

CHAPTER 7

CONTRACT MANAGEMENT

The parts of the PAH shown in blue and bold should only be updated by Works Branch of Development Bureau.

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SYNOPSIS

This Chapter provides reference and general guidelines on management of civil engineering contracts. It is basically written for capital works contracts and reference is made to the General Conditions of Contract for Civil Engineering Works (1999 Edition) (GCC).

To cater for the wider adoption of New Engineering Contract (NEC) form in public works projects, DEVB has promulgated the “Practice Notes for New Engineering Contract – Engineering and Construction Contract (NEC–ECC) for Public Works Projects in Hong Kong” (referred to as “the Practice Notes”) aiming to provide guidance, performance benchmarking and alignment of practices in the administration of public works projects using NEC form. The most updated version of the Practice Notes is available at DEVB’s website:

https://www.devb.gov.hk/en/publications_and_press_releases/publications/standard_contract_documents/practice_notes_nec_engineering_construction_contract/index.html

Whilst the guidelines provided in this Chapter were originally written for contract management under GCC, the majority of them can still be applied to contract management under NEC. Where appropriate, this Chapter shall be read in conjunction with the Practice Notes for relevant subjects of contract administration. In addition, project officers shall refer to the relevant guidelines or practice from corresponding Works Departments regarding how the duties of the Engineer / Architect / Surveyor / Supervising Officer under GCC form contracts would be taken up by the Project Manager / Supervisor under NEC form contracts. Please also refer to paragraph II.04 in this Chapter for the comparison of common terminologies used under GCC and NEC–ECC.

Owing to the complicated and complex nature of contract management, the guidelines provided in this Chapter shall in no way be construed as directives overriding the powers and responsibilities of the Engineer/Engineer’s Representative under GCC form contracts and the Project Manager/Project Manager’s Representative/Supervisor under NEC form contracts who shall always make their own decisions under their contracts’ provision.

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I. ABBREVIATION

- I.01 The meaning of the abbreviations assigned in this Chapter of the Project Administration Handbook for Civil Engineering Works shall only apply to this Chapter.
- I.02 The following list shows the meaning of the abbreviations for the common terms used in this Chapter of the Project Administration Handbook for Civil Engineering Works (PAH):

Abbreviation	Term
AC No.	Accounting Circular No.
AFCD	Agriculture, Fisheries and Conservation Department
AIOW	Assistant Inspector of Works
AMO	Antiquities and Monuments Office of the Leisure and Cultural Services Department
APE	Approved Project Estimate
Arch SD	Architectural Services Department
BQ	Bills of Quantities
C of IR	Commissioner of Inland Revenue
C&SD	Census and Statistics Department
CEDD	Civil Engineering and Development Department
CIC	Construction Industry Council
CTA(F)	Chief Treasury Accountant (Finance)
CSSM	Construction Site Safety Manual
D of J	Department of Justice
D&B	Design and Build
DEVB	Development Bureau
DEVB TCW No.	DEVB Technical Circular (Works) No.
DLO	District Lands Office
DSD	Drainage Services Department
DSDTC No.	Drainage Services Department Technical Circular No.
E&M	Electrical and Mechanical
EACSB	Engineering and Associated Consultants Selection Board EACSB
EMSD	Electrical and Mechanical Services Department
EOT	Extension of Time
EPD	Environmental Protection Department
ER	Engineer's Representative
ETWB	Environment, Transport and Works Bureau
ETWB TCW No.	ETWB Technical Circular (Works) No.
FC No.	Financial Circular No.
FSTB	Financial Services and the Treasury Bureau

Abbreviation	Term
FSTBCM No.	Financial Services and the Treasury Bureau Circular Memorandum No.
GC No.	General Circular No.
GCC	General Conditions of Contract for Civil Engineering Works (1999 Edition)
GEO	Geotechnical Engineering Office
GS	General Specification for Civil Engineering Works (2020 Edition)
HAD	Home Affairs Department
HKPF	Hong Kong Police Force
HyD	Highways Department
HyD TC No.	Highways Department Technical Circular No.
IOW	Inspector of Works
LA(W)	Legal Adviser (Works)
LAD(W)	Legal Advisory Division (Works)
Lands D	Lands Department
LCSD	Leisure and Cultural Services Department
LD	Labour Department
LWBTC No.	Lands and Works Branch Technical Circular No.
MD	Marine Department
MPF	Mandatory Provident Fund
MPFSA	Mandatory Provident Fund Schemes Authority
MTRCL	MTR Corporation Limited
NEC	New Engineering Contract
NEC-ECC	New Engineering Contract – Engineering and Construction Contract
OVT	Old and Valuable Tree
PAH	Project Administration Handbook for Civil Engineering Works
PCFB	Pneumoconiosis Compensation Fund Board
PS	Particular Specification
PSTsy	Permanent Secretary for Financial Services and the Treasury (Treasury)
PWCL	Public Works Central Laboratory
PWDTC No.	Public Works Departmental Technical Circular No.
PWL	Public Works Laboratories
PWP	Public Works Programme
PWRL	Public Works Regional Laboratories
PWSC	Public Works Subcommittee
RPE	Registered Professional Engineer
S for J	Secretary for Justice
S for Tsy	Secretary for the Treasury

Abbreviation	Term
S for W	Secretary for Works
SCA	Subcommittee on Access under the Rehabilitation Advisory Committee
SCC	Special Conditions of Contract
SCCT	Standing Committee on Concrete Technology
SCE	Special Conditions of Employment
SDEV	Secretary for Development
SE	Senior Engineer
SFST	Secretary for Financial Services and the Treasury
SMM	Standard Method of Measurement for Civil Engineering Works (1992 Edition)
SO(Q)	Survey Officer (Quantity)
SPRs	Stores and Procurement Regulations
SSO(Q)	Senior Survey Officer (Quantity)
STA	Senior Treasury Accountant
VO	Variation Order
VTC	Vocational Training Council
WBTC No.	Works Bureau Technical Circular No.
WSD	Water Supplies Department
WTO GPA	World Trade Organization Agreement on Government Procurement

II. GLOSSARY OF TERMS

II.01 Words and expressions to which meanings are assigned in this Chapter of the Project Administration Handbook for Civil Engineering Works (PAH) shall only apply to this Chapter.

II.02 In this Chapter of the PAH the following words and expressions shall have the meaning hereby assigned to them except when the context otherwise requires:

“Government” means the Government of the Hong Kong Special Administrative Region.

“project office” means the office responsible for the planning, design and construction of the project. (Where these functions are performed by different offices at different stages, the project office shall mean the office responsible at each particular stage.)

“Contract”, “Contractor”, “Drawings”, “Employer”, “Engineer” and “Engineer’s Representative” are as defined in the General Conditions of Contract for Civil Engineering Works (1999 Edition) or the General Conditions of Contract for Term Contracts for Civil Engineering Works (2002 Edition).

“Schedule of Rates” and “Works Order” are as defined in the General Conditions of Contract for Term Contracts for Civil Engineering Works (2002 Edition).

II.03 Words importing the singular only also include the plural and vice versa where the context requires.

II.04 The common terminologies used in GCC and NEC–ECC are compared in the table below.

GCC	NEC–ECC
Extension of time, variations, claims, disruptions, loss and expenses	Compensation events
Bills of Quantities / Schedule of Rates	Bill of Quantities / Activity Schedule
Architect / Engineer / Surveyor / Supervising Officer	Project Manager / Supervisor
Site	Site / Working Areas
Contract Sum	The Prices
Date of completion	Completion Date
Estimated value of works	Price for Work Done to Date
Maintenance Periods	Defects date, defect correction period

1. ACTION CHECKLIST AT COMMENCEMENT OF CONTRACT

The checklist in this Section 1 (for commencement of contract) and Section 2 (for completion of contract) provide a fairly comprehensive list of actions to be taken but it may not cover all situations. Individual offices/divisions should extract this list, expand it if necessary to include internal procedures of the office/division concerned, and make it a standard requirement for a copy of the check-list to be kept in the relevant project file and project handbook. The Engineer's Representative (ER) should record in the "Remarks" column of the checklist the file reference and other relevant information when action on any item is completed.

Item No.	Procedure	Reference	Remarks
1	<u>ACTIONS BY THE ENGINEER</u>		
1.1	Notify Contractor of the date for commencement of the Works	-	
1.2	Notify Chief Treasury Accountant (Finance) CTA(F) of Development Bureau (DEVB) of contract number, name of contractor, contract title, name of department, contract approval date and awarded contract sum	-	
1.3	Inform Contractor of the name and delegated authorities of the ER	4.1	
1.4	Confirm and arrange method of payment	7.1	
1.5	Issue Forms to Construction Industry Council (CIC) & Pneumoconiosis Compensation Fund Board (PCFB)	21.1	
1.6	Send notification to Vocational Training Council (VTC), CIC and/or Electrical and Mechanical Services Department (EMSD)	21.1	
1.7	Send Mandatory Provident Fund (MPF) form to Mandatory Provident Fund Schemes Authority (MPFSA)	21.1	
1.8	Notify Labour Department (LD)/Marine Department (MD) of the commencement date and other details of the Contract	11.3	
1.9	Inform SCA of contact channel	10.2	
1.10	Provide Contractor with information for preparation of Waste Management Plan/ Environmental Management Plan	12.5.3/ 12.9	
1.11	Send master programme and CV of nominated	4.3	

Item No.	Procedure	Reference	Remarks
	geotechnical supervision personnel to Geotechnical Engineering Office (GEO)		
1.12	Hand over the Site to Contractor	3.1	
1.13	Provide survey control points and beacon marks	3.2	
1.14	Determine the types and format of site records to be kept	5.1	
1.15	Issue “Registration Form for Testing of Construction Materials” to Public Works Laboratories (PWL)	-	
1.16	Submit “Summary Details of Contract” to the Departmental Safety and Environmental Adviser	11.5	
1.17	Central acceptance and distribution of contract preliminary items	21.18	
2	<u>ACTIONS BY THE CONTRACTOR</u>		
2.1	Submit details of managerial and technical staff and site supervision structure	4.2.1	
2.2	Nominate Site Agent	4.2.2	
2.3	Nominate surveyor(s)	4.2.3	
2.4	Nominate Safety Officer/Supervisor	4.2.4 & 11.2	
2.5	Nominate Construction Engineer and Construction Supervisor for piling works	4.4	
2.6	Nominate Labour Relation Officer (LRO (with title currently unified as ACO(LR)))	4.5	
2.7	Submit details and particulars of the technician apprentices, and building and civil engineering graduates employed (if any)	4.2.5	
2.8	Submit Programme of Works	6.1	
2.9	Submit details of project signboard	3.5	
2.10	Obtain approval for the Engineer’s site accommodation	-	
2.11	Obtain approval for the Contractor’s site accommodation	3.3	
2.12	Submit details of Safety Plan (where required)	11.9 &	

Item No.	Procedure	Reference	Remarks
		11.10	
2.13	Submit Waste Management Plan/ Environmental Management Plan (where required)	12.5.3/ 12.9	
2.14	Submit first detailed version of Sub-contractor Management Plan (SMP) (where required)	21.14	
2.15	Circulate to obtain latest utility information	10.1	
3	<u>JOINT ACTIONS BY BOTH PARTIES</u>		
3.1	Carry out joint initial survey and agree survey results	3.2	
3.2	Arrange site security to be set up	3.4	
3.3	Take photos of the Site and surroundings before commencement of the Works	3.1 & 5.12	
3.4	Decide locations where settlement/movement of the Site or structures should be monitored	5.18(c)	

2. ACTION CHECKLIST ON COMPLETION OF CONTRACT

Item No.	Procedure	Reference	Remarks
1	Hand back land/Works Area formed under the Contract to District Lands Office (DLO)	3.7 & 18.1.3	
2	Hand over completed Works to operation/maintenance departments/divisions	3.7 & 18.1.2	
3	Prepare list of outstanding works	18.1.4	
4	Issue completion certificate(s)	18.2.1, 18.2.2 & 18.2.3	
5	Release of security deposit/surety bond, if any	18.2.4	
6	Prepare as-constructed drawings and survey plans, and forward to appropriate authorities	5.3 & 18.3.6	
7	Forward as-constructed drawings, design calculations, operation and maintenance manuals, warranty certificates, etc., where applicable, to operation/ maintenance departments/divisions	18.3.7	
8	Issue maintenance certificate	18.3.3	
9	Release of retention money	18.3.4	
10	Prepare report on completion of the Contract	18.3.5	
11	Finalise valuation of variations and settle claims	13.3 & 14.2	
12	Finalise and agree site measurements and record of materials and equipment provided by Government	5.5 & 5.14	
13	Prepare final payment certificate	7.3	
14	Issue Forms to CIC & PCFB	21.1	
15	Check return for electronic drawings from Contractor (if any)	18.3.8	
16	Arrange custody of site records and documents	5.19	

3. THE SITE

3.1 HANDING OVER TO CONTRACTOR

According to the General Conditions of Contract, on the date for commencement of the Works notified by the Engineer, the Contractor should be given possession of so much of the Site as may be required to enable the Contractor to commence and proceed with the construction of the Works in accordance with his programme, unless the Contract makes specific provision for phased possession of Portions of the Site. If phased possession is not stated in the Contract, the general policy is to hand over the whole of the Site to the Contractor on the date for commencement of the Works.

Whenever possible, the project office should arrange to take over the Site from the appropriate District Lands Office (DLO) of the Lands Department (Lands D) or the existing occupier on the same date as that of handing over the Site to the Contractor so that continuous control may be exercised to prevent illegal occupation or dumping.

Relevant details of the handing over of the Site or any Portions, which should include a plan clearly showing the areas handed over, should be confirmed in writing to the Contractor. A copy of the same plan should be sent to the appropriate DLO together with written confirmation that the Site has been handed over and stating the period for which the areas will be occupied by the Contractor. A further copy of the plan should be sent to the Lands Administration Office, Lands D, if applicable. Details concerning the preparation of the plan are given in Chapter 3 (Land Matters).

When the Contractor takes possession of the Site or any part, the existing features of the Site and the area adjacent to the Site are to be extensively photographed with particular emphasis on the condition of adjoining properties or amenities. See also paragraph 5.12.

Should it occur that possession of the whole of the Site on the date notified for commencement or the possession of a portion of the Site on the specified date is not possible, then the extent of any delay to the progress of the Works caused by the non-possession is to be established and recorded at the time.

3.2 JOINT SURVEY AND SETTING OUT

Survey work associated with a construction contract and required by the project engineer is normally carried out by the survey section of the project office (or survey division of the project department), except that where consultants are employed to supervise the Contract such survey work will usually be carried out by surveyors of the consultant's site establishment. In carrying out different types of survey work, reference should be made to "Engineering Survey Practice Guides for Works Projects" which is available at CEDD website (<https://www.cedd.gov.hk/eng/publications/standards-spec-handbooks-cost/index.html>) or Lands D website (<https://www.landsd.gov.hk/en/resources/survey-related-guides.html>).

Setting out of the limits of the Contract or the Site should be carried out in conjunction with the Contractor and Estate Surveyor of the appropriate DLO, and if appropriate, the Lands Administration Office, Lands D. If it is necessary to readjust private

lot boundaries, this should be done by the appropriate District Survey Office of the Lands D.

The project engineer should arrange to establish a sufficient number of control points and benchmarks to enable the Contractor to set out the Works. These points should be well constructed and, as far as is practical, located so that they will not be disturbed as the Works proceed. Regular checking should be done during the Contract to ensure that such points are correct. The control points and benchmarks should be provided to the Contractor in appropriate forms and diagrams, or plotted on the Dimensioned Plan with their co-ordinates and levels listed. The Dimensioned Plan shall be issued as a contract drawing to the Contractor. In order to enable speedy map revision work, a copy of the Dimensioned Plan or setting-out plan should be sent to DD/SM (Attn: Technical Division, Survey and Mapping Office (SMO)) of the Lands D.

Before the commencement of any work, the original ground levels and details of existing features including trees to be preserved with tree protection zone, trees to be transplanted or felled on the Site should be established by a survey carried out jointly with the Contractor. The results of the survey should be agreed with the Contractor and recorded in the form of drawings.

The project office shall seek the prior agreement of DD/SM if, during the progress of work, it is found necessary to deviate from the agreed Dimensioned Plan.

3.3 MANAGEMENT

When formal notice is given by the Engineer to the Contractor to commence work, the Contractor must be required to take charge of the Site, and immediately he takes possession of the Site, be responsible for its care and control, including keeping it clean and clear of illegal occupation. If any illegal occupation is found on the Site, the Contractor should initiate eviction action, provided it is specified under the Contract, such as in the Particular Specification (PS). If unsuccessful, the case should be reported to the appropriate DLO and the Police for assistance to clear the illegal occupation.

The Contractor must be fully aware of and comply with any restrictions on the use of the Site as specified in the Contract, especially the clauses in the Engineering Conditions with respect to Temporary Government Land Allocations for land such as works areas. Close liaison should be maintained with the Lands D and, where necessary, the District Office to avoid unnecessary friction with private individuals.

All site offices and other temporary structures required for the Works should, wherever possible, be sited together in one or two defined areas to assist recognition by the staff of the Lands D.

If any site offices or temporary accommodations are to be erected on Site which may conflict with the permanent works or in areas which may have to be handed back to the Lands D before the whole of the Works are completed, the implications should be carefully considered and appropriate conditions should be added to avoid claims from the Contractor regarding any necessary vacation and re-erection of the site offices or temporary accommodations.

If a temporary structure is required on a Works Site that cannot be defined in the contract documents, such as in term contracts, the form, “Consent to Erect Temporary Structure on Contract Works Site” (Appendix 7.1), should be issued. Sites for such structures should be jointly selected by representatives from the DLO and project office/department before the form is issued.

3.4 SECURITY

- (a) In general, works areas, site formation areas, public filling areas and borrow areas in urban districts and in rural recreational areas should preferably be shielded from view by means of hoardings. However, a hoarding should not be provided under the following circumstances:
 - (i) If it will have to be removed within 6 months, or
 - (ii) If it will unduly obstruct traffic.

Reference should be made on any mandatory requirements for the provision of hoarding under the Air Pollution Control (Construction Dust) Regulation. These requirements should prevail over any other requirements that may be specified in the Contract.

- (b) If the provision of hoarding is impracticable, then a chain link fence or portable barrier should be provided.
- (c) The works area where the Engineer’s offices are situated should be properly fenced off, locked and, if necessary, manned with a watchman at night.
- (d) Appropriate signs should be put up at prominent locations, declaring this is a construction site and trespassing will not be permitted.
- (e) Close liaison should be maintained with local Police Station who are requested to pay special attention to the works area during the daily patrolling especially at night.
- (f) Equipment, especially that of a portable type, should be kept under lock and key.

3.5 PROJECT SIGNBOARD

3.5.1 Size and Location

The project signboard must always be of appropriate size (see paragraph 3.5.2 below) and in the appropriate location to achieve the desired result. On occasions, more than one project signboard may be required for a particular project or it may be desirable for a project signboard to be illuminated at night.

3.5.2 Details of Project Signboard

- (a) The design, size and construction and other relevant details of the project signboard shall be as per the relevant departmental standard drawings.
- (b) Major project signboards are to carry, in both Chinese and English, a brief project title, a simple description of the project or the benefit to the community to be derived from the project, and a large, simple artist's impression of the completed project or the construction in progress as viewed from the location of the project signboard. The estimated completion date is to be stated and it is preferable to express this date by saying, for example, "mid-2004" or "early 2005" to allow for possible extensions of time. Subject to the approval of the relevant Director, the estimated cost may be given. The attached side of project signboard is to carry the department logo and the name, in Chinese and English, of the department under the control of which the project is being executed. With the approval of the Chief Engineer, the names of Consultants, Contractors and Sub-Contractors engaged on the project may be displayed on the Consultants/Contractors names board. Consultants' names may be displayed on this subsidiary project signboard in the format approved or recommended by the professional institution to which they belong. In no case should a consultants'/contractors' project signboard be permitted to compete with, detract from or in any way overshadow the Government project signboard.
- (c) Minor project signboards are to carry all the information included on major signboards with the exception of the artist's impression.
- (d) The colours of the lettering, characters, dividing lines and background shall be as shown on the relevant departmental standard drawings. Chinese characters are to have the same prominence as English letters.

3.5.3 Erection, Maintenance and Removal

The erection, maintenance and removal of project signboards stated in the Contract shall be in accordance with GS Clause 1.48.

3.6 TEMPORARY UTILITY SUPPLIES

On behalf of the Contractor, when deemed appropriate and subject to funds being available, and having taken regard of available options, the project engineer should make an advance application for temporary supply of electricity, water and telephone services before the award of the Contract in order to expedite the availability of such services shortly after commencement of the Works.

Expenses for the temporary utility supplies are to be met by the Contractor. However, as the Contract will not have been signed and sealed at the time of making an advance application for temporary supplies, it should be noted that any fees paid by the project office are unlikely to be recoverable from the Contractor unless a Special Conditions of Contract (SCC) clause and specific contractual provisions including PS clause is written in to this effect. The Contractor shall be responsible for the maintenance and subsequent removal of the temporary supplies, and all fees in connection with the supplies.

3.7 RE-POSSESSION ON COMPLETION

- (a) On completion of the whole or any Section of the Works, the Site or part of the Site should be re-possessed in the following manner, to ensure continuous control:
 - (i) The area permanently occupied by the Works should be handed over to end-user/operation/control/maintenance departments or to the authority responsible for further work in the area. Upon completion of handing over, the project office must inform the appropriate DLO of the arrangement made so that the appropriate records can be updated.
 - (ii) Remaining areas should be handed back in the agreed condition to the appropriate DLO or other department on management and maintenance of these areas. These areas shall include the land not occupied by the Works on the ground, but with Works above or below ground across such land.
- (b) Re-possession and handing over should normally be by a joint inspection followed by an exchange of memoranda and drawings, if necessary. If the Site is handed over to another Division/Office for further work, the appropriate DLO must be advised. See Chapter 3 for further information on handing over the Site or part of the Site.

3.8 SITE ACCOMMODATION FOR RESIDENT SITE STAFF

The size of site accommodation has been determined with reference to the number and rank of resident site staff (RSS) required and stipulated in the particular specification (see Chapter 5 paragraph 6.3.1 for details). The site staff shall not accept site accommodation with size deviated from the contract specification, unless prior approval has been sought from the Employer.

4. SUPERVISING PERSONNEL

4.1 ENGINEER'S STAFF

Immediately on signing the Contract, the Engineer should advise the Contractor of the names of the Engineer's Representative(s) (ER) who will represent him in supervising the Works. The duties and powers, which the Engineer will delegate to the ER(s), should be identified and communicated in writing to the Contractor.

4.2 CONTRACTOR'S STAFF

GCC Clause 18 requires the Contractor to employ skilled, experienced and competent staff in carrying out the Works. It is therefore necessary that the contract documents stipulate the minimum requirements and qualifications of the staff stated in paragraphs 4.2.1 to 4.2.6 who are employed on the Contract. The Engineer has to be satisfied that these staff members meet the contract requirements and that the Contractor has fulfilled his obligations under the Contract.

4.2.1 Technical Resources and Site Supervision Structure

For contracts tendered with marking scheme approach in accordance with DEVB TCW No. 4/2014 and 4/2014A, the Contractor shall submit a site organization chart on a monthly basis showing the details of the managerial and technical staff and the site supervision structure for the Engineer's checking/agreement. If there is a change in the site key staff, it shall be reported to the Engineer. The technical resources on managerial and technical staff and the technical proposal on site supervision should be checked against the Contractor's "Technical Submission" made at the tendering stage to ensure that adequate site supervision will be provided by the Contractor. In the event the Contractor is unlikely to provide or maintain any staff of the management team submitted by the Contractor in his Tender submissions on technical resources or necessarily inferred therefrom, he shall report to the Engineer as soon as practicable.

4.2.2 Site Agent

The Contractor should submit for approval within 7 days after the date for commencement of the Works the name and particulars of the site agent who will represent the Contractor on the Site. The qualification and experience of the Contractor's site agent should comply with the requirements of the Contract.

4.2.3 Surveyor

The Contractor should submit for the Engineer's information the name and particulars of the person employed to set out the Works within 7 days of his appointment. The person should be competent and experienced and possess the academic and professional qualifications acceptable to the Engineer and appropriate to the nature of the survey work required for the Contract.

4.2.4 Safety Officer

Where the Contract requires the employment of a Safety Officer(s), the Engineer should check whether the Safety Officer(s) proposed by the Contractor has the relevant training, knowledge and experience as required in the Contract. Refer to paragraph 11.2 for further details regarding the employment of a safety officer(s)/supervisor.

4.2.5 Technician Apprentices and Building and Civil Engineering Graduates

In accordance with ETWB TCW No. 12/2003, Approved Contractors for Public Works on the List are required to employ technician apprentices, or building and civil engineering graduates. The ER should keep records and report the number of technician apprentices, building and civil engineering graduates in the Contractor's Performance Report. The project office should report to Development Bureau (DEVB) of any deficiencies according to the circular.

4.2.6 Registered Skilled Workers and Registered Semi-skilled Workers

In accordance with DEVB TCW No. 4/2017, all public works contracts, including design and build contracts and term contracts, tendered on or after 15 July 2017, shall employ the minimum number of registered skilled workers and registered semi-skilled workers. Random site checks for compliance with the said Technical Circular will be carried out by site supervisory staff.

For public works contracts tendered before 15 July 2017 and adopting the contract provisions under Works Bureau Technical Circular No. (WBTC No.) 13/2002, which requires the employment of qualified tradesmen and intermediate tradesmen, works departments are no longer required to verify contractors' monthly submissions on the qualification of their workers with a view to simplifying administrative requirement, however, site supervisory staff should continue carrying out random compliance checks by site inspections or checking contractors' records.

4.3 SUPERVISION FOR GEOTECHNICAL WORKS

In accordance with ETWB TCW Nos. 29/2002, 29/2002A and 15/2005, the project office shall ensure that suitably qualified and experienced geotechnical supervision personnel are appointed to supervise the geotechnical works (including the associated temporary works and blasting activities, the construction of which could pose significant risk to public life and property) and the ground investigations under the Contract. The geotechnical supervision personnel shall ensure that the works carried out on site comply with the design, any specified working procedure and contractual acceptance limits. They shall inspect and check the actual site conditions encountered and the critical items of works/working procedure and validate the design assumptions and the buildability of the works. The supervision personnel shall have the authority and responsibility to carry out any necessary design review, design modifications and specification of preventive/mitigation/remedial measures to ensure that the works meet the design objectives. They shall make a design amendment submission to the GEO prior to commencement of the works through the project office or its consultants, should there be any significant changes in the design after the design review.

Guidance on the recommended minimum requirements for geotechnical supervision is at Appendix 7.47. The project office shall provide the GEO with a copy of the master programme for the works contract and the curriculum vitae of the nominated geotechnical supervision personnel on commencement of the contract for comment.

For projects involving compaction of new fill slopes, the Department responsible for a contract (its consultant where one is employed) must take adequate provision well before the start of a contract for site supervision and compaction control testing, to ensure that the requirement as stipulated in the “General Specification for Civil Engineering Works (2020 Edition)” is achieved. The Engineer/Architect/Supervising Officer for the project will be held personally responsible for ensuring compliance with the specification. (Subsumed from PWDTC No. 13/78)

For geotechnical works relating to slopes, retaining walls, tunnel works, ground investigation works and foundation works in Scheduled Areas Nos. 2 and 4 and in the Designated Area of Northshore Lantau, involving design or alternative design by the Contractor, the project office shall agree with the GEO the site supervision requirements for these works prior to tendering.

For a Design and Build (D&B) contract and for works involving design or alternative design by the Contractor for a non D&B, the Designer, Design Checker or Independent Checking Engineer should carry out site inspection to confirm the design and amendments of design and shall report the findings to the Category I supervision personnel.

For projects involving tunnel works, the project office shall consult the GEO on the minimum requirements for the site supervision personnel that the Engineer/Architect/Supervising Officer (E/A/SO) and the Contractor should employ for supervising the different types of tunnel works under the Contract (see ETWB TCW No. 15/2005). The project office shall submit to the GEO details of the E/A/SO's and the Contractor's site supervision arrangement and management structure, including the curriculum vitae of the key site supervision personnel, and their duties, responsibilities, authority and lines of reporting, prior to the commencement of construction of the tunnel works. The GEO may audit the documents submitted and carry out site audits.

Guidelines on the requirements for site supervision relating to ground investigation works and foundation works in Scheduled Areas Nos. 2 and No. 4 and in the Designated Area of Northshore Lantau are given in ETWB TCW No. 4/2004.

For projects involving blasting for rock excavation, the project office shall consult the GEO on the minimum requirements of the resident site supervision team and the Contractor's supervision team, including any requirement for geological input for the blasting works.

In general, the resident site supervision team should include at least one Competent Supervisor with at least four years' relevant experience in blast design and supervision of blasting works. For large or complex projects, additional and/or more experienced Competent Supervisors and a geologist should be engaged.

The Competent Person who prepares the Blasting Assessment during the design stage (see paragraph 4.6.12 in Chapter 4) can also be the Competent Supervisor for carrying

out the supervision of the blasting works. If a person holds the qualification and experience of both the Category I supervisor and the Competent Supervisor for blasting works, they can take up the construction supervision for the geotechnical works, including blasting. The curriculum vitae of the proposed Competent Supervisor should be submitted to the Mines Division of GEO for agreement, prior to commencement of the blasting works. The need and the number of Resident Explosives Supervisors required for a particular project will depend on the explosives delivery arrangement and the blasting programme. (See paragraph 21.6.3 below)

4.4 SUPERVISION FOR PILING WORKS

Supervision for piling works should be carried out by personnel with suitable qualification and experience, and should comply with the relevant technical circular, if any, issued by the department of the project office (e.g. Departmental Technical Circular No. 4/2007 issued by Highways Department (HyD) on “Quality Supervision and Assurance for Piling Works”). Basically, the Contractor should employ a Construction Engineer and a Construction Supervisor in connection with the execution of piling works as stated in the Contract. The Contractor shall develop a monitoring system before piling commences, to ensure the integrity and accuracy of the piling record. This system shall be agreed by the Engineer.

4.5 SUPERVISION FOR SOFT LANDSCAPE WORKS

The project office shall ensure that suitably qualified and experienced landscape and arboricultural professionals/supervision personnel are appointed for supervising the setting out of tree protective zone, erection of protective fence and other protective measures for trees, preparation works for transplanting, tree felling works, routine vegetation maintenance, tree risk assessment and mitigation measures, soil and ground preparation, checking plant materials, installation/planting, stabilizing works, transplanting works, establishment works, coordination of conflicting above and underground utilities/structures with the planting plan, etc. The Contractor shall employ qualified landscape professionals/field officers in connection with the preparation and implementation of the greening and landscape works.

4.6 EMPLOYMENT OF LABOUR RELATION OFFICER (LRO (with title currently unified as ACO(LR)))

A set of contract measures to prevent non-payment of wages was introduced by the Secretary for Development (SDEV) under SETW’s memo ref. (0126S-01-6) in DEVB(W) 510/17/01 dated 26.4.2006, SETW’s letter ref. (015YP-01-5) in ETWB(W) 510/17/01 dated 27.7.2006, SDEV’s memo ref. (01TAM-01-7) in DEVB(W) 510/17/01 dated 17.7.2008 and SDEV’s memo ref. (023Q5-01-7) in DEVB(W) 510/17/02 dated 23.11.2009. Parts of the measures require the Contractor to employ a LRO (with title currently unified as ACO(LR)) to assist the Resident Engineer in monitoring and maintaining records for payment of workers in in-house administrated projects (other than maintenance contracts and E&M supply and installation contracts). For projects administrated by a consultant, the LRO (with title currently unified as ACO(LR)) would be employed by the same consultant as part of its resident site staff establishment.

The LRO (with title currently unified as ACO(LR)) is a general officer responsible for collecting, maintaining and checking payment of wages to the workers on site. He or she should be conversant with the existing labour regulations and be prepared to explain to the workers their rights under the Law. Depending on the size of the contract and the labour force, the LRO (with title currently unified as ACO(LR)) establishment may be more than one person. The LRO (with title currently unified as ACO(LR)) reports directly to the Resident Engineer on site who will follow up with the Contractor and the Labour Department (LD), if necessary, on incomplete records or matters requiring investigation. The LRO (with title currently unified as ACO(LR)) has no statutory or contractual authority viz-a-viz the Contractor as well as the workers.

Paragraph 9.11 of PAH Chapter 5 has set out in detail the measures to prevent non-payment of wages in which the contract provisions in relation to the employment of the LRO (with title currently unified as ACO(LR)) are also included.

As the site staff including LRO (with title currently unified as ACO(LR)) would have access to personal data when monitoring payment of wages and Mandatory Provident Fund (MPF) contributions, they should be required to handle the data in compliance with the Personal Data (Privacy) Ordinance (PDPO) and the relevant Data Protection Principles. They should observe and follow the principles and guidelines on complying with the PDPO set out at Appendix 7.54 (subsumed from DEVB WB Internal Circular No. 9/2007). (Ref.: SDEV's memo ref. (01TAM-01-7) in DEVB(W) 510/17/01 dated 17.7.2008)

4.7 QUALITY SITE SUPERVISION PLAN (QSSP)

The Secretary for Environment, Transport and Works promulgated the requirements of Quality Site Supervision Plan (QSSP) in memo ref. () in ETWB(W) 925/50/01 dated 29.1.2003. The relevant paragraphs have also been subsumed in Annex A of Appendix 4.6 of the EACSB Handbook. The project office should ensure its compliance by their consultants and that the site staff manual gives details on authorities, duties, responsibilities and contract management and works supervision procedures for the guidance of all grades of the site establishment.

5. RECORDS

5.1 GENERAL

The keeping of good comprehensive records is very important. Records serve three basic purposes:

- (a) They provide information for the administration of the Contract, and in particular, for the evaluation of work done for payment.
- (b) They provide the management with necessary information on progress, the level of resources and the condition of the Works, on which engineering and management decisions may be based.
- (c) They provide information on the history of the Works, so that facts are available for the evaluation of claims or resolution of disputes should these arise.

The ER, in consultation with the Engineer where necessary, should establish a set procedure for record keeping at the commencement of the Works such that adequate records will be produced efficiently. During the progress of work, should events occur or be about to occur, which may lead to claims or disputes, the ER should consider and implement as soon as possible a system for keeping additional records. It is important that such a system will provide detailed and comprehensive information. Where possible, the Contractor's agreement to the records should be obtained.

Records submitted by the Contractor must be carefully checked and verified as soon as they are received. Discrepancies should be resolved early while memories and evidence are still fresh; but where agreement cannot be reached, the differences must be recorded either in the site diary (paragraph 5.4) or in a letter to the Contractor.

The standard practice for filing of works contract site-documents as stipulated in Appendix 7.73 should be followed by departments as far as possible. The standard practice is recommended to be carried out in both the department's project office as well as the works-contract site office. The requirements shall be applied to all Public Works Programme (PWP) works contracts and any proposed modification to the standard practice shall be submitted to Works Branch of DEVB for agreement and issue. A computer aided document management system may be employed having regard to the requirements of particular contracts. However, the provision of such system should be considered as part of the Contract Computer Facilities subject to the conditions and requirements as laid down in paragraph 9.14 of PAH Chapter 5.

The type of records considered being necessary for good contract administration and the more common types of engineering records required under most contracts are described in the following paragraphs and are also contained in other sections of this Chapter. The list is by no means exhaustive and the keeping of other records must be considered according to the needs of a particular contract.

5.2 CONTRACT DOCUMENTS

A certified true copy of the signed contract documents, including a set of the original contract drawings should always be kept in the site office. Any standard document which forms part of the Contract, but is not bound in the signed documents, should also be kept in the site office. Such documents include the General Conditions of Contract (GCC), General Specification (GS) and Standard Method of Measurement (SMM).

5.3 RECORD DRAWINGS

One set of drawings should be kept separate from the set of original contract drawings mentioned in paragraph 5.2, the latter being kept intact for reference only.

To ensure the building up of a comprehensive set of record drawings as the Works proceed, the following should be observed:

- (a) A set of drawings comprising the contract drawings and one copy of all revised drawings, additional drawings issued to the Contractor and the CAD drawings approved by the Engineer shall be designated for record purposes.
- (b) Where the as-constructed work deviates from the drawings, the as-constructed details should be recorded as soon as possible and marked in red ink on the relevant drawings in the set to record exact dimensions and positions of the finished work.
- (c) Where details of the finished work are the subject of a record survey, either a copy of the survey plan produced should be kept in the set or the results of the survey should be abstracted and incorporated into the relevant drawings.

Attention is drawn to GCC Clause 44 that concerns the examination of works before they are covered up. All details, especially those that deviate from the drawings, should be adequately recorded for the preparation of the as-constructed drawings.

On completion of the work, the set of record drawings should be checked and endorsed by the ER and then passed to the drawing office for the preparation of faired copies of the as-constructed drawings for the designs carried out by the Engineer and the Contractor (if any). The as-constructed drawings shall be completed within the time scale appropriate to the size and complexity of the Contract and according to operational needs, as determined by the project engineer during the preparation of the Contract, or for consultant-managed projects, within the time scale stipulated in the brief to the consultancy agreement.

For projects involving tunnel works, the project office shall submit to GEO prior to completion of any consultancy/contract under the project, as appropriate, as-built survey plans showing the boundaries of the tunnels/shafts/caverns and the extent of any temporary works, which may affect future construction (see ETWB TCW No. 15/2005).

5.4 SITE DIARY

The standard form to use for the site diary is GF 536 that is bound in a book. Subject to the agreement of the Engineer, the ER may choose to keep site diaries in electronic format, preferably on database management software. In this event, the ER shall outline the proposed format, including the details and capabilities of the management software, to the Engineer for endorsement.

The site diary is one of the most important records for a contract, its primary aim being to record facts. It should therefore contain an accurate and concise record of the progress of work, plant and labour employed, weather and site conditions, and any occurrences which affect the progress and/or quality of the work, including the extent to which they are affected. In addition, comments on causes of delays and disruptions to normal progress should be noted where appropriate. The post and name of site supervisory staff who carries out the inspection and the works inspected shall be recorded.

The Inspector of Works (IOW) is normally responsible for keeping the site diary. The IOW and the Contractor's authorised agent or representative should sign the diary daily and the ER should check and initial the diary at least once a week. For site diaries kept in electronic format, hard copies should also be signed as outlined above and kept in file for reference and record.

For contracts occupying a large site area and comprising several well-defined Sections, the use of several diary books, one for each Section, should be considered. Where a contract is exceptionally large or complex in nature, the standard form of diary may be inadequate. In that event, a special diary format may be devised for use subject to the Engineer's endorsement.

5.5 SITE MEASUREMENT BOOK

The standard site measurement book to be used is GF 534.

Measurements should be entered with reference to the SMM or the method of measurement stated in the Contract. Entries should be made by the site supervisory staff or Survey Officer (Quantity) (SO(Q)) regularly and signed by authorised representatives of both the Contractor and the Engineer. The ER is normally the person responsible for agreeing measurements.

Further guidance on using the site measurement book is contained in Chapter 9.

5.6 PROGRESS CHART

A progress chart should be maintained in the site office and brought up-to-date at least once a month.

The chart should be drawn up so as to show clearly the actual progress in relation to the programme submitted by the Contractor.

A sample progress chart for a simple contract is shown at Appendix 7.3.

For complex contracts, a master chart showing overall progress and several charts showing progress on different Sections of the Contract may be necessary. No standard form will suit all contracts and a different chart should be devised for each contract.

5.7 INCLEMENT WEATHER

General weather conditions are recorded in the site diary (paragraph 5.4). On days of inclement weather, an additional daily report should be completed by a member of the site staff of rank AIOW or above, and countersigned by the ER, using the standard form shown at Appendix 7.4.

Apart from recording the actual weather conditions, the inclement weather report should also denote the extent to which Works were affected by weather. Observations on the Contractor's failure to mitigate the effects of inclement weather, such as inadequate protection of Works, should also be included in the report.

5.8 SITE INSTRUCTIONS

Instructions given to the Contractor on Site should be issued on the standard form shown at Appendix 7.5. The form may also be used by the ER, with delegated authority, under GCC Clauses 60 & 62 for ordering work paid for on a daywork basis. However, it should not be used for ordering variations where the standard form at Appendix 7.21 should be employed for such circumstances. Where the works in site instruction or variation are paid by dayworks, the works should be charged under the Daywork Bill.

One copy of instructions should be handed to the Contractor's representative, one copy should remain in the instruction book kept in the site office and one copy should be sent to the project office for the contract file. If dayworks are ordered on the form, an additional copy should be made for filing with Dayworks Daily Record (paragraph 5.9).

5.9 DAYWORKS

The General Conditions of Contract requires the Contractor to submit, and the ER to agree (or reject with reasons), daily records of labour, plant and materials employed on any work executed on a daywork basis. Such daily records should be made on the standard form shown at Appendix 7.6.

To facilitate the calculation of the amount to be paid under daywork items each month, a summary of daily records for each daywork order should be made at the end of each month using the standard form shown at Appendix 7.7.

All daily records and monthly summaries relating to one daywork order should be filed together for easy checking.

5.10 INVENTORY OF FURNITURE AND EQUIPMENT

The standard form shown at Appendix 7.8 should be used for recording the receipt by the ER of equipment and furniture provided under the Contract. A copy of this record must be kept in the site office. On completion of Works, the Contractor should be asked to sign this form to acknowledge receipt of furniture and equipment returned to him. Please also see paragraph 21.18 for control of preliminaries.

5.11 MINUTES OF MEETINGS AND CORRESPONDENCE

Minutes of meetings with the Contractor, including monthly meetings, meetings with utilities, rate fixing meetings etc., and all correspondence with the Contractor will form part of the records of the Contract and must therefore be kept in the site office and, where necessary, in the project office files.

5.12 RECORD PHOTOGRAPHS

The main purposes of taking photographs are:

- (a) to provide a visual record of the conditions of the Site and surroundings before and during the course of the Contract,
- (b) to record particular features of the work, especially which will later be covered, and
- (c) to provide material for publicity or training.

To fulfil the purpose of (a) above, one set of photographs of the Site and surroundings should be taken before commencement of the Works. Particular attention should be paid to existing structures, installations or properties which may be damaged by the Works. Attention should also be paid to any area of potential disputes e.g. adjoining land used by local farmers.

For purpose (b) above, photographs should be taken regularly during the course of the Contract from the same vantage points on various Sections of the Works. The location of the vantage points should be indicated on a key plan in the photograph album.

All photographs should include something to give a scale effect where this is not readily apparent. On the back of each record photograph, the following information should be written:

- (a) Date on which the photograph was taken,
- (b) Exact location and description of the subject photographed, and
- (c) Purpose of the photograph.

Selected prints shall be authenticated by the Contractor and the ER by signing and dating on the back of the prints. The photographs taken to record the conditions of the Site

and surroundings before the Works commence should be sent to the DLO/maintenance authorities for record and acceptance of the as-photo conditions of the Site.

Ordinary record photographs should normally be taken by the site supervisory staff. Where aerial photographs are required and no provisions were made in the Contract for such photographs to be taken by the Contractor, requests for assistance can be made to the appropriate Survey Office of the Lands D through the respective Chief/Senior Land Surveyor.

5.13 REQUEST FOR INSPECTION AND SURVEY CHECK

(Ref.: SDEV's memo ref. () in DEVB(W) 510/70/03 dated 13.11.2020)

At present, the PS clause that governs the requests for inspection and/or survey check (RISC) system varies with different works contracts. To ensure consistency, a standard PS clause on RISC system for incorporating into the contract documents has been prepared by the SDEV under Annex A (for GCC contracts) and Annex B (for NEC contracts) of by the SDEV under SDEV's memo ref. DEVB(W) 510/70/03 dated 13.11.2020. The PS clause shall be adopted for works contracts with tender invitation to be made on or after 1 December 2020. For tenders invited/to be invited before this date, procuring departments may adopt the clause as appropriate.

The standard form shown at Appendix 7.82A (for GCC contracts) and Appendix 7.82B (for NEC contracts) should be used for recording the Contractor's request for inspection and/or survey of work performed and the ER's permission to proceed with proposed work after inspection/survey of the preceding stage. The purpose of using this standard form is to improve communications on Site and provide a record of the sequence of events. For critical items, hold points, witness points, interfacing works or works to be covered-up, the form should be countersigned by the resident engineer or above rank. The ER should respond to the contractor's request for inspection/survey expeditiously. When the standard forms could not be submitted prior to the time for inspection/survey due to exceptional circumstances with prior agreement by the ER, the standard forms should be submitted no later than 3 calendar days following the inspection/survey. Under no circumstances should the works be covered up or put out of view without the approval of the ER.

The ER should ensure that sufficient level of details of the works to be inspected or surveyed should have been inserted in the standard form by the Contractor. Specific descriptions of all the works to be inspected or surveyed, such as types of details, drawing numbers, reference documents, etc. should be inserted in the standard form.

The ER should also be aware of the requirement of countersigning on the standard form. All forms should be countersigned by the supervisor of the inspection officer. The supervisor's duty is to ensure the inspection officer has inspected the works in conformance with the contract documents, and to conduct appropriate level of site supervision of the works. Such requirement of countersigning is applicable to all items.

Implementation of the mechanism of request for inspection/survey should be included as a standard item in the technical audit carried out by Works Departments in accordance with paragraph 21.2.1 of Chapter 7 of the PAH. The audit team should carry out spot check by specifying the events, locations and dates and requesting the ER to provide the

respective standard forms. The audit should include the requirements given in the contract specifications and as outlined above. The standard forms should be checked whether they were timely submitted, duly completed and signed and properly documented.

5.14 RECORD OF MATERIALS AND EQUIPMENT PROVIDED BY GOVERNMENT

The standard record book to use is GF 537.

This book should be maintained in the site office when stores are issued to the Contractor free of charge and should record all receipts and issues. Materials issued to the Contractor for incorporation into the Works should be signed for by the Contractor's site agent or authorised representative.

On completion of the Works, the book should be returned to the project office and the quantities issued should be checked against the site measurements.

The pages referring to the Contract should be detached, stapled together, certified by the ER and filed in the measurement file. A record of the sheets removed giving the reference of the relevant measurement file should be maintained on the inside front cover of GF 537 and endorsed by the ER for audit inspection.

5.15 MATERIALS TESTING

(Ref.: WBTC Nos. 14/2000 and 15/2000)

The Engineer should consult the Chief Geotechnical Engineer/Standards and Testing of GEO (CGE/S&T) at an early stage to confirm the compliance tests of construction materials to be undertaken by the Public Works Central Laboratory (PWCL) and the Public Works Regional Laboratories (PWRL) collectively under Public Works Laboratories (PWL). PWL provides an extensive range of materials testing services. A list of materials testing services and the test request forms for laboratory testing can be downloaded from CEDD website at the hyperlinks <https://www.cedd.gov.hk/eng/public-services-forms/geotechnical/laboratory-testing/public-works-laboratories/index.html> and <https://www.cedd.gov.hk/eng/public-services-forms/public-forms/geotechnical-services/test-request-forms-for-laboratory-testing/index.html> respectively.

Records of tests on materials used in the Contract should be kept. The following arrangement should be noted and followed whenever applicable:

(a) Compression Test of Concrete Cubes

The test request forms should normally be signed by the IOW and then delivered to PWL with the concrete cubes to be tested by a member of the site supervisory staff. Results of testing will be shown on the forms and returned to the respective project office. With the implementation of the Central Concrete Mix Database (see paragraph 21.22 for details), the MIX ID of a registered designed mix shall be printed on the test request form so that PWL can store the test information in the database.

A sample of Concrete Test Cube Register is shown at Appendix 7.10. One register should be prepared and kept by the resident site staff for each grade of concrete with the same mix design used in the Contract.

(b) Test of Steel Reinforcement

Please observe the Steel Bar Circular and the announcements of the Standing Committee on Concrete Technology (SCCT) on CEDD website.

(c) Soil Compaction Test

A sample of Soil Compaction Test Summary Form is shown at Appendix 7.12. The Soil Compaction Test Summary Form should be prepared and kept by the resident site staff.

For Sand Replacement Test (SRT), see DEVB's memo ref. () in DEVB(W) 216/27/22 dated 12.7.2013 - Enhancement for Sand Replacement Test (SRT) for a new enhancement mechanism for SRT in public works projects. Project officer shall also refer to SDEV's memo ref. () in DEVB(W) 216/27/22 dated 25.5.2010 - Fraudulent Acts by Site Personnel Attempting to Influence the Results of Sand Replacement Test (SRT) when dealing with SRT.

(d) Labels for Samples of Concrete Cube/Concrete Core/Steel Bar/Bituminous Materials/Fill Materials/Steelwork Materials and Associated Mechanical Fasteners

For implementation of security labels for samples of concrete cube / concrete core / steel bar / bituminous materials / fill materials / steelwork materials and associated mechanical fasteners taken in Hong Kong or fabrication yards outside Hong Kong, see “Guidance Notes on the Use of Security Labels” on CEDD website.

For details on materials compliance tests, see WBTC Nos. 14/2000 and 15/2000 and <https://www.cedd.gov.hk/eng/public-services-forms/geotechnical/laboratory-testing/public-works-laboratories/index.html>.

It should be noted that all materials compliance tests required by the Contract or the Engineer must be done through PWL in accordance with WBTC No. 14/2000. Materials compliance tests will be carried out either by PWL or commercial laboratories appointed by PWL. If the required tests cannot be undertaken by PWL as advised by CGE/S&T, then testing must be performed by an independent HOKLAS accredited laboratory with no affiliation as a legal entity to the Contractor and its sub-contractors. In this case, the following requirements should be followed (see DEVB's memo ref. () in DEVB(PS) 106/47/1(TC21/2012) dated 6.11.2012 “ICAC Assignment Report No. 5/2012 - Study on Site Supervision System for Consultant-Managed Projects”):

(a) Particulars of the proposed laboratories including a declaration of any conflict of interest made by the laboratories must be submitted to the Engineer for approval. (GS Clause 1.40(1)(c))

- (b) The ER's supervisory staff shall make prior arrangements with the laboratory engaged by the Contractor to ensure that the test results must be supplied directly to the ER in sealed envelope, not via the Contractor; and the ER's supervisory staff must exercise caution to examine the validity and integrity of the test results.
- (c) Test results obtained from a laboratory other than PWL should be checked by periodic verification using another independent laboratory to conduct identical tests on items selected from the same samples, or as advised by CGE/S&T.

Although the Contractor may carry out as many quality control tests for his own purposes as he wishes, using either his own laboratory or commercial laboratories, these quality tests performed for the Contractor shall not be taken as compliance tests done through PWL for public works projects. See CEDD's memo ref. () in CEDD GPWR/1-150/7 dated 31.7.2015 for reference.

ICAC publishes the "Best Practice Checklist on Construction Quality Control Testing" in which it stresses the importance of independence of testing laboratories in a project. It aims at providing some recommended practices to prevent abuse and corruption and avoid conflict of interest. Officers involved in quality control of materials and works in construction projects should adopt these practices as far as practicable, without prejudice to the requirements stipulated in WBTC No. 14/2000.

In any case, the ER's supervisory staff must supervise the sampling, transport and delivery of samples to the laboratories.

5.16 LABOUR RETURNS AND WAGES

The General Conditions of Contract requires the Contractor to provide a daily return of labour employed on the Works. The Contractor should be asked to fulfil this requirement by filling the standard form GF 527 (Rev. 1/2003) and GF 527 (Rev. 1/2017) pursuant to DEVB TC(W) No. 3/2003A. The inspector should check the accuracy of the information entered on the form by the Contractor, as far as practicable.

The Contractor should complete the standard form and submit to the site supervisory staff within the first 4 working days of the succeeding month. In completing the form, the Contractor should be reminded to include wage rates for normal working hours only and to ignore overtime pay and employers' contribution to MPF. If the accuracy of wage rates entered on the form is doubtful, the Contractor should be asked to produce evidence such as wage books to support his return. The site supervisory staff should check the returns and deliver excel copies of the returns directly to, or through the project office to, the Census and Statistics Department (C&SD) within the first two weeks of the succeeding month. The information will provide bases for compiling the "Index Numbers of Costs of Labour and Selected Materials Used in Government Contracts" which are used in the calculation of contract price fluctuations under GCC Clause 89. Further guidelines on the monthly return of site labour deployment and wage rates for construction works are given in ETWB TCWs No. 3/2003 and No. 3/2003A.

Four copies of the GF 527 (Rev. 1/2003) shall be prepared. The original excel copies should be sent to C&SD, the duplicate to be retained by the project office, the

triplicate to be filed as site record and the quadruplicate to be kept by the Contractor.

Recommendation 80 of the Report of the Construction Industry Review called for the LD to review the methodology for collating the construction safety statistics with a view to developing a more reliable mechanism for calculating the accident rates for construction sites. In this connection, LD revised the methodology for the calculation of accident rates for the construction industry to reflect the site safety performance. The revised methodology will encompass all personnel of contractors engaged at construction sites including the managerial and supervisory staff, which differs from the previous methodology of employing the manual works only in the calculation. (Ref.: ETWB TCW No. 4/2005)

A new form is designed accordingly for the collection of the required data from contractors, which is applicable for both public and private sector construction sites. Currently, the contractors for public works contracts are also required to submit the GF 527 on site labour deployment and wage rates of manual workers under ETWB TCWs No. 3/2003 and 3/2003A. As such, the new form is numbered as GF 527A with a view to reminding the contractors to submit both forms concurrently. In addition, opportunity is taken to include the return on site vacancies and the number of employers/ self-employed persons engaged at the site in GF 527A for compiling the statistics on labour demand and number of contractors' personnel engaged at construction sites. (Ref.: ETWB TCW No. 4/2005)

All public works contracts including Buildings, Civil, Electrical and Mechanical, Term and D&B shall submit the GF 527A to C&SD monthly. One GF 527A shall be submitted for each and every public works contract. (Ref.: ETWB TCW No. 4/2005)

A sample of the GF 527A and the guidelines for submission and completion are attached at Appendices 7.52 and 7.53 respectively. The GF 527A will be completed in quadruplicate: the original excel copies to C&SD, the duplicate kept by the project office, the triplicate filed as site record and the quadruplicate kept by the Contractor. The data in the GF 527A will be prepared based on the last full working day of the reporting month, which will exclude Saturdays, Sundays, public holidays or days of inclement weather such as strong winds, heavy rains or typhoons whereby the construction activities may be affected. An example of how to determine the last full working day for a month is given in paragraph (c) of the guidelines at Appendix 7.53. (Ref.: ETWB TCW No. 4/2005)

Furthermore, only persons who have worked or engaged at the site (including in the site office) for three hours or more on the reporting day will be included for the number of persons of the respective category in the GF 527A. The data will cover all the persons employed by the Contractor and his sub-contractors, except for those employed by the nominated sub-contractors for public works contracts, who will complete a separate GF 527A and submit to the principal contractor for consolidation. (Ref.: ETWB TCW No. 4/2005)

The completed GF 527 and GF 527A will be submitted to the Architect/Engineer/Supervising Officer/Maintenance Surveyor's Representative within the first four working days of the month following the reporting month. Upon receipt of the completed forms, the Architect/Engineer/Supervising Officer/Maintenance

Surveyor's Representative will check that the data provided in the forms are in order, except for the numbers of vacancies and employers/self-employed persons, which are the Contractor's responsibility to ensure their accuracy. If necessary, the Architect/Engineer/Supervising Officer/Maintenance Surveyor's Representative may request the contractor to substantiate the data provided in the forms. Any discrepancy found will be notified to the Contractor immediately for rectification. The Architect/Engineer/Supervising Officer/Maintenance Surveyor's Representative will complete the checking of the forms for submission to the relevant parties within the first two weeks of the month following the reporting month. (Ref.: ETWB TCW No. 4/2005)

Pursuant to SDEV's memo ref. () in DEVB (PS) 107/3 dated 2.6.2021, upon review, the threshold contract value for submission of forms GF 527 and GF 527A is now increased to \$3M. To echo with the Government's target of facilitating electronic submissions, only excel copies of the completed forms GF 527 (both GF 527 (Rev. 1/2003) and GF 527 (Rev. 1/2017)) and GF 527A shall be submitted to C&SD by email. The excel files are available at www.devb.gov.hk/en/public/forms. Submission of scanned signed copies of forms GF 527 and GF 527A to C&SD is no longer required. The responsible personnel shall insert their names in the forms after completing or checking the returns, which will be taken as fulfilling the requirement of signing the returns stipulated in the "Guidelines for filling in GF 527 (Rev. 1/2003)", "Guidelines for filling in GF 527 (Rev. 1/2017)" and "Guidelines for Completion and Submission of GF 527A". The following statement should be included in the submission email to C&SD:

"The submitted forms GF 527 and GF 527A were completed by the Contractor/Contractor's agent and checked by the site supervisory staff, whose names are indicated in the applicable fields in the forms."

For the avoidance of doubt, the threshold contract value for submission to C&SD of the standing return on commencement and completion of contracts will remain unchanged (i.e. at \$1M).

5.17 USE OF CONTRACT TRANSPORT

The guidelines for the use of contract transport, both land and marine, are given in LWBTC No. 11/84. Section 5.1 of LWBTC No. 11/84 emphasizes that contract transport must not be used by any officer for non-official business or for any un-authorised journeys between home and office, whether or not the Contractor is prepared to carry out the journeys free of charge.

A record must be kept for the use of vehicles and launches provided under the Contract, using the standard log-book GF 100. One log-book should be kept for each vehicle or launch and all journeys must be recorded and signed by the user of the transport. The ER/Engineer should ensure that the necessary log-books are correctly maintained and should check them at least once a fortnight, endorsing each page wherever necessary.

In addition to routine checking of the log-books, the ER/Engineer shall carry out periodical reviews of the actual utilization level of contract transport and make recommendations to the project office for maintaining or terminating the contract transport provision. The project office shall carry out global reviews of the returns from the

ER/Engineer and make further adjustments if necessary.

Staff should not avail themselves of the Contractor's transport service if that service is not specified in the Contract except where this is necessary and expedient for both parties to jointly examine or record on-site any matter connected with the Works. Such transport service that is called for by the Contract is to be used only in the manner and at the times specified.

If, in an emergency, the vehicle is driven by a member of the site supervisory staff, the log-book shall be similarly completed by that person but in addition, the nature of the emergency must be stated in the 'Purpose' column and the entries in the log-book is to be initialled by the ER/engineer/senior engineer or, where appropriate, the Engineer.

5.18 MISCELLANEOUS RECORDS

(a) Piling records

Examples of forms for pile driving records and pile loading test records are given in the General Specification. Particular records of piling works may also be required by the PS of a contract.

(b) Record for soil and rock conditions

Full records should be kept of the soil and rock conditions as the Works progress. Apart from their importance during construction in respect of the method of working, confirmation of original design, safety, progress evaluation etc., these records will be of great value for future maintenance of the Works and also for planning future works in the vicinity. If necessary, the project engineer should be contacted to advise on the records to be kept.

(c) Settlement and movement records

These should be carefully planned at an early stage, particularly for works where settlement/movement is expected. The respective Land Surveyor should be consulted to devise a method for monitoring and recording the movements efficiently. If necessary, Geotechnical Projects Division, GEO, can be requested to give advice on the type of instruments and techniques most suitable for the measurement of soil and rock movements.

(d) Concrete casting records

A record should be kept of the location, date, time, grade, approximate quantity, test cube reference numbers, and supplier (if more than one source) of each concrete pour. Where a structure is cast in more than one operation, the sequence of casting should also be recorded, preferably on a drawing of the structure. This type of record will be particularly useful in the subsequent identification of materials in a structure should it be necessary to investigate the extent of non-complying materials.

(e) Bar bending schedules

These are required for all works with reinforced concrete construction. Schedules should be prepared on the standard form shown at Appendix 7.13.

All bar bending schedules, whether prepared by the ER or the Contractor, should be kept in the site office with the R.C. drawings. They should be updated in the same manner as record drawings. It should be noted that GS Clause 15.16 requires that bending schedules shall be prepared by the Contractor and submitted to the Engineer before bending of reinforcement starts.

(f) Tensioning record for prestressed concrete

This is an important record for works involving prestressed concrete construction. A sample of a suitable form is shown at Appendix 7.14.

(g) Record of bituminous materials delivered to Site

When bituminous materials are used, a record should be kept of the temperature of the material at various stages, the time lapse between production and placing, and location of placing. The record will provide part of the information for determining acceptability of the material and the necessity for further investigation into the quality of materials already placed. A sample of a suitable form is shown at Appendix 7.15.

(h) Drainage pipeline test records

A record should be kept of acceptance tests on drainage pipelines carried out in accordance with the GS.

A sample of suitable form for recording results of air test, water test and infiltration test on gravity pipelines is shown at Appendix 7.2. A sample of form for recording water tests on gravity pipelines between 150mm and 450mm diameter and for recording hydraulic test results on pressure pipelines is shown at Appendix 7.16.

(i) Water pipeline test records

A record for pressure testing of water pipelines should be kept in accordance with GS Clause 22.1.5 of Appendix 22.1.

Standard forms and standard pressure testing procedures stipulated in Appendix 3.2 of the “Manual of Mainlaying Practice 2012 Edition” and Clauses 22.81 - 22.83 and Appendix 22.1 of GS respectively, should be followed. For water pipelines to be handed over to Water Supplies Department (WSD) for maintenance, charts for registering the test results from a continuous pressure recorder should be presented as records after testing.

(j) Bearing and expansion joint records

When bearings and expansion joints are used in the Works, a clear record of their performance should be kept using the form shown at Appendix 7.17.

(k) Record of materials on Site

A record of materials delivered to Site should be kept to enable the ER to certify interim payment regarding the materials on Site. This record may be a loose leaf file or a hard backed book with separate sections for each type of material, listing the quantity delivered, date of delivery, (and time of delivery when appropriate), together with such information as delivery tickets, truck numbers and any other useful data. If the Contractor co-operates by making copies of delivery tickets available, these should be retained on file but summaries should still be produced as outlined above.

(l) Labour strength chart

The total number of the Contractor's workforce on the Site is to be recorded daily in a graphical form from the date of commencement until no appreciable amount of work remains to be carried out.

(m) Tree survey record and subsequent records

The Contractor shall carry out an initial tree survey for all existing trees and submit the survey record to the Engineer within a specified duration at the commencement of the Works, in accordance with the methods and requirements as stipulated in the contract Specifications. All trees to be preserved, transplanted or felled should be located and tagged and checked and confirmed before proceeding with tree works. The Contractor may require the regular reporting of the conditions of the trees on site.

Other records, such as earthwork quantity record, marine work quantity record, caisson record, soil compaction test record, soil nail record, safety report, accident record, interim payment record, Works programme, progress report, expenditure chart, Contract Price Fluctuation record, Nominated Sub-contractor record, and record on permits and licences required in the Contract, are also commonly kept on site.

5.19 CUSTODY AND DISPOSAL

When the final payment certificate for a Contract has been issued, the ER is to arrange for all documents, including records, files, measurement books, accounts and other information to be gathered together and catalogued. The catalogue is to give the date when, subject to no outstanding litigation or audit queries, the various documents can be destroyed. Reference should be made to Accounting Circular No. (AC No.) 9/2005, AACSB/EACSB Handbook and other relevant circulars/guidelines on the retention time required. Departments may set a longer period to suit their own requirements.

The afore-referenced retention times are not applicable to the contract documents which have been scheduled for disposal. All the records and documents shall be properly

stored. Where boxes are used, labels shall be fixed to each box (not the lid) showing:

The Contract number and title;.

The number of the box;

The number of boxes used for the Contract; and

The documents enclosed together with the date for disposal.

Normally, the original signed contract documents shall be kept under safe custody in the department for a period of time according to department's internal procedures. After that period, the department should arrange for the original signed contract documents to be transferred to the Records Centre of the Records Management Office for storage. A registry record shall be kept giving details of the Contract number and title, the scheduled date for disposal of the original signed contract documents, and the locations of storage for ease of future retrieval. Three months before the scheduled date for disposal of any contract documents, the person responsible for arranging disposal shall notify the respective Division/Branch Head to destroy the documents concerned. Upon receipt of confirmation from the respective Division/Branch Head, the responsible person shall arrange with the Government Records Service Director for the disposal of the original signed contract documents.

5.20 INSPECTION AND TEST PLANS

(Ref.: SDEV's memo ref. () in DEVB(W) 510/70/03 dated 1.9.2021)

At present, it is not a mandatory requirement to adopt Inspection and Test Plans (ITP) in works contracts. Upon review, it is considered that ITP can facilitate site supervisory staff and contractors to agree on hold points¹ and witness points² for critical items of works or activities prior to commencement of such works/activities so that adequate resources can be arranged in a timely manner to facilitate necessary site supervision/inspection.

In view of the above, a standard PS clause on ITP for incorporating into the contract documents, as given in Annex A (for GCC contracts) and Annex B (for NEC contracts) under SDEV's memo ref. () in DEVB(W) 510/70/03 dated 1.9.2021. The PS clause shall be adopted for capital works contracts with a pre-tender estimate³ exceeding \$400 million and tenders to be invited on or after 27 September 2021. For capital works contracts below this threshold, procuring departments may consider adopting the PS clause as appropriate.

¹ Hold points mean construction activities, stages, elements and particular aspects or details of any item of works, the inspection and acceptance of which by the site supervisor staff must be obtained before the contractor can proceed to the next construction activity, stage, element and particular aspect/detail of such works.

² Witness points are tests of materials/equipment, performance tests of prototypes as well as testing and commissioning of any item of works/installations, which require the site supervisor staff's witnessing or recording. The contractor may however proceed to the next hold points or witness points even if such witnessing and recording have not been conducted by the site supervisor staff within the notified time frame.

³ For NEC contracts, the pre-tender estimate refers to the forecast total of the Prices.

6. PROGRAMME, PROGRESS & EXPENDITURE

6.1 CONTRACTOR'S PROGRAMME AT COMMENCEMENT

GCC Clause 16 requires the Contractor to submit a programme of the Works at the commencement of the Contract. The programme should show clearly the sequence, method and timing of all major activities under the Contract, including allowance for carrying out specialist work by other contractors to be employed by Government and work by utility undertakers.

The programme should normally be in the form of a bar chart. For complex contracts involving a large number of inter-related activities, the programme may need to be in the form of a network diagram. Critical activities and the critical path should be identified on the programme. For contracts with different completion dates for different Sections of the Works, the critical path for each Section of the Works should be identified and shown on the programme.

In addition to the programme to be submitted to the Engineer in accordance with GCC Clause 16, the Contractor shall, in accordance with the GS, submit within a further 14 days a programme showing a detailed breakdown of the work to be carried out in the first 3 months, and an outline for the remainder of the work. A programme showing the work completed to date, a detailed breakdown of the work to be carried out in the next 3 months and an updated outline for the remainder of the work shall be submitted to the Engineer not later than 4 weeks before the commencement of each subsequent 3-monthly period. Programmes submitted in accordance with this paragraph shall be in the form of a bar chart showing the earliest and latest start and finish dates for each activity, and the critical path.

When a programme is submitted by the Contractor, it should be acknowledged, but approval of the programme (or wording conveying approval) should not be given in the letter of acknowledgement as this may be construed as relieving the Contractor of some of his responsibilities or duties under the Contract. However, the programme should be analysed and examined to determine:

- (a) Whether details shown on the programme, in respect of sequence, method and timing, conform with the requirements of the Contract,
- (b) Whether the programme is over-optimistic in respect of any critical activity or the Works as a whole, and
- (c) Whether information provided in the programme is sufficient for the management of the Contract, this being particularly important where activities under the Contract will have major effects on other related contracts.

If the programme does not satisfy (a) above, the Contractor must be asked to re-submit a programme that conforms with the requirements of the Contract.

If the programme does not satisfy (b) above, the Contractor should be asked to explain in writing the basis of his programming, which should include information on the methods of construction and resources he intends to employ on the critical activities. If the Engineer is not convinced of the Contractor's justification, he should inform the Contractor

of his dissatisfaction with the programme submitted and request the Contractor to re-consider and revise the programme. However the Engineer should not advise or instruct the Contractor on how the programme should be revised.

6.2 PROGRAMME UPDATING AND REVISION

The Contractor should be required to revise the programme described in paragraph 6.1 during the course of the Contract whenever:

- (a) An extension of time for completion of the Works or any Section of the Works has been granted by the Engineer;
- (b) Progress is too slow to ensure completion by the due date and the Contractor has been so informed;
- (c) Progress on critical activities is falling behind the original programme or the latest revised programme, particularly where the Contractor had been informed that his programme was in the opinion of the Engineer over-optimistic, or;
- (d) The latest programme is rendered unsuitable by unanticipated events which have occurred since preparation of the programme.

6.3 MONITORING AND REPORTING PROGRESS

A fair copy of the Contractor's programme should be posted up in the site office and actual progress marked on the programme to monitor progress of work.

If necessary, a monthly progress report should be made. The report should be tailor-made according to the individual situation of the Contract. As a general guideline, the report may include:

- (a) Commencement date, original completion date, EOT granted, revised completion date, time elapsed in days and in percentage of the contract period, a realistic estimated completion date based on the actual progress made and the expected time to complete outstanding works;
- (b) Original contract sum, predicted final contract sum, estimated percentage of work physically completed, amount and percentage of certified value of works, expenditure to date, yearly forecast expenditure and a predicted/actual cash flow chart;
- (c) Dayworks, variations and drawings issued;
- (d) Description of progress with a progress table and progress chart;
- (e) Claim record;
- (f) Safety matters and accident matters;

- (g) Record of significant meetings;
- (h) Record of hand over of works; and
- (i) Environmental issues.

6.4 ACTION IN CASE OF SLOW OR VARIABLE PROGRESS

As soon as it is apparent that the progress of the Works or any Section of the Works is too slow or variable to ensure completion by the due date, the Engineer for the Contract should inform the Contractor in writing of the unsatisfactory progress. The Contractor should also be reminded of his obligation under the GCC to inform the Engineer of actions he will take to expedite completion and to submit a revised programme. Care should be taken not to give instructions that may be construed as an order to accelerate the work.

Close monitoring of the rate of progress should continue and further warning letters to the Contractor should be issued if progress has not improved. The Contractor's response and performance subsequent to the issue of warning letters should be noted in the Quarterly Report on Contractor's Performance (see Section 15).

If slow progress continues despite repeated warnings from the Engineer, the situation should be reported to the relevant Reporting Review Committee for further appropriate actions, which will include management actions as stipulated in Sub-section 4.6 of the Contractor Management Handbook. Reference should also be made to Part D of Appendix 4B of the Handbook for guidelines on assessing the progress of the Contractor.

For a joint venture of several contractors, regulating action will be applied to every constituent party. The lead party's managing department will co-ordinate and keeps the managing departments of other constituent parties informed.

6.5 MONITORING AND ESTIMATING EXPENDITURE

The ER plays an important role in the financial control of the Contract at site level. The project engineer (PE) controlling the project vote also plays an important role in the review from time to time of the Approved Project Estimate (APE) and expenditure in the light of progress of the project. Particular attention should be paid to the financial control in contract expenditure and the APE, where the performance of the Contractor is slow or variable and/or where the contractor is in financial difficulties (e.g. where re-entry and/or novation of contract are being considered.) Once the Contractor's programme is known, it is possible for the ER to produce a detailed curve of expected expenditure. As the Works progress, he should compare actual against expected expenditure, making amendments as required, and drawing the attention of the Engineer and the Employer to any significant changes so that necessary adjustments to the annual expenditure allocation can be made. Any major revision of the Contractor's programme would require a new expenditure curve.

When producing the curve of expected expenditure the following should be noted:

- (a) The rate of expenditure may not be uniform.

- (b) It may be possible to assess the rate of expenditure from the Contractor's programme thus allowing for any "front end loading" in the rates.
- (c) The Contractor's programme and the due date for completion may have to be extended if the work continues through a wet season.
- (d) The whole of the contract sum may not be expended and, for the purpose of producing the expected rate of expenditure, the quantities in the Bills of Quantities are to be taken as being correct without further checking. The amount included as the contingency sum is to be shown separately.

It is necessary to recognise that this record will show the value of work done on the date to which the interim statement refers as opposed to the date of actual payment by Treasury. The payment by Treasury will be some time after the date of measurement depending on the period of time taken to receive and process an interim statement, prepare a draft certificate and to effect the payment.

When monitoring expenditure, the ER should give an early warning in liaison with the PE controlling the project vote if it appears that the contract sum will be exceeded and, if so, by how much, to enable action to be taken for the provision of funds. The estimation of the Final Contract Sum can be affected by various circumstances, such as:

(a) Changes in Quantities

During construction, the ER should note any significant changes in quantities that have been identified and should record the additional expenditure or savings accruing as a result. This may be revealed by one or more of the following:

- (i) Measurement of completed work being sufficiently advanced to show inaccuracies in original estimates;
- (ii) Ground conditions becoming more adverse or more favourable than expected; and
- (iii) Errors or omissions in the Bills of Quantities becoming apparent.

(b) Contractual Claims

There are provisions in the GCC for the Contractor to claim additional payment in various circumstances. Should such circumstances occur or appear to be unavoidable, an estimate of the possible additional payment is to be made.

(c) Variation Orders

The effect of all issued and proposed variation orders including all the consequential costs shall be assessed carefully using the best information available. The contract sum and the APE should be checked before ordering variation. Where the varied work is to be carried out at new rates, estimation will be necessary if the new rates are yet to be agreed. If the total effect of a

variation order is small in the context of the contingency sum then it is acceptable to ignore detailed calculations.

(d) Contract Price Fluctuations (CPF)

An estimate of the likely expenditure/saving due to any CPF can be made by projecting the average rate of increase calculated to date. Should there be insufficient data available to obtain an average rate of increase then the current average factor of a similar contract may be used.

(e) Items omitted from the Bill of Quantities (Ref.: In view of the findings in Chapter 3 of the Audit Report No. 53, SDEV requested in email of 19.2.2010 to strengthen the relevant PAH Sections on omitted items for reference by works departments and, where applicable, the consultants appointed as the Engineer for the Contract.)

For those items of works shown on the Drawings or described in the Specification but omitted from the Bill of Quantities (hereinafter called “omitted items”), the Engineer shall value the omitted items actually carried out in accordance with Clause 61, and shall certify in accordance with Clause 79. For the purpose of financial control, once potential omitted items are identified, the Engineer or his representative should exercise his professional judgement in rendering a preliminary assessment of rates and estimate the possible additional payment to be made. The total additional payment of potential omitted items and those omitted items which have already been valued should be properly reflected in the Final Contract Sum.

6.6 AUTHORITY TO INCREASE CONTRACT SUM

When any event occurs, which will probably cause the original contract value to be exceeded, approval has to be given by officers designated in Item A.I of Appendix V(B) of the Stores and Procurement Regulations (SPRs). This shows a schedule of authorities and lists the officers who can authorise increases in contract sums for payments in accordance with the terms of the contract subject to the APE not being exceeded. This authority is also applicable to variations essential for the completion of the works as defined in the original contract. Items A.III and A.IV of Appendix V(B) of the SPRs also stipulate that prior approval of the appropriate authority is required for an increase in the contract sum for additional works outside the terms of the Contract but within the approved scope of the project, subject to the APE not being exceeded. Where there is a supplementary agreement involved for additional works approved under Items A.III and A.IV of Appendix V(B) of the SPRs, it should be treated as a separate contract for the purpose of effecting further variations to these additional works and the schedule of authorities for variation of contract under Item A.I should also be applicable where appropriate. According to SPR 520(f), departments should copy to the Director of Audit correspondences on approved variations and any supplementary agreements consequentially signed.

In no circumstances may a contract sum be increased if such an increase would result in the APE being exceeded, or if the works which necessitate such an increase are outside the approved scope of the project, unless prior approval from the Secretary for Financial Services and the Treasury (SFST) has been obtained for an increase in the project

estimate, or for a change in the scope of the project, in accordance with Financial Circular No. (FC No.) 2/2012.

If the increase in contract sum will exceed the departmental cap of the project, the internal procedure as set out in FC No. 2/2012 for securing approval for increase in additional allocations in excess of the departmental cap should apply. However, there is no need for submission to Public Works Subcommittee (PWSC) or Finance Committee if the APE is not exceeded. See the SFST's memo ref. FIN CR1/6/581/87(02) Pt.65 dated 12.9.2002 for details.

6.7 SECTIONS SUBJECT TO EXCISION (Subsumed from LWBTC No. 6/89)

Once the Contract has commenced and within the period of time stipulated in the Appendix to the Form of Tender, the Employer must decide whether he wishes the work contained within the Section Subject to Excision (if applicable) to be carried out or not. If the decision is made to proceed with the work then the Engineer must issue an instruction to the Contractor. If the decision is made not to proceed then the Contractor should be notified accordingly.

6.8 MINOR WORKS

The Director of Audit has conducted an audit review on the administration of minor works/term contracts of a works department. Pursuant to the Director of Audit's recommendations arising from the review, SDEV has announced the requirement that minor works projects should be controlled as much as other capital works projects for timely completion vide his memo ref. (3) in L/M in DEVB(CR)(W) 1-106/33 (2009) Pt. 1 dated 22.4.2009.

7. CONTRACT PAYMENTS

7.1 ARRANGEMENT FOR PAYMENTS TO CONTRACTOR

Payments to Contractors are normally made by direct bank credit unless specially requested by Contractors **otherwise** Amd No. 1/2025. After signing the Contract, the Accounts Division/Section of the Works Department/Office shall request the Contractor to duly complete GF 179A on “Authority for payment to a Bank” for receiving payment by direct bank credit.

As a new measure promulgated by FSTB via memo ref. TsyB E 00/735/1/0(C) Pt.8 on 29 November 2024, for all government procurement exercises invited from 1 June 2025 onwards, regardless of value, including quotations and tenders as well as contracts awarded by way of direct engagement, the Government will make payments to Contractors by electronic means, and will no longer use cheques. The electronic means options include (i) bank transfer via traditional or digital bank accounts; and (ii) payment made by using Faster Payment System (FPS) proxy through Hong Kong Identity Card number or FPS identifier. For the avoidance of doubt, there will be no change to payment methods for procurement exercises invited before 1 June 2025.

Amd No. 1/2025

7.2 INTERIM PAYMENTS

7.2.1 General Principles

The Contractor is required to submit to the Engineer at the end of each monthly period (the first of such monthly periods to commence on the date for commencement of the Works) a statement showing:

- (a) The estimated contract value of the work done in accordance with the Contract up to the end of such monthly period with sums payable in respect of Nominated Sub-contractors listed separately;
- (b) A list of materials delivered to the Site for use in the permanent work and their estimated contract value; and
- (c) All further estimated sums, which the Contractor considers to be due to him under the Contract.

The statement shall be prepared on a form supplied by and at the expense of the Contractor, and the style and number of copies shall be as determined by the Engineer. The Contractor shall complete the required number of copies of the statement and deliver them to the Engineer for checking and, if necessary, correction in accordance with GCC Clause 79. To facilitate checking and correction, the Contractor shall also submit an electronic copy of his statement, in a format agreed by the Engineer. One corrected hard copy shall be returned to the Contractor.

According to GCC Clause 79(1), the Engineer shall value and certify Contractors' interim payment within 21 days of receiving Contractor's statement, and the Government shall effect payment to the Contractor within a further 21 days. Notwithstanding this contractual provision, SDEV (then S for W) gave directive in April 2000 and re-confirmed in

January 2001 to achieve a 90% administrative target to effect payment of Contractors' interim accounts within 25 calendar days, for helping Contractors' cash flow in the "Helping Business Programme".

The payment to the Contractor should be the sum, which in the opinion of the Engineer is due, based on the rates in the Contract where appropriate, in respect of the following:

- (a) The estimated value of the permanent work executed,
- (b) The estimated value of any Temporary Works or preliminary items for which a separate sum is provided in the Bills of Quantities,
- (c) The estimated value of materials with proof of ownership from the Contractor for inclusion in the permanent work and not being prematurely delivered to and being properly stored on the Site,
- (d) The estimated sums payable in respect of Nominated Sub-contractors, and
- (e) Any other estimated sum, which the Contractor is entitled in accordance with the Contract.

Provided that the total certified sum should be adjusted by the Engineer to take into account the retention of the percentage stated in the Contract until the sum retained reaches the limit of Retention Money and any adjustment to be made for fluctuations in the cost of labour and materials.

The quantities ascertained and determined by the Engineer for valuing an interim payment may be given in fractions of a unit.

The assessment of quantities for interim payments should be based on the Interim Payment Abstract Sheets which record quantities abstracted from site measurements and surveys on as-constructed drawings. The Interim Payment Abstract Sheet should be prepared on a form as shown at Appendix 9.10 of Chapter 9 (Measurement Procedure). See Chapter 9, paragraph 3.3.2, for more details.

The method of assessing quantities may vary according to the nature of the work but every effort should be made to ensure neat and clear records, which are agreed, by both the ER and the Contractor.

- Note:
1. When assessing quantities of earthworks by lorry loads or barge loads, check surveys should be carried out every three months and the quantity per lorry/barge load should be adjusted if necessary.
 2. Any measurements or survey computations taken solely for interim payment purposes should be filed but should be clearly marked INTERIM ONLY.

7.2.2 Procedure

In order to meet the administrative target of effecting Contractor's payment within

25 calendar days as described in paragraph 7.2.1, the following progress record sheet or similar workflow procedure should be adopted by departments. However, the procedure as shown is for illustrative purpose only and each department may have their internal procedure for processing interim payment to suit departmental situation and the relevant departmental instructions should be referred to.

Interim Payment Certification - Progress Record					
To	Action	Action Deadline ¹	Date		Signature
			In	Out	
GR	Account received and Progress Record Sheet passed to ER	D minus 16 WD ²			
ER	Account received and passed to Inspector	D minus 15 WD			
Inspector	Quantities checked and passed to ER	D minus 12 WD			
ER	Account checked and passed to SSO(Q)	D minus 10 WD			
SSO(Q)	Bill casting checked and passed to Accounts Section	D minus 6 WD			
Accounts Section	Interim Payment Certificate checked	D minus 4 WD			
ER	Interim Payment Certificate signed	D minus 3 WD			
SE	Employer's Statement for Payment signed and passed to Accounts Section	D minus 2 WD			
Accounts Section	Payment Voucher online authorised in the 'Government Financial Management Information System' (GFMS)	D ³			
GR	Accounts copied to Site Office and filed	-			

Notes:

1. The exact calendar date of action deadline should be entered in the column, taking into account any intervening public holidays. The required action deadlines are for guidance only. Departments should work out their particular dates on its own merits.
2. WD = Working Days (including Saturday). The numbers of working days shown are for a typical cycle and indicative only. Action period of certain activities may have to be reduced due to extra public holidays in some circumstances e.g. Easter Holidays.
3. D = Deadline for GFMS online authorisation which should be within 20 calendar days on receipt of IP from the Contractor.

Contractor's accounts, including the electronic copy, must be submitted in their final form with an accompanying dated letter, so that the date of receipt of the account is recorded. The General Registry should stamp the account and prepare the Interim Payment Certificate Progress Record Sheet with the action dates filled in the appropriate columns. These, including the electronic copy, should then be passed in a loose jacket by hand to the ER. The Contractor's covering letter should be inserted into the main file and should be passed to the appropriate Senior Engineer for information.

The ER should check and sign the account, making such alterations as he considers necessary on the electronic copy and print out a hard copy of the corrected account. The ER should at least retain a copy of the uncorrected account in electronic form. His check should comprise checking the correctness of all quantities, that the work is being paid for under the appropriate items, the extension of quantities and rates, and the summation of the amounts shown against each item. He may request assistance from his Quantity Surveyors, Assistant Engineers, Inspectors of Works, Senior Survey Officer (Quantity) (SSO(Q)) and SO(Q) as appropriate, but should be responsible for ensuring that all such checks have been carried out within the stipulated periods.

If, for any reason, the ER finds that the account is invalid or cannot be certified, he should advise the Contractor accordingly in writing explaining the reasons and should return the account.

The ER should pass the corrected account both in hard and electronic copies to the Accounts Section, dating and signing the appropriate columns of the Interim Certificate Progress Record. The corrected account should not be returned to the Contractor for re-typing before passing to the Accounts Section.

The standard form at Appendix 7.19, which is based on Form EDD 27 or other relevant forms used in each individual department, on Engineer's Certificate shall be used. If the Engineer has not delegated authority to certify interim payment under GCC Clause 79(1) to the ER, the Certificate shall be signed by the Engineer.

The Employer's statement for Payment should be signed by an officer appointed by the Project Controller and such person should not be the Engineer nor the Engineer's Representative. After the account is authorised online by the Accounts Section, the Treasury will arrange for payment to the Contractor by direct bank credit and will also notify the Contractor accordingly. The Treasury normally takes three working days (excluding Saturday) to effect payment with an aim to achieve the administrative target of payment within 25 calendar days of receipt of accounts from the Contractor. A copy of the Payment Voucher and Engineer's Certificate shall be sent simultaneously to the Contractor and DEVB.

See paragraph 7.7.8 for more details as to "partial interim payment" arrangement, which is an interim relief measure.

7.2.3 Minimum Amount

The minimum payment to be made in an interim certificate is given in the Appendix to the Form of Tender. Minimum payments are specified to avoid the unproductive administrative effort necessary to prepare an interim certificate and may give an incentive to the Contractor to proceed with due diligence. It is recognised that in some circumstances a

low value of completed work may be the result of the type and timing of the work being undertaken, extensive adverse weather or delays in making part of the Site available for work to proceed etc, and, is not due to any failure by the Contractor to make diligent progress. When there are circumstances of this nature, consideration should be given to exercising the discretionary powers under the Contract in favour of certifying payment for an amount less than that shown in the Appendix to the Form of Tender. See also LWBTC No. 7/87.

Should the ER consider that there are grounds for issuing a certificate in a sum less than the specified minimum amount then before any detailed checking is carried out these grounds are to be stated in the payment file for consideration by the Engineer who will decide if a certificate is to be issued or not.

7.2.4 Contract Price Fluctuation

The operation of Contract Price Fluctuation (CPF) procedure is contained in DEVB TCW No. 4/2021. For on-going contracts, index numbers for civil engineering contracts, entitled “Index Numbers of the Costs of Labour and Materials used in Public Sector Construction Projects (April 2003=100)” compiled by C&SD shall be used for calculating the CPF. All new contracts (including design and build contracts) with tenders to be invited on or after 1 October 2021 shall adopt the 2021-based Index Numbers published by C&SD and the associated provisions (including the revised sample Schedules of Proportions) stipulated in DEVB TCW No. 4/2021 for CPF adjustment.

7.2.5 Deductions

In preparing the “Employer’s Statement for Payment” on the standard form at Appendix 7.19, deductions shall be made in respect of the following, where appropriate:

- (a) Previous payments - Since the Engineer’s Certificate is based on the total and hence cumulative value to which the Contractor is entitled (adjusted for Retention Money and price fluctuations), deductions will have to be made on all except the first certificate, in respect of previous payments.
- (b) Liquidated damages - refer to paragraph 8.2.
- (c) Value of materials supplied by the Employer.
- (d) Other deductions - the contractual grounds for such deductions shall be stated.

7.3 FINAL PAYMENTS

Basically, the guidelines as contained in paragraph 7.2 on interim payments shall be followed for final payments where appropriate. However, the following major differences shall be noted:

- (a) The Contractor shall submit the final account and supporting documentation showing the value of work done with all further sums he considers to be due to him not later than 90 days after the date of issue of the maintenance certificate.
- (b) Under GCC Clause 79(6), within 90 days after receipt of the final account and of all information reasonably required for its verification, the Engineer shall issue a final payment certificate stating the sum which is finally due under the Contract up to the date of the maintenance certificate with deductions of all sums previously paid by the Employer and the amounts to which the Employer is entitled under the Contract.
- (c) Any balance to be paid to or by the Contractor shall be made within 28 days of the date of the certificate.

Having regard to the above differences, the ER should ensure that the necessary checking has been carried out within 90 days after receipt of the final account and of all information reasonably required for its verification. As a good practice, the preparation of the final account should proceed throughout the contract period and not be left until submission of the final account. Where the Contractor fails to submit a statement of the final account within 90 days of the date of the maintenance certificate, the case should be reported to the Engineer who will consider issuing a final account without reference to the Contractor under GCC Clause 79(7).

The Final Payment Certificate at Appendix 7.20 shall be used. The due date for payment shall be entered as 28 days from the actual date of the Engineer's Certificate.

The certificate shall not make express reference to approval of any work, this being covered by GCC Clause 80 maintenance certificate. (Subsumed from WBTC No. 36/93)

Where payment has to be made by the Contractor to the Employer, the standard General Demand Note shall be issued. The General Demand Note contains the words "payment to be made within 14 days from date of bill". Under GCC Clause 79(6) of the Engineering Works the balance due from the Contractor to the Employer is required to be paid by the Contractor within 28 days of the Engineer's final payment certificate. The General Demand Note shall be amended to comply with the Contract. (Subsumed from WBTC No. 36/93)

7.4 MISTAKES IN PAYMENTS

GCC Clause 79(5) allows the Engineer to delete, correct or modify any sum previously certified by him by means of certificates. Should it be discovered that there has been a mistake in the Final Payments, the matter shall be reported to the Engineer who will give directions as to the appropriate action to be taken.

Legal advice is that for contracts executed under seal, the account will be left open for 12 years from the date of the final payment certificate. The Director of Audit, Director of Accounting Services, Director of Corruption Prevention and Permanent Secretary for Financial Services and the Treasury (Treasury) (PSTsy) have agreed that the "no finality" approach is appropriate. This permits the Employer and the

Contractor to retrieve over/under payments, subject to the 12-year limit. (Subsumed from WBTC No. 36/93)

Where difficulty is experienced in obtaining a refund of previous overpayments, or where it is not possible to make a claim due to the statutory period of 12 years having elapsed or for other reasons, legal advice and assistance should be sought and, if necessary, an application for write-off or waiver made in the usual way. See FC No. 5/2017 for more guidance.

7.5 OVERDUE PAYMENTS

In the event of failure by Government to make payment to the Contractor in compliance with GCC Clause 79, Government shall pay to the Contractor interest at one percent below the judgement debt rate prescribed from time to time by the Rules of the High Court (Chapter 4 of the Laws of Hong Kong).

7.6 RE-ENTERED CONTRACTS (Subsumed from WBTC No. 36/93)

There is no agreed standard format for certificate for contracts re-entered under GCC Clause 81. Individual departments should produce forms to suit their requirements based on the model at Appendix 7.20.

7.7 MEASURES TO ASSIST THE CONSTRUCTION INDUSTRY

7.7.1 Financial Relief Measures

In the immediate aftermath of the financial tsunami in late 2008, DEVB has implemented a package of interim financial relief measures with a view to relieving contractors, especially small and medium-sized contractors, of the cashflow difficulties they encountered at that time.

According to SDEV's memo ref. (025QN-01-3) in DEVB(W) 510/83/08 dated 4.3.2010, each works department is required to monitor the status with standing targets for achieving early contract finalization.

Upon completion of a review of the interim measures, DEVB decided to adopt these interim measures as standing policies in public works contracts under SDEV's memo ref. (02APB-01-8) in DEVB(W) 510/83/08 dated 8.3.2011. The measures includes, among other things, incorporation of contract provisions for interim payments for contracts which do not contain interim payment provisions, interim payment for major off-site pre-fabrication works, release of retention money in stages to the contractors. The SCC as promulgated under SDEV's memo ref. (02APB-01-8) in DEVB(W) 510/83/08 dated 8.3.2011 for implementation of the measures are given in Appendices 7.62, 7.65 and 7.66.

In order to improve the cash flow of contractors, DEVB also promulgated a set of

guidelines under SDEV's memo ref. DEVB(W) 510/83/08 dated 20.7.2012 for adoption of the SCC on interim payment for major off-site prefabrication items in public works contracts with a view to promoting its wider use. The set of guidelines is also given in Appendix 7.70.

7.7.2 Contract Measures to Prevent Non-payment of Wages and to Limit the Tiers of Sub-contracting

(Ref.: SDEV's memos ref. (027RU-01-3) in DEVB(W) 510/17/01 dated 16.7.2010, (02UZT-01-1) in DEVB(W) 510/17/01 dated 28.9.2016, DEVB(W) 510/17/01 dated 4.6.2019 and () in DEVB(W) 510/17/01 dated 19.4.2021)

DEVB promulgates contract measures to prevent non-payment of wages for implementation in all capital works contracts and contract provisions limiting the tiers of sub-contracting for application of public works contracts. See Section 21.7 for more details as to the contract measures to prevent non-payment of wages.

7.7.3 Advance Payment under New Capital Works Contracts

To assist the construction industry in the midst of the economic downturn in early 2020, DEVB introduced an interim relief measure of an "advance payment" mechanism in capital works contracts adopting selective tendering, with a contract period of not less than 12 months under SDEV's memo ref. () in DEVB(W) 510/33/02 dated 14.2.2020.

The helping measure allows the Contractor to request an advance payment from the Employer after the execution of the Articles of Agreement. In brief, the Contractor is required to submit a statement for such purpose to the Engineer / Surveyor / Project Manager for certification. The duly certified statement will then be passed to the Employer for processing payment. The advance payment will be deducted from interim and/or final payments due to the Contractor starting from the seventh monthly payment by instalments.

To help the construction industry tide over the difficult period of 5th wave of the COVID-19 pandemic, DEVB extended the "advance payment" mechanism until further notice under SDEV's memo ref. () in DEVB(W) 510/33/02 dated 10.3.2022.

7.7.4 Special Advance Payment under Ongoing Capital Works Contracts

To help the construction industry tide over the difficult economic situation in early 2020, DEVB extended the "advance payment" mechanism to cover ongoing capital works contracts with a contract period of not less than 12 months under SDEV's memo ref. () in DEVB(W) 510/33/02 dated 27 February 2020.

This one-off "special advance payment" arrangement shall apply to all ongoing capital works contracts at that time and contracts with tenders invited before 1.3.2020.

7.7.5 Special Advance Payment (5th Wave) for Ongoing Capital Works Contracts

To help the construction industry tide over the difficult period of the 5th wave of the COVID-19 pandemic, DEVB introduced a one-off "special advance payment (5th wave)" arrangement for ongoing capital works contracts under SDEV's memo ref. () in DEVB(W) 510/33/02 dated 15.3.2022, similar to the special advance payment arrangement promulgated under SDEV's memo ref. () in DEVB(W) 510/33/02 dated 27.2.2020

The one-off “special advance payment (5th wave)” arrangement shall apply to all ongoing capital works contracts awarded on or before 31 December 2021, irrespective of whether a similar advance payment has been made before pursuant to SDEV’s memos ref. DEVB(W) 510/33/02 dated 14 February 2020 or 27 February 2020.

7.7.6 Special Payment for Imported Items

The 5th wave of the COVID-19 pandemic is gradually subsiding from its peak. However, the construction industry is still experiencing uncertainties and delays in delivery of construction materials / products / plants / equipment / goods (hereinafter referred to as “materials and plant”).

To help public works contractors better cope with the above difficulties, policy approval is given under SDEV’s memo ref. () in DEVB(W) 510/33/02 dated 8.7.2022 for a special payment for materials and plant which are delivered to Hong Kong and properly stored off-site (hereinafter referred to as “Special Payment for Imported Items”) under capital works contracts.

For NEC ECC Option A and Option B contracts, Advance Payment for Plant and Materials is colloquially referred to as “materials on site”. Irrespective of the contract form adopted (i.e. GCC or NEC), in assessing payments for materials on site, consideration as to whether the materials and plant concerned are “not prematurely delivered” shall be made with due regard to the genuine effort made by contractors in securing delivery of such materials and plant, thereby avoiding delay to the projects.

To cope with the situation as described above under NEC-ECC target contracts, the *Project Managers* are reminded to refer to Item 3 on Plant and Materials and Item 4 on Subcontractors of the Schedule of Cost Component.

According to SDEV’s memo ref. () in DEVB(W) 510/33/02 dated 22.11. 2023, DEVB decided to extend this measure until further notice.

7.7.7 Streamlining the Approval Process of Contract Assignment

See Note 1 of Section 21.3 below for details.

7.7.8 More Frequent Interim Payments

The construction sector has indicated that many contractors experienced difficulties in running their business in the past year or so due to financial hardship or cash flow problems, caused mainly by the shrinkage in the volume of private construction works.

DEVB introduced a “partial interim payment” arrangement in the existing interim payment mechanism of capital works contracts under SDEV’s memo ref. () in DEVBWB WP4S-021-004-002 dated 10.10.2024. This new payment arrangement shall be applicable for all new capital works contracts for which tenders are to be invited during the period from 24 October 2024 to 31 August 2025 (both dates inclusive), or for those ongoing capital works contracts where a supplementary agreement is executed to incorporate appropriate contract provisions.

If this “partial interim payment” arrangement is adopted, the monthly interim payment will be paid to the contractor in two instalments. The first instalment, called partial interim payment, will be certified within 14 days after receipt of the contractor’s interim payment application and paid 7 days after certification. In order to minimise the workload arising from the introduction of this new arrangement, the amount to be certified by the contract administrator for the partial interim payment will be assessed on a broad-brush basis, amounting to 50% of either (i) the amount claimed by the contractor in his interim payment application; or (ii) a reasonable amount estimated by the contract administrator to be due to the contractor for the assessment period, as considered appropriate by the contract administrator. Upon completing detailed assessment of the amount due to the contractor for the assessment period by the contract administrator, the second instalment, viz. the amount due to the contractor for the assessment period less the amount paid under the first instalment, will be certified by the contract administrator and paid within the time frame specified in the original contracts.

The “partial interim payment” arrangement is only an interim relief measure in nature, contract administrator is empowered to suspend or cease the operation of the “partial interim payment” arrangement as he thinks fit under circumstances such as a contractor running into serious financial problem or having seriously poor performance or when DEVB considers that there is no need to continue this relief measure. When the operation of the “partial interim payment” arrangement is suspended or ceased, the payment method will be reverted to the conventional monthly interim payment arrangement.

7.7.9 More Frequent Milestone Payments

With the difficulties in the construction sector as mentioned in paragraph 7.7.8, according to SDEV’s memo ref. () in DEVBWB WP4S-021-004-002 dated 10.10.2024, project offices should introduce more frequent milestones or more activities (e.g. for major items of works) in new capital works contracts adopting milestone payments or using activity schedules, where practicable, to shorten the payment intervals to contractors.

This measure shall also be incorporated into ongoing capital works contracts as far as practicable provided that it would not result in additional costs to be borne by the Government. For works contracts which have already had contract provisions to allow sub-division of milestones / activities in the existing payment schedules, project offices should work proactively with contractors to introduce such sub-divisions. For works contracts which do not have such contract provisions, project offices should enter into a supplementary agreement with contractors through exchange of correspondence to introduce similar changes to the payment schedules with a view to achieving the objective of expediting payments to contractors.

For the purpose of executing a supplementary agreement as mentioned above, project offices should adopt one the sample letters in Appendices 7.83, 7.84 and 7.85 for NEC ECC HK Edition, NEC4 ECC and GCC contracts respectively. For ongoing capital works contracts adopting NEC3 ECC, project offices should make necessary amendments to the sample letters at the Annexes mentioned above to suit the context of NEC3 ECC. Clearance by LAD(W) should be sought in case of doubt.

8. EXTENSION OF TIME FOR COMPLETION AND LIQUIDATED DAMAGES

8.1 EXTENSION OF TIME FOR COMPLETION AND LIQUIDATED DAMAGES

8.1.1 General Principles

- (a) An extension of time for completion in effect deprives Government of the right to liquidated damages for delay in completion of the Works for the period of the extension and therefore has a financial implication.
- (b) GCC Clause 50(1)(a) expressly requires the Contractor to give notice in writing to the Engineer of their claim for an extension of time for completion within certain stipulated time limits, as follows:
 - (i) As soon as practicable but in any event within 28 days after the cause of any delay to the progress of the Works or any Section has arisen, the Contractor shall give notice to the Engineer of the cause and probable extent of the delay.
 - (ii) As soon as the Contractor can reasonably foresee that any order or instruction issued by the Engineer is likely to cause a delay to the progress of the Works or any Section, the Contractor shall give notice to the Engineer and specify the probable effect and extent of such delay. Such notice shall not in any event be given later than 28 days after the Engineer has issued the relevant order or instruction.
- (c) If the Contractor has failed to comply with GCC Clause 50(1), the Engineer is not bound under the Contract to consider whether the Contractor is fairly entitled to an extension of time for completion. However, the Engineer is not explicitly deprived of such power and the Engineer may consider the Contractor's claim for an extension of time for completion if it is not unreasonable for him to do so.
- (d) In order to ensure that the Contractor knows as soon as possible whether or not he is entitled to an extension and to enable him to plan his progress accordingly, the Engineer should take action in accordance with the following provisions in the Contract:
 - (i) Under GCC Clause 50(1)(b): if in the opinion of the Engineer, the cause of the delay is any of those stipulated in this sub-clause, then the Engineer shall within a reasonable time consider the Contractor's claim.
 - (ii) Under GCC Clause 50(2): if the Engineer considers that the Contractor is fairly entitled to an extension of time for completion, the Engineer shall within a reasonable time determine, grant and notify the Contractor in writing accordingly.
- (e) The Engineer is also required under GCC Clause 50(2) to notify the Contractor

in writing if he decides that the Contractor is not entitled to an extension in response to a claim made by the Contractor.

- (f) It should be noted that the Contractor has no duty to submit full and detailed particulars of the claim unless the Engineer has expressly required him to do so. Again, the submission if required shall be made by the Contractor to the Engineer as soon as practicable. If the Contractor fails to comply with a request for such a submission, the Engineer shall consider such extension only to the extent that he is able on the information available.
- (g) When examining a claim for an extension of time, the two crucial questions are whether the Contractor has in fact been held up by delay within the provisions of GCC Clause 50, and whether he is “fairly” entitled to an extension. It is thus necessary to take into account the facts on Site including the state of readiness of the Contractor to act had the matter that is the subject of the claim not arisen, and the effect on the critical path for the Works. For this purpose, it may be reasonable to consider the critical path as being the actual critical path at the time the matter took effect recognising that this may or may not be the same as the critical path in the notified programme. In all respects, the Engineer in determining an extension of time, is required under GCC Clause 50(2) to take into account all the circumstances which are known to him at that time, including the effect of any omission of work or substantial decrease in the quantity of any item of work.
- (h) It should also be noted that the Engineer, if so requested by the Contractor in writing under GCC Clause 50(2), shall make a subsequent review of the circumstances causing the delay and determine whether any further extension of time for completion should be granted. However, the Engineer may not, at such subsequent review, decrease any extension already granted to the Contractor.
- (i) For contracts that are managed by consultants, the provision of Clause 25(iv) of the “General Conditions of Employment of Engineering and Associated Consultants for a Design and Construction Assignment” should be referred to in matters relating to delays to the progress of the contract works and assessment of grant of an extension of time for completion. The same consideration also applies to in-house contracts.
- (j) An extension of time for completion may be granted in units of half a day.
- (k) **Entitlement to an extension of time does not automatically lead to entitlement to monetary compensation. GCC Clause 50(5) provides that except as provided elsewhere in the Contract, any extension of time granted by the Engineer shall be deemed to be in full compensation and satisfaction for any loss or injury sustained or sustainable by the Contractor in respect of any matter or thing in connection with which such extension shall have been granted. (Ref.: SDEV’s memo ref. DEVB(W) 510/10/01 dated 18.12.2013)**

8.1.2 Reasons for Extension

- (a) The main causes of delay that may justify an extension of time are given in GCC Clause 50(1)(b)(i) to (xi), and **SCC Clauses for unforeseen utility work if included in accordance with ETWB TCW No. 17/2004, and Change in Law if included in accordance with ETWB TCW No. 23/2004. (Ref.: SDEV's memo ref. DEVB(W) 510/10/01 dated 18.12.2013)**
- (b) When a claim for an extension of time in respect of inclement weather as stated in GCC Clause 50(1)(b)(i) is examined, “inclement weather” may be taken to mean “any weather condition which is detrimental to the progress of the Works in critical areas of the works programme and effectively delays the completion of the Works”. When weather conditions occur which may fall within this definition it is the responsibility of the Engineer/Architect to fairly determine whether the conditions prevented the completion of the Works, within the stated or extended time and if so, to assess the length of time by which the Works were delayed, and grant an extension to the time for completion accordingly. The object is to replace the lost time. In making this decision the Engineer/Architect must use his professional judgment, but in so doing the Engineer/Architect may consider:
- (i) the Contractor's notice required under Clause 50(1)(a) of the cause and probable extent of the delay;
 - (ii) the timing, duration and severity of the “inclement weather”;
 - (iii) changes in volume of work output;
 - (iv) changes in resources employed on the site;
 - (v) details of items of work delayed and their importance in the works programme as a whole;
 - (vi) the readiness of the Contractor to work had weather conditions been favourable;
 - (vii) any measures taken by the Contractor to minimise the effects of inclement weather; and
 - (viii) whether the extended period included any statutory or accepted (e.g. Lu Pan Festival) holiday during which the Contractor would not in any case work, in which case this lost time may also be added.

[Paragraph 8.1.2(b) (Subsumed from WBTC No. 8/92)]

- (c) Not used.
- (d) Where the provision for extension of time due to inclement weather is deleted in the Contract according to paragraph 9.18 of PAH Chapter 5, it should be noted that the Contractor's entitlement to extension of time in respect of

inclement weather that occurs after the expiry of the completion time originally prescribed in the Contract, but before the period of culpable delay, is not deleted.

- (e) In deciding whether the cause of delay is a disturbance to the progress for which the Employer is responsible pursuant to GCC 50(1)(b)(vii), the Engineer should take into account all relevant matters including e.g. the Government is wearing two hats in that on the one hand it is the Employer under the Contract and on the other hand it is exercising its public function. Any delay arising out of or in connection with the Government exercising its public function (e.g. implementation of large number of big infrastructure projects causing a shortage of construction workers in particular trades; rejection or lengthy processing of applications for importation of labour by LD, etc.) may not be a delay caused by the Employer under GCC 50(1)(b)(vii) of the Contract. (Ref.: SDEV's memo ref. DEVB(W) 510/10/01 dated 18.12.2013)**
- (f) "Any special circumstance of any kind whatsoever" under GCC Clause 50(1)(b)(xi) excludes the Employer's breach of express or implied terms of the Contract and any matters of delaying effects reasonably within the contemplation of the parties at the time of tender. Whether a claim of special circumstance is established depends on the facts of each case. In making this decision the Engineer/Architect must use his professional judgment, but in so doing the Engineer/Architect may consider the following factors (which are not exhaustive) where appropriate: (Ref.: SDEV's memo ref. DEVB(W) 510/10/01 dated 18.12.2013)**

 - (i) whether the occurrence of the event/problem relied on is something out of the ordinary or uncommon; (Ref.: SDEV's memo ref. DEVB(W) 510/10/01 dated 18.12.2013)**
 - (ii) in case the occurrence of the event/problem is foreseeable at the time of tender, whether the time of occurrence or the severity is not reasonably within the contemplation of the parties at the time of tender; (Ref.: SDEV's memo ref. DEVB(W) 510/10/01 dated 18.12.2013)**
 - (iii) whether the occurrence or the severity of the event/problem is self-induced by or arising out of the fault of the Contractor; and (Ref.: SDEV's memo ref. DEVB(W) 510/10/01 dated 18.12.2013)**
 - (iv) whether the Contractor has taken reasonable steps to avoid the occurrence of the event or alleviate the problem. (Ref.: SDEV's memo ref. DEVB(W) 510/10/01 dated 18.12.2013)**
- (g) The Contractor shall not be entitled to an extension of time for completion if the cause of the delay is any of the causes which are stipulated in GCC Clause 50(1)(c) (i) or (ii). A mandatory SCC has been promulgated under DEVB TCW No. 5/2013 to delete "labour" from Clause 50(1)(c)(ii). (Ref.: SDEV's memo ref. DEVB(W) 510/10/01 dated 18.12.2013)**

- (h) Upon the adoption of the SCC promulgated under DEVB TCW No. 5/2013, shortage of labour (or particular trades) is not a cause of delay automatically justifying an extension of time under Clause 50(1)(b) but the Contractor may be entitled to an extension of time if the Engineer/Architect considers that the delay brought by shortage of labour (or particular trades) is a case of special circumstance pursuant to GCC 50(1)(b)(xi). The problem of labour shortage not only covers the problem of insufficient workers of a particular trade but also insufficient skilled workers of the particular trade. Where the labour shortage is made more transparent and publicized by the Construction Industry Council (CIC) and the market information amid the increasing number of infrastructure projects in full swing and aging of workforce, shortage of labour (or particular trades) should be foreseeable at the time of tender. To demonstrate that the problem of labour shortage (or particular trades) is a case of special circumstance, the circumstance, e.g. the time of occurrence or the severity of labour shortage (or particular trades) etc. must be one which was not reasonably within the contemplation of the parties at the time of tender. As the Contractor is responsible for providing the resources necessary for constructing the work, the Contractor is not fairly entitled to any extension of time if the problem of shortage of labour is self-induced, caused by its own fault or arises out of its failure to take reasonable steps to alleviate the problem. However, each case turns on its own facts. Apart from the considerations mentioned above, the following are some relevant factors which may be taken into account (which are not exhaustive) in coming to a reasonable and just conclusion: (Ref.: SDEV's memo ref. DEVB(W) 510/10/01 dated 18.12.2013)
- (i) The wages the Contractor is prepared to pay and the reasonableness of the terms of employment. Hence, the level of wages the Contractor is offering when recruiting labour is a relevant factor for consideration. The wage rates published by the Census and Statistic Department and the Hong Kong Construction Industry Employees General Union may be used as a reference for comparison. (Ref.: SDEV's memo ref. DEVB(W) 510/10/01 dated 18.12.2013)
- (ii) Whether the Contractor has provided a safe and reasonable working environment to workers. (Ref.: SDEV's memo ref. DEVB(W) 510/10/01 dated 18.12.2013)
- (iii) Whether the Contractor has taken reasonable steps to increase efficiency and reduce the requirement of labour force, such as reasonably more use of prefabricated units, mechanical plants as compared with its Technical Proposal and any other contractual requirements etc. (Ref.: SDEV's memo ref. DEVB(W) 510/10/01 dated 18.12.2013)
- (iv) Whether the Contractor has taken reasonable steps to recruit workers timely, such as carrying out recruitment exercise through the Construction Industry Resources Centre, joining the Contractor

Cooperative Training Scheme etc. (Ref.: SDEV's memo ref. DEVB(W) 510/10/01 dated 18.12.2013)

8.1.3 Procedure (Subsumed from LWBTC No. 14/85)

An extension of time for completion of a contract should not be granted by means of a Variation Order (or Site Instruction in the case of Architectural Office contracts) but by letter. It should be notified to the Contractor in the form of the sample letter as given in Appendix 7.18. This should be adapted as necessary by individual departments and to suit specific cases. If there are any Sections identified in the Contract then the situation with regard to these Sections is to be stated, notwithstanding that they may be unaffected by the extension. In some cases, it may be only a Section that is affected and the whole of the Works may remain unaffected.

8.2 LIQUIDATED DAMAGES

8.2.1 Authority

Under GCC Clause 52, if the Contractor fails to complete the Works or any Section (where the Works are divided into Sections) within the time of completion or any extension thereof, then the Contractor shall pay liquidated damages to the Employer or the Employer may deduct liquidated damages from money due to the Contractor. It should be noted that the contractual authority to deduct liquidated damages is the officer nominated as the Employer on behalf of the Government.

8.2.2 General Principles

- (a) When the date for completion of an identified Section or the Works becomes due and the certificate of completion in respect of the Section or the Works is not to be issued in accordance with GCC Clause 53, the Engineer shall review the situation and make recommendations to the officer nominated as the Employer prior to the imposition of any liquidated damages. The review is to show the current due date for completion with notes and an assessment of any claims for extensions of time received or expected, together with an indication of the monies payable or likely to become payable to the Contractor. Retention Money and projected payments for price fluctuations, if any, are to be shown separately. If there appears to be good reason to suppose that the deduction of liquidated damages may produce such financial hardship that it might prevent the Contractor from completing the Works or any Section (where the Works are divided into Sections), this shall be specifically indicated in the recommendation.
- (b) If there appears to be reasonable grounds for an extension of time that might put back the due date for completion beyond the actual completion date, then deductions should not be made until the extension has been fully evaluated and the certificate of completion issued. Should there be an extension of time under consideration but preliminary assessments show that there are insufficient grounds to grant such an extension that would come near or go beyond the anticipated or actual completion date, then deductions after the

most optimistic estimate of the extended date may be appropriate.

- (c) GCC Clause 52 on liquidated damages also provides for the reduction of liquidated damages should any part of the Works or any part of the Sections be certified as being complete before the completion of the Works or the Sections.
- (d) The period for which liquidated damages shall be calculated shall be the number of days from the prescribed date for completion or any extension thereof of the Works or the relevant Section until and including the certified date of completion (apart from the interim deductions in sub-clause (b)).
- (e) If upon a subsequent review of the circumstances causing delay, the Engineer has granted an extension of time, any sum in respect of such period, which may have been paid by or deducted from the Contractor, must be reimbursed to him together with interest at one percent below the judgement debt rate in accordance with GCC Clause 79(4).

9. SITE MEETINGS

9.1 OBJECTIVE

The main objectives of site meetings with the Contractor are to review works progress and programme, to discuss problems encountered with regard to the execution of the Works and to propose remedies.

9.2 FREQUENCY

Site meetings should normally be called and chaired by the ER once a month or at more frequent intervals if necessary. The meetings shall be attended by the inspectorate staff, the Contractor's site agent and his representatives. When required, the Employer, the Engineer and the Contractor's senior personnel may attend meetings to address particular issues such as adverse progress or serious site problems. For certain contracts, such as operation and maintenance term contracts, site meetings may be at intervals greater than one month.

9.3 TYPICAL TOPICS

Typical topics discussed should include works progress and programme, site supervision, site resources including labour and plant, workmanship, materials, testing and site safety.

9.4 RECORDS

Matters discussed at site meetings shall be recorded in the minutes. The number of the meeting, date, time, venue and whoever attends should be stated. The minutes of meetings should be sent to the Contractor for his confirmation and retention. Copies of the same should be separately sent to the site agent, site office and other relevant officers for information and necessary action.

10. LIAISON WITH OTHERS

10.1 LIAISON WITH UTILITY COMPANIES, GOVERNMENT DEPARTMENTS AND OTHERS

Close liaison between the Contractor and others is very important. The Contractor should make all the necessary arrangements with and obtain all necessary approvals/agreements from Government departments, utility undertakers and other duly constituted authorities for carrying out the Works, including those required for traffic arrangement and control.

For excavation in existing public roads maintained by the HyD, the project office should apply for the necessary Excavation Permit or Works Permit from the Regional Offices or the Bridges and Structures Division of HyD as appropriate. Detailed procedures for the application of Excavation Permits from the HyD can be found in the Excavation Permit (XP) Processing Manual, which is available at the web site: <http://www.hyd.gov.hk>. For excavation in unleased Government lands other than streets maintained by the HyD, permission in the form of Simplified Temporary Land Allocation (STLA) should be obtained from the Lands D by the project office. Where STLA is not applicable and such excavation is not within the category of exemption under Section 10B of the Land (Miscellaneous Provisions) Ordinance, the Contractor shall apply to the Lands D for an Excavation Permit and shall be the Permittee.

The Contractor should maintain close liaison with all the necessary authorities throughout the Contract and in this respect Section 1 of the GS gives guidelines, and also details of traffic arrangements and control, works in roads and adjacent to utilities. Also, Chapter 3 gives further information concerning the appropriate Ordinances to follow and approvals to obtain.

There are cases in the past where reclamations formed with sand extracted from local marine borrow areas were found to contain unexploded ordnance. When carrying out any reclamation works and if any unexploded ordnance is found during the contract, the project office should assess the implications of the potential risks to the works and the future land use for appropriate actions. If there is any likelihood of residual risk to the land, the future land users (such as works departments responsible for subsequent provision of infrastructure works on the reclamation) and/or Lands D (in case no subsequent infrastructure works are needed but Lands D will arrange the land for disposal) should be consulted, where practicable, for any safety measures to be adopted and/or appropriate measures to be planned for the subsequent infrastructure works contracts and/or land lease conditions. The project office responsible for reclamation should provide the details to the future land users/Lands D for carrying out any necessary actions subsequently.

10.2 FACILITIES FOR THE BLIND

For capital works projects affecting existing pedestrian way, the project office shall inform the Subcommittee on Access (SCA) under the Rehabilitation Advisory Committee the site telephone numbers through which people with disabilities could contact site personnel for assistance when necessary. The address of SCA is Government Secretariat, 11/F, West Wing, Central Government Offices, 2 Tim Mei Avenue, Tamar, Hong Kong. The SCA is the

principal advisory body to the Secretary for Health, Welfare and Food on the development and implementation of rehabilitation policies.

11. SITE SAFETY

11.1 RESPONSIBILITY

It is the Contractor's responsibility to ensure the safety of all persons on Site and the general public during execution of the Works. Government site supervisory staff should encourage the Contractor and his workers to use safe methods of working and remind them of the provisions of the Construction Sites (Safety) Regulations and other relevant regulations, but they should avoid giving specific advice or instructions on working methods which could construe the site staff having assumed the Contractor's responsibility. Any breach of the regulations or safe working practices observed on Site should be brought to the attention of the Contractor and recorded in the site diary. Where it is considered that the outcome of any unsafe working practice could result in injury or be detrimental to the permanent works, the matter should be reported to the Engineer, who should then consider whether to exercise his power to suspend the progress of the Works and/or to notify the LD and/or Marine Department (MD) as appropriate.

With reference to SDEV's memo ref (02U5N-01-1) in DEVB(W) 517/17/01 dated 8 June 2016, capital works projects with estimated construction cost equal to or exceeding \$500M, excluding Design & Build projects, should follow the Design for Safety process with immediate effect. The project teams are reminded to refer to "Guidance Notes of Design for Safety" and "Worked Examples of Design for Safety" for their safety responsibilities during contract management. The documents can be downloaded from DEVB's website at: http://www.devb.gov.hk/en/publications_and_press_releases/publications/index.html

11.2 CONTRACTOR'S SAFETY ORGANISATION

The Contractor shall submit to the ER at monthly intervals an updated safety organisation chart. The ER shall ensure that the Contractor shall establish a Site Safety and Environmental Committee (SSEC). The statutory requirements for site safety management are listed in the Factories and Industrial Undertakings (Safety Management) Regulation, which vary according to the contract sum and the number of employees on Site. Under the Factories and Industrial Undertakings (Safety Officers and Safety Supervisors) Regulations, the Contractor has to employ a full-time Safety Officer and Safety Supervisor on Site when the number of workers reaches 100 and 20 respectively. The contractual requirements require the Contractor to employ part-time or full-time Safety Officer(s), Safety Supervisor(s) and Safety Representative(s) according to the number of workers on Site.

11.3 MONITORING AND LIAISON WITH LABOUR DEPARTMENT AND MARINE DEPARTMENT

To ensure closer co-operation between the site staff and LD/MD and to improve efficiency in monitoring site safety matters, the following procedures shall be followed. However, works department may adjust the procedures to suit their own modes of operation.

- (a) At the commencement of the Contract, the Engineer shall inform the relevant Divisional Occupational Safety Officer (DOSO) of LD of the location and the nature of the works, the name and the telephone number of the ER responsible

for supervising the Contract, the name of the Contractor, the contract sum, the commencement date and the estimated completion date of the Contract. For contracts which may involve any use of vessel and/or barge, the Senior Shipping Safety Officer (SSSO) of MD shall similarly be informed. The Engineer shall inform DOSO or SSSO immediately whenever there is any change of information.

- (b) The ER shall closely liaise with LD/MD throughout the whole construction period regarding the construction site safety matters. The ER shall invite LD/MD to attend the first Site Safety and Environmental Management Committee (SSEMC) meeting, and subsequent SSEMC meetings and other ad-hoc safety meetings where appropriate.
- (c) When the site staff have identified that an unsafe situation or believed that the Contractor or his workers are using unsafe working methods, the matter shall be drawn to the attention of the Contractor's Site Agent or Safety Officer as soon as possible. The matter should then be duly recorded in the site diary which must be countersigned by the Contractor's Site Agent. If the unsafe situation or the unsafe working methods still persist after repeated notifications by the site staff, they shall be reported by the most senior site staff to the relevant DOSO for their immediate action. Where the unsafe situation is considered as one with a definite risk to life, the Engineer may in parallel instruct the Contractor to suspend relevant portions of the Works. For similar cases involving persistent unsafe situations or unsafe working methods on a floating barge/vessel, the matter shall be reported by the most senior site staff to the SSSO in the Marine Industrial Safety Section of MD for their immediate action. See Chapter 8 of the CSSM for contact points of the relevant DOSO and SSSO.
- (d) When an Occupational Safety Officer (OSO), or a Shipping Safety Officer (SSO) visits the Site, the site staff shall brief the OSO or SSO the condition on the Site, accompany them during inspection, and ask them to sign on the site diary upon completion of the inspection. The ER shall ask the Contractor to follow up the items in the Construction Site Inspection Report issued by the Commissioner for Labour.
- (e) Where it is necessary for the Commissioner for Labour or the Director of Marine to issue statutory notices, viz. Improvement Notice, Suspension Notice, Marine Direction or Warning Letter, to the Contractor, the notices shall be copied to the Departmental Safety and Environmental Adviser (DSEA) concerned and the site staff. Upon the receipt of such reports and notices, the DSEA shall then copy them to the appropriate project office and other parties as he sees fit. The issue of any statutory notices shall be noted on the Report on Contractor's Performance.
- (f) Works department shall take the guiding principles of the "Guidance Notes on Safety and Health of Hand-Dug Tunnelling Work" (GN) into consideration when planning any trenchless/tunnelling work before awarding works contracts to contractors, and remind them to strictly follow the occupational safety and health (OSH) measures as set out in the GN. For effective monitoring the OSH performance, works department is requested to notify LD

once it intends to employ “heading” hand-dug tunnelling method in works projects and provide the information of the works such as site location, construction period and name of the consultant (if any), principal contractor to be involved and respective contact persons via letter or email to:

Senior Divisional Occupational Safety Officer
(Operations Division)(Headquarters)1
Address: Operations Division, Labour Department
13/F, Harbour Building,
38 Pier Road, Central,
Hong Kong.
Email: sso-hq-1@labour.gov.hk

11.4 CHECKING AND AUDITING OF TEMPORARY WORKS

Unless specifically provided in the Contract to the contrary, the Contractor is responsible for the design and stability of all temporary works. Attention is also drawn to paragraph 9.35 of PAH Chapter 5 concerning the independent checking of the design, erection, use and removal of temporary works. The ER is required to examine the Contractor’s design details concerning the design, erection, use and removal of the temporary works and shall satisfy himself that it contains no obvious deficiency. In particular, the ER is to carry out all necessary checks to ensure that the proposed methods do not have a detrimental effect on the permanent works or on the safety of existing or temporary slopes especially where public safety could be affected, and if necessary in consultation with the project engineer. For temporary works which will be extremely complex or innovative, or the case where potential consequence of any failure is likely to be severe, the requirement of independent checking of temporary works, including temporary drainage, and their effects on the permanent works or on the safety of existing or temporary slopes especially where public safety could be affected, should be considered. Where the requirements for checking, testing or inspecting temporary works have been given in the Contract then these requirements are to be implemented and monitored accordingly. In the majority of cases, no such specific requirements will be stated, and the ER should make all checks as appear to be reasonable as to the adequacy of the design and implementation, pointing out any errors or areas of uncertainty that become apparent. In some circumstances, a trial run or test load may be a practical way to prove suitability. The responsibility for the temporary works remains with the Contractor but no work should commence until the ER has issued his consent in writing upon making such verification. The ER should also satisfy himself that the Independent Checking Engineer has carried out his duties with reasonable skill and care in certifying that the temporary works have been properly and safely designed. See also paragraph 9.35 of PAH Chapter 5.

Guidance on temporary drainage provisions and precautionary and mitigation measures against severe rainfall during site formation works are given in GEO Technical Guidance Note No. 40. Suitable control requirements to protect public safety should be specified in the consultancy agreement and works contract. In some cases, there could be benefits to specify construction of some of the permanent drainage works in the early stage of the contract, to channel the majority of surface water flow to safe discharge locations, for safety and ease of construction.

In respect to temporary works, the following publications may generally be of use:

- (a) Technical Report TRSC 4, issued by the Concrete Society and the Institution of Structural Engineers, provides useful guidance where temporary works are classified as falsework;
- (b) Chapter 9 of the Geotechnical Manual for Slopes and GEO Technical Guidance Note No. 40 provide guidance and good practice for implementing temporary drainage and rainfall precautionary and mitigation measures during construction in the wet season;
- (c) BS 5975:1996 (Code of Practice for Falsework); and
- (d) Appendix B in the Structures Design Manual for Highways and Railways for the design of protective measures for Temporary Works.

Temporary geotechnical works should be designed and constructed in a safe manner. Proper supervision by technically and professionally qualified personnel is essential, particularly when public safety may be affected. Guidance on the requirements for geotechnical supervision is given in Appendix 7.47.

For projects involving tunnel works, the project office shall submit to the GEO for audit the geotechnical design documentation for all tunnel works, including associated temporary works, where such works could pose a significant risk to public life or property. Details of the information to be included in the geotechnical design submission are given in Appendix A of ETWB TCW No. 15/2005.

11.5 REPORTING OF SITE INCIDENTS AND ACCIDENTS

All accidents causing personal injury, affecting the Works or adjacent property, and incidents on or adjacent to the Site are to be recorded in the site diary. An accident is classified as a notifiable accident if:

- (a) it has led to fatality, or
- (b) the victim is in critical condition, or
- (c) the media have arrived on site or have telephoned to ask information concerning the accident, or
- (d) it will arouse public interest/concern in view of the damage/inconvenience that has been caused or its potential harm to workers and/or the public, or
- (e) it has created a drawn-out situation which may lead to fatality or multiple injuries.

Then, where practicable, the situation should be extensively photographed. The ER shall follow the procedures laid down in Sections 9.1.2, 9.1.3 and Appendix C9-AX of the Construction Site Safety Manual (CSSM). For other reportable accidents, the procedures in Appendix C9-AIV should be followed.

The ER should ensure that all evidence and facts are recorded. This must be done as soon after the occurrence of the event as practically possible. When ascertaining and recording the evidence and facts it is necessary to ensure that nothing is said or done which will:

- (a) Suggest that the Contractor has been relieved of any responsibilities or liabilities,
- (b) Interfere with the relationship between the Contractor and any insurance company, or
- (c) Admit any liability on behalf of Government or Government employees.

On the occurrence of accidents or incidents on Site, the ER shall ensure that the Contractor report to LD or MD using the appropriate statutory forms as required under the Factories and Industrial Undertakings Regulations, Occupational Safety and Health Ordinance or Shipping and Port Control Ordinance. Dangerous Occurrences shall be reported under Occupational Safety and Health Ordinance Section 13 or Factories and Industrial Undertakings Regulations Section 18. Should a Contractor's (including sub-contractors') employee be injured, the Contractor shall, without delay, notify the Commissioner of Labour in such form and manner as required by the Employees' Compensation Ordinance (Chapter 282). The matter should also be reported to the Engineer in the form prescribed in the Contract in accordance with GCC Clause 27 for Works Contracts or GCC Clause 29 for Term Contracts. For further details of contractor's responsibility to report accidents, reference should be made to Section 9.1. of the CSSM.

Should any accident or claim be either unclear as to responsibility or give rise to or be likely to give rise to legal proceeding by the Contractor or others against Government, then Secretary for Justice (S for J) are to be advised accordingly.

The "PWP Construction Site Safety & Environmental Statistics" (PCSES) system is a database maintained by DEVB, among others, for compiling and analyzing accident statistics of public works contracts. The accident statistics covered in the PCSES system include dangerous occurrences and reportable accidents resulting in death, serious bodily injury and injury with incapacity for more than 3 days. The ER shall collect information according to the procedures and using standard forms as stipulated in Appendices C9-AIV to C9-VII of the CSSM, for public works contracts including term contracts under his control and send to the Departmental Safety and Environmental Advisory Unit for entry into the PCSES system.

11.6 SPECIAL PRECAUTIONS WITHIN RAILWAY RESERVES

To promulgate the safety precautions to be taken by the site staff who are required to work in the vicinity of railway tracks, the ER shall:

- (a) Not used;
- (b) Not used;
- (c) Liaise with the Light Rail Director of MTR Corporation Limited (MTRCL) for

works affecting the Light Rail; or

- (d) Liaise with MTRCL and refer to the guidelines stipulated in DEVB TCW No. 1/2019 for works affecting the MTR protection boundary.

The requirements laid down in Chapter 3 should also be noted.

11.7 REGULATING ACTIONS ON CONTRACTORS CONVICTED OF SITE SAFETY OFFENCES OR INCURRING SERIOUS INCIDENTS ON SITE

Regulating actions will be taken against contractors who have been convicted of site safety offences or who have incurred serious incidents on sites including any other sites not under the control of the works group of departments. This applies to all listed contractors and sub-contractors that are either nominated Sub-contractors or specialist Sub-contractors employed under domestic sub-contracts. A site safety offence means a conviction for any offence set out in the following Ordinances and their subsidiary legislation:

- (a) The Factories and Industrial Undertakings Ordinance (Cap. 59);
- (b) The Occupational Safety and Health Ordinance (Cap. 509);
- (c) The Shipping and Port Control Ordinance (Cap. 313);
- (d) The Merchant Shipping (Local Vessels) Ordinance (Cap. 548)

For the purpose of regulating actions, a serious incident means an incident involving either one or a combination of the following:

- (a) Loss of life at a construction site;
- (b) Serious bodily injury at a construction site:
 - resulting in a loss or an amputation of a limb; or
 - which has caused or is likely to cause permanent total disablement to the injured (see footnote 1 of DEVB TC(W) No.5/2023);
- (c) Dangerous occurrence (see footnote 2 of DEVB TC(W) No.5/2023) or incident at a construction site leading to or resulting in injuries that are considered serious (but not up to the extent as described in sub-paragraph (b) above), or damage to works or property on or adjacent to the construction site that posed a potential threat to public safety as identified/notified by DEVB, LD or MD.

A contractor who may have caused or contributed (whether by act or omission) to the occurrence of a serious incident on a construction site, or has committed conviction of five or more site safety offences counted by the date of commission and not the date of conviction, each arising out of separate incidents in any six months period on a construction site or construction sites under the same contract (or sub-contract where the contractor is acting as a sub-contractor), will be required to make a written representation. A Panel of Enquiry chaired by DS(W2) of DEVB will make recommendations on regulating action after considering the written representation and hearing the case from the contractors. PS(W) will

then decide on the regulating action to be taken which may include issue of warning letter, independent safety audit, requesting for improvement proposal, suspension from tendering or other regulating actions including demotion, downgrading or removal. Further details are given in DEVB TCW No. 5/2023.

For arrangement for approval of domestic sub-contract, before an Architect/ Engineer/ Supervising Officer/ Maintenance Surveyor/ Project Manager/ Service Manager advises a contractor under a works contract whether he has an objection with respect to a proposed domestic sub-contractor, he shall check and ensure that the sub-contractor has not been suspended from tendering or removed from the Lists, taking cognizance of the requirements described in paragraphs 46 and 47 of DEVB TCW No. 5/2023 as appropriate.

11.8 DEPARTMENTAL SAFETY AND ENVIRONMENTAL ADVISER

In each Works Department, a Safety and Environmental Adviser is appointed at senior professional level to head a Safety and Environmental Advisory Unit. The roles and duties of the Safety and Environmental Adviser are set out in ETWB TCW No. 14/2003.

The Safety and Environmental Adviser shall submit monthly and quarterly reports to CAS(W)5 of DEVB with a copy to the respective Head, Deputy Head or Assistant Head of the department. Such reports shall include the relevant statistics and analyses on the health, safety and environmental performance of contractors for contracts undertaken by the department during the reporting period.

11.9 CONSTRUCTION SITE SAFETY MANUAL

A copy of the Public Works Programme Construction Site Safety Manual, issued by DEVB, is to be kept in the ER's Office. The Manual gives guidelines in policy, legislation, contractual provisions and site safety set-up and actions during construction. It also contains guidelines of a comprehensive safety plan, which help the Contractor to ensure the provision of a safe and healthy working environment for all personnel in public works construction sites and others who may be affected by the works. It is imperative that every professional and supervisory staff are familiar with and adhere to the contents of the Manual, particularly those involved in the administration and supervision of public works contracts.

The Manual will be reviewed in the light of experience gained and revisions will be issued from time to time. It has been completely revised in two parts via **Chapters 1, 2 and 4 to 11 of CSSM** and WBTC No. 30/2000. The most updated version of the Manual is available at DEVB's website.

11.10 PAY FOR SAFETY AND ENVIRONMENT SCHEME

The "Pay for Safety and Environment Scheme" (PFSES) includes pre-priced safety and environmental items in the Bills of Quantities (BQ) or Schedule of Rates. These items would be certified and paid to the Contractor, provided that the specified activities are satisfactorily performed whilst failure to perform would result in no payment for the relevant

items. As a general rule set out in ETWB TCW No. 19/2005 and supplemented by the interim guidance note issued in June 2006 (see paragraph 12.9), capital works contracts including E&M contracts and D&B contracts having an estimated contract sum of \$20M or more (or a smaller contract sum as set by individual departments), for which tenders are invited on or after 16 January 2006 shall be included under the PFSES. Irrespective of the value of the contract, contracts with duration of 6 months or less can be exempted from inclusion under PFSES. See WBTC No. 30/2000, Section 3.2 of Chapter 3 of CSSM, ETWB TCW Nos. 15/2003 (for contracts for which tenders are invited before 16 January 2006) and 19/2005 (& the interim guidance note) (for contracts for which tenders are invited on or after 16 January 2006) for details of the PFSES and DEVB's memo ref. (02LSV-01-1) in DEVB (W) 516/70/03 dated 22.11.2013 for details of Pay for Safety Performance Merit Scheme.

In mid-2015, the Safety Management System for public works contracts (SMS) was reviewed by DEVB with the objectives to sustaining the effort on site safety as well as to simplify and streamline the existing administrative works. The DEVB TCW No. 19/2005 was subsequently revised in March 2018 to reflect the enhancement to the SMS after the review. In brief, the PFSES has been renamed as the "Pay for Safety Scheme" (PFSS). For all public works contracts, including design and build contracts and term contracts, the tender of which are issued on or after 20 April 2018, all environmental related pre-priced payment items from the Bills for the PFSES shall be removed and then combined in an appropriate item to the Bills for Preliminaries. See DEVB's memo ref. DEVB(W) 516/71/01 dated 29 March 2018 for details.

11.11 SCORE CARD FOR ASSESSMENT OF SITE SAFETY PERFORMANCE

The Score Card system for assessing contractors' site safety performance applies to all works and term contracts except for minor contracts for supply of materials/equipment or laboratory testing etc. It provides a quantitative approach to assess the safety aspects of performance of contractors, which will be reflected in the Report on Contractors' Performance. The ER may consider incorporating the checklist items into the weekly safety walk checklists for use by his/her site staff so that a more consistent and objective assessment can be made on the contractor's safety performance during the reporting period.

Any items of major weaknesses identified in the Score Card shall be promptly communicated in writing by the Engineer or the ER to the Contractor who shall be requested to take prompt and appropriate action to rectify the situation. The major weaknesses identified and follow up actions required shall be discussed in the following Site Safety Management Committee meetings or progress meeting where appropriate, until satisfactory completion of the remedial actions.

DEVB TCW No. 1/2020 stipulates the detailed administration of the Score Card System, and Appendices A, B and C to DEVB TCW No. 1/2020 were subsequently updated in DEVB's memo ref. (03F9H) in DEVB(W) 516/71/01 dated 29 December 2022 and (03F7R) in DEVB(W) 516/70/03 dated 27 February 2023. The circular is available at DEVB's website.

A "Very Poor" rating in the Final Performance Rating of the Score Card as reflected in "Site Safety" section of the Report of Contractor's Performance (RCP) shall result in an "Adverse" RCP. Under such circumstance, regulating actions against contractors with poor performance as set out in Contractor Management Handbook shall be initiated where

appropriate. Moreover, provisions in paragraphs 24 and 25 of Appendix B of DEVB TCW No. 1/2020 relating to Final Performance Rating should be taken into account.

11.12 SITE SAFETY CYCLE

The Site Safety Cycle (SSC) aims to enhance the communication between site management and working levels on safety and health matters, promote workers' safety awareness and improve housekeeping and site tidiness. All these contribute towards the improvements of safety performance and prevention of accidents on construction sites. The second stage of SSC was promulgated via Section 3.2 of Chapter 3 of CSSM, which applies to all capital works contracts including Design, and Build contracts that are included in the PFSS or PFSES, and tenders of which are invited on or after 15 August 2002.

Basically, the activities of SSC are classified into three categories, namely Daily Cycle, Weekly Cycle and Monthly Cycle. Each of these cycles comprise activities as follows:

- (a) Daily Cycle
 - (i) Pre-work Exercise and Safety meeting;
 - (ii) Hazard Identification Activity meeting;
 - (iii) Pre-work Safety Checks;
 - (iv) Safety inspection by Site Agent or his/her representatives;
 - (v) Guidance and supervision during work;
 - (vi) Safety co-ordination meeting;
 - (vii) Daily cleaning and tidying up of the Site; and
 - (viii) Checking of the Site after each day's work.
- (b) Weekly Cycle
 - (i) Weekly Safety Walk by Site Agent and Safety Officer in company with the ER;
 - (ii) Weekly co-ordination meeting with Site Agent and the ER; and
 - (iii) Weekly overall cleaning and tidying up of the Site.
- (c) Monthly Cycle
 - (i) Site Safety and Environmental Management Committee meeting (including pre-meeting inspection); and
 - (ii) Site Safety and Environmental Committee meeting.

Reference should be made to Section 3.2 of Chapter 3 of CSSM for the administration and payment details of the SSC. The ER shall closely monitor the Contractor's performance on practising SSC on the Site. Any irregularity observed for the Pre-work Activities shall be put up to the Contractor for improvement in the weekly co-ordination meetings and/or Site Safety and Environmental Management Committee meetings as appropriate. The Contractor shall be warned if his performance on practising SSC is not satisfactory resulting in non-payment for "arrange and hold Pre-work Activities" for more than two consecutive weeks. If the non-payment continues, this should be duly reflected in the Contractor's quarterly performance report.

11.13 SAFETY TRAINING

Works departments should ensure that adequate site safety training is provided to departmental staff, particularly those working on construction sites and those responsible for the administration and/or supervision of contracts on sites and resident site staff employed by consultants on public works projects in accordance with the basic principles set out in Chapter 5 of the CSSM.

Contractual provisions on safety training for resident site staff employed by consultants shall be incorporated in consultancy agreements. Reference should be made to WBTC No. 12/2001 for the details of implementation.

11.14 ADOPTION OF SMART SITE SAFETY SYSTEM (SSSS)

All capital works contracts with an estimated contract sum exceeding \$30 million shall adopt SSSS. See DEVB TCW No.3/2023 for further details.

12. ENVIRONMENTAL PROTECTION

12.1 NOISE CONTROL

12.1.1 Working Within Restricted Hours

The Noise Control Ordinance (Cap. 400) provides for controls to restrict and reduce the nuisance caused by environmental noise. Of particular relevance to construction sites are the restrictions on:

- (a) Noise from certain construction activities, and
- (b) Noise from certain individual items of plant.

The Ordinance enables regulations and technical memoranda to be made which introduce detailed control criteria, measurement procedures and other technical matters.

In general, construction work using powered mechanical equipment between the hours of 7 p.m. and 7 a.m., or at any time on a general holiday, is prohibited under the Ordinance unless a valid Construction Noise Permit (CNP) is in force. On the other hand, carrying out percussive piling between the hours of 7 p.m. and 7 a.m., or at any time on a general holiday, is definitely prohibited. See paragraph 6.2 of Chapter 3 for more details of the Noise Control Ordinance. Reference should be made to technical memoranda issued from time to time pursuant to Section 9 of the Noise Control Ordinance.

12.1.2 Processing of Construction Noise Permit (CNP)

Applications for such permits are to be made by the Contractor on the prescribed forms to the Director of Environmental Protection. Note that percussive piling is subject to special conditions and may only be carried out in accordance with a CNP. For details with regard to the issue of CNP for a specific site, reference should be made to the relevant technical memoranda and the associated amendments issued by Environmental Protection Department (EPD).

When work is to be carried out during the restricted hours in an emergency, the Contractor should notify the officer-in-charge of the nearest police station before work commences, or as soon thereafter as is practicable. EPD should be notified the next day of the incident either by facsimile or a letter signed by the Chief Engineer.

12.1.3 Monitoring Noise Control Measures

The issue of CNP may include conditions such as details of the special noise control measures to be employed, acoustic performance specifications for such measures, or for particular quiet items of powered mechanical equipment/quiet percussive piling methods to be used, maximum noise levels at the nearest sensitive receiver or other position, or other conditions as imposed by EPD.

To ensure satisfactory control of construction noise, regular surveillance on noises emitted from the Site is encouraged. The site supervisory staff shall ensure that the conditions specified in the CNP are followed. In cases where a maximum noise level has

been specified as a condition of a CNP, any measurements which are taken to determine if this condition is being complied with should follow the procedure and guidelines as given in the relevant technical memoranda issued by EPD.

12.1.4 Sanctions Against Offences

Should the Contractor carry out his construction work using powered mechanical equipment within restricted hours without a valid CNP or fail to comply with any conditions of a permit, the case shall be reported to EPD who will carry out necessary prosecutions against the same.

12.2 PREVENTION OF WATER POLLUTION

12.2.1 Water Pollution Control Ordinance (Cap. 358)

The Water Pollution Control Ordinance provides the main control of water pollution in Hong Kong. The Contractor shall carry out work in such a manner, as far as is reasonable and practicable, to prevent water pollution. He shall comply with the requirements of the GS and in particular Clauses 1.22, 1.23 and 1.34.

12.2.2 Dumping at Sea Ordinance (Cap. 466)

The Dumping at Sea Ordinance controls the dumping or incineration of substances and articles at sea so as to prevent damage to the marine environment. It is an offence under the Ordinance to dump or incinerate substances or articles at sea without a valid permit or to do so not in accordance with the terms and conditions set out in the permit.

Projects or portions of projects, which involve the marine disposal of dredged/excavated sediment, shall be governed by the Ordinance. The Contractor shall make a formal application to the Director of Environmental Protection (DEP) for a dumping permit. The permit is valid for specific periods of time, for specific quantities and types of material carried by specific vessels, for a specific/designated place of disposal, and are subject to certain conditions. It is the responsibility of the Contractor to ensure that the permit conditions are met to DEP's satisfaction. Failure to comply with permit conditions will render the permit holder and/or responsible parties liable to legal action, and for repeated offences to refusal of future permits. Reference should be made to paragraph 4.2.1 of Chapter 4 of the PAH for details.

12.3 PREVENTION OF AIR POLLUTION

The Air Pollution Control Ordinance (Cap. 311) is the principal ordinance for the management of air quality. The Air Pollution Control (Construction Dust) Regulation came into operation on 16.6.97. The Regulation gives definitions and sets out control standards that must be met when construction works are carried out to prevent and to minimise dust emissions from the works.

12.3.1 Classification of Works

Under the Regulation, construction works are classified into the following categories:

- (a) “Emergency work” which means
 - (i) Work that is required under emergency situations where human life or building safety is immediately threatened or is being threatened; or
 - (ii) Repair work that is immediately required as a result of failure of utility services, road collapse or road blockade due to natural uncontrollable forces or accidents.
- (b) “Excluded work” which means
 - (i) Renovation, maintenance and alteration work carried out entirely within the external walls and under the roof of a building;
 - (ii) Work carried out exclusively for asbestos investigation, abatement and removal;
 - (iii) Any specified process;
 - (iv) work carried out entirely within a tunnel (except work carried out in any part of the tunnel that is within 100 m of any exit to the open air);
 - (v) work carried out entirely under water;
 - (vi) Repair work (including cleansing and inspection) to an underground sewer, drain, culvert or other pipeline that is carried out entirely within the confines of such sewer, drain, culvert or pipeline;
 - (vii) Paint brushing and patch repairs carried out on the outer surface of the external wall or the upper surface of the roof of a building;
 - (viii) Work carried out in a quarry including any associated rehabilitation of the excavated surface; or
 - (ix) Farming or archaeological activities.
- (c) “Notifiable work” which means
 - (i) Site formation;
 - (ii) Reclamation;
 - (iii) Demolition of a building;
 - (iv) Work carried out in any part of a tunnel that is within 100 m of any exit to the open air;

- (v) Construction of the foundation of a building;
 - (vi) Construction of the superstructure of a building; or
 - (vii) Road construction work,
- but does not include any emergency work, excluded work or regulatory work.
- (d) “Regulatory work” which means
- (i) Renovation carried out on the outer surface of the external wall or the upper surface of the roof of a building;
 - (ii) Road opening or resurfacing work;
 - (iii) Slope stabilisation work; or
 - (iv) Any work involving any of the following activities:
 - (1) Stockpiling of dusty materials;
 - (2) Loading, unloading or transfer of dusty materials;
 - (3) Transfer of dusty materials using a belt conveyor system;
 - (4) Use of vehicles;
 - (5) Pneumatic or power-driven drilling, cutting and polishing;
 - (6) Debris handling;
 - (7) Excavation or earth moving;
 - (8) Concrete production;
 - (9) Site clearance; or
 - (10) Blasting,

but does not include any emergency work, excluded work or notifiable work.

12.3.2 Notification

The Contractor responsible for the construction site shall give notice to EPD before the proposed notifiable work commences to be carried out and shall be in the prescribed form and include the specified particulars.

Where any change relating to any of the particulars given in an earlier notice is proposed, the Contractor shall give notice to the EPD of the proposed change before the proposed change shall take effect.

12.3.3 Control of Works

The Contractor responsible for a construction site where notifiable or/and regulatory works are being carried out shall ensure that the works are carried out in accordance with the Schedules of Dust Control Requirements stated in the Regulation.

Where an excluded work is being carried out the Contractor shall ensure that any dusty materials, which are stored outside the site, are stored and handled in accordance with any relevant provisions of the Schedules of Dust Control Requirements stated in the

Regulation.

Any person who contravenes commits an offence and is liable to a fine under the Regulation.

12.3.4 Use of Non-road Mobile Machinery

DEVB TCW No. 1/2015 promulgates the requirements for the use of non-road mobile machinery (“NRMM”) approved under the Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation in capital works contract of public works including design and build contracts with an estimated contract value exceeding \$200 million. Reference should be made to DEVB TCW No. 1/2015 for the implementation plan to phase out the use of exempted NRMM and the provisions to be incorporated in tender documents.

12.4 ENVIRONMENTAL PERMIT

The Environmental Impact Assessment Ordinance (Cap. 499) (EIAO) came into operation on 1.4.98. The purpose of the Ordinance is to avoid, minimise and control the adverse impacts of certain designated projects on the environment through the use of the environmental impact assessment process and the issue of environmental permit. In accordance with Section 10 of the Ordinance, a person who wishes to have constructed, construct or operate a designated project listed in Part I of Schedule 2 or to decommission a designated project listed in Part II of the Schedule is required to have an Environmental Permit issued by the Director of Environmental Protection.

A Technical Memorandum on Environmental Impact Assessment Process was issued under the EIAO and in addition “A Guide to the Environmental Impact Assessment Ordinance” was published containing detailed information on the practices and procedures involved. Further reference should be made to ETWB TCW No. 13/2003.

It should also be noted that project profiles to be submitted under Section 5 of the EIAO (application for permission to apply directly for an environmental permit) shall be in both English and Chinese to facilitate public inspection.

See also paragraph 13.5 for variations affecting environmental permit.

12.5 CONSTRUCTION AND DEMOLITION (C&D) MATERIAL

12.5.1 Dumping Licences

Application for Dumping Licences needs to be submitted to Chief Engineer/Fill Management of CEDD for delivering inert C&D material to public filling facilities. Public filling facilities include public filling areas, public filling barging points and public fill stockpiling areas. Licences are issued by the CEDD under the Land (Miscellaneous Provisions) Ordinance, under the delegated authority of Director of Lands. Dumping Licences for public filling facilities require that material to be disposed of at public filling facilities must comprise only earth, building debris, broken rock and concrete. Such materials shall be free from marine mud, household refuse, plastic, metal, industrial and chemical waste, animal and vegetable matter and other matter considered unsuitable by the Filling Supervisor. Small quantities of timber mixed with otherwise suitable material may be

permitted. The materials considered unsuitable for disposal at public filling facilities have to go to a landfill.

Reference should also be made to WBTC Nos. 2/93, 2/93B, 16/96, 4/98 & 4/98A and ETWB TCW Nos. 15/2003 (for contracts for which tenders are invited before 16 January 2006) & 19/2005 (for contracts for which tenders are invited on or after 16 January 2006) concerning the handling and disposal of C&D material to public filling facilities.

12.5.2 Trip-ticket System

In order to deal with the problem of illegal dumping, a trip-ticket system has been applied, subject to certain exemptions, to all PWP contracts invited on or after 1 July 1999. All inert C&D materials and C&D wastes shall be disposed of at designated public filling facilities and designated landfills respectively. The operation procedures of the trip-ticket system should be in accordance with the details stipulated in the PS and DEVB TCW No. 6/2010 (for public works contracts for which tenders are invited on or after 1 November 2010).

The Contractor's compliance with the system shall be a consideration in the assessment of the Contractor's performance. See DEVB TCW No. 6/2010 (for public works contracts for which tenders are invited on or after 1 November 2010) and the guidance notes in Appendix 4B of the Contractor Management Handbook for details.

Implementation of the trip-ticket system should be included as a standard item in the technical audit carried out by Works Departments in accordance with paragraph 21.2.1 of Chapter 7 of the PAH. The audit should include the aspects on the implementation of the trip-ticket system and the implementation of follow-up actions for any non-compliance with the requirements of the system.

12.5.3 Waste Management Plan

All capital works contracts including E&M contracts and D&B contracts having an estimated contract sum of \$20 million or more, for which tenders are invited on or after 1 July 2003, should require the contractor to prepare and implement an enhanced Waste Management Plan (WMP) as stipulated in ETWB TCW No. 19/2005 with the aim to ensure that solid steps would be taken to avoid and/or minimize C&D material generation, to reuse and recycle C&D material generated and to maintain the Site in a clean and tidy condition. Contractors are required to carry out on-site sorting of C&D materials to recover the inert portion, and those reusable and/or recyclable materials. The WMP should include a proposal of how the contractor would maintain the Site in a clean and tidy condition and checklists, including a daily checklist for site cleanliness and tidiness (see also paragraph 12.6) to ensure the WMP is properly implemented. The WMP shall be submitted for the Engineer's approval.

The Contractor's performance in implementing the WMP shall be considered in assessing the Contractor's performance. See the guidance notes in Appendix 4B of the Contractor Management Handbook for details.

Following the issue of ETWB TCW No. 19/2005, the WMP has been incorporated as part of the Environmental Management Plan (EMP) for contracts for which tenders are invited on or after 16 January 2006. See paragraph 12.9 for further details of the EMP.

12.5.4 Construction Waste Disposal Charging Scheme

The Construction Waste Disposal Charging Scheme came into operation on 1 December 2005. See EPD's website for details.

12.6 REGULATING ACTIONS ON CONTRACTORS CONVICTED OF ENVIRONMENTAL OFFENCES

Regulating actions will be taken against contractors who have been convicted of environmental offences on sites including any other sites not under the control of the works group of departments. This applies to all listed contractors and sub-contractors that are either nominated Sub-contractors or specialist Sub-contractors employed under domestic sub-contracts. An environmental offence means a conviction for any offence set out in the following Ordinances and their subsidiary legislation:

- (a) the Air Pollution Control Ordinance (Cap. 311);
- (b) the Noise Control Ordinance (Cap. 400);
- (c) the Waste Disposal Ordinance (Cap. 354);
- (d) the Water Pollution Control Ordinance (Cap. 358);
- (e) the Dumping at Sea Ordinance (Cap. 466);
- (f) the Ozone Layer Protection Ordinance (Cap. 403);
- (g) the Environmental Impact Assessment Ordinance (Cap. 499);
- (h) the Hazardous Chemicals Control Ordinance (Cap. 595).

A contractor who has committed conviction of five or more environmental offences counted by the date of commission and not the date of conviction, each arising out of separate incidents in any six-month period on a construction site or construction sites under the same contract (or sub-contract where the contractor is acting as a sub-contractor) will be required to make a written representation. A Panel of Enquiry chaired by DS(W2) of DEVB will make recommendations on regulating action after considering the written representation and hearing the case from the contractors. PS(W) will then decide on the regulating action to be taken which may include issue of warning letter, requesting for improvement proposal, suspension from tendering or other regulating actions including demotion, downgrading or removal. Further details are given in DEVB TCW No.5/2023.

For arrangement for approval of domestic sub-contract, before an Architect/ Engineer/ Supervising Officer/ Maintenance Surveyor/ Project Manager/ Service Manager advises a contractor under a works contract whether he has an objection with respect to a proposed domestic sub-contractor, he shall check and ensure that the sub-contractor has not been suspended from tendering or removed from the Lists, taking cognizance of the requirements described in paragraphs 46 and 47 of DEVB TCW No.5/2023 as appropriate.

12.7 SITE CLEANLINESS, TIDINESS AND CONTROL ON MOSQUITO BREEDING

GCC Clause 38 and Clause 1.32 of the GS requires the Contractor to keep the Site clean and hygienic and to maintain site cleanliness. An enhanced specification on cleanliness and tidiness of public works sites was introduced in all PWP contracts, including D&B contracts, invited on or after 15 April 2002. Separate items for payment on site cleanliness are stipulated in the BQ to prevent the Contractor from evading their general obligation. The Contractor shall be required to maintain records on site cleanliness including, but not limited to, daily and weekly inspection checklists and photos taken at various work locations to be agreed by the Engineer for monitoring of site cleanliness condition. Payment can be made upon the satisfactory performance of the Contractor on site cleanliness in accordance with the PS based on the inspection checklists and photos taken. The ER may conduct regular inspections and surprise checks to verify the Contractor's performance on site cleanliness in certifying payment.

The ER shall maintain a record of payment and non-payment to the Contractor on site cleanliness. A verbal warning shall be given to the Contractor whose performance on site cleanliness is not satisfactory, resulting in non-payment for two consecutive Cleaning Days or Cleaning Week Days, or more than two Cleaning Days in any rolling five-Cleaning Day period. If the performance is not improved, a written warning shall be issued. If the situation is still not improved, the Contractor's unsatisfactory performance should be duly reflected in the quarterly performance report. Further details for the administration and payment on the enhanced specification for site cleanliness and tidiness are given in DEVB TCW No. 8/2010.

The Engineer shall direct the Contractor to implement the measures in ETWB TCW No. 22/2003 for improvement of site cleanliness and to control mosquito breeding on construction sites. The Engineer may revise the measures and/or supplement additional measures to suit specific nature of individual contracts and shall monitor the effectiveness of such basic measures or any additional measures through the Pay for Safety and Environment Scheme (or the Pay for Safety Scheme as appropriate).

The Engineer shall report the Contractor's performance in site cleanliness and control of mosquito breeding in the Report on Contractor's Performance. See ETWB TCW Nos. 22/2003 & 22/2003A and the guidance notes in Appendix 4B of the Contractor Management Handbook for details.

12.8 USE OF PFA AS GENERAL FILL IN RECLAMATION

Procedures and guidelines for using Pulverised Fuel Ash (PFA) as general fill in reclamation, both below and above water, are given in WBTC No. 14/94.

With the reorganisation of the Fill Management Committee (FMC) into the Marine Fill Committee (MFC) and the Public Fill Committee (PFC), the previous role of the FMC in co-ordinating the use of the PFA as outlined in the above circular is taken up by the PFC. In general, the PFC, as authority for the allocation of fill sources to reclamation projects, may require Government Departments to include PFA as reclamation fill where this is considered by the PFC to be feasible. See WBTC No. 12/2000 for reference.

When lagooned or fresh PFA is transported by road or used as fill above water, dust suppression measures given in Appendix A of WBTC No. 14/94 shall be implemented.

12.9 ENVIRONMENTAL MANAGEMENT

The concept of waste management has been further extended to environmental management by ETWB TCW No. 19/2005, targeted at those nuisances relating to air (smoke and dust), noise and wastewater pollution. The requirements of environmental management covering both nuisance abatement and waste management shall be applied to all capital works contracts. Capital works contracts including E&M contracts and D&B contracts having an estimated contract sum of \$20M or more and with duration longer than 6 months, for which tenders are invited on or after 16 January 2006 shall be included under the “Pay for Safety and Environment Scheme” (PFSES).

The PFSES was first introduced, by extending the then “Pay for Safety Scheme”, to cover waste management. The purpose is to enhance waste management on construction sites and to facilitate monitoring and control of the contractor’s performance on waste management. Following the issue of ETWB TCW No. 19/2005, the PFSES has been expanded to environmental management absorbing waste management into it. The contractor shall be required to prepare and implement an Environmental Management Plan (EMP) with the aim to abate environmental nuisances on construction sites and to reduce C&D materials to be disposed of during the course of construction.

ETWB TCW No. 19/2005 has been supplemented by the “Interim Guidance Note on Administration of Environmental Management and Pay for Safety and Environment Scheme for Public Works Contracts” issued via SETW’s memo ref. (014G7-01-1) in ETWB(W) 517/91/01 dated 19.6.2006, incorporating feedback from the construction industry, EPD and works departments with updated appendices of the circular. The guidance note is available at DEVB’s website.

As part of the EMP on waste management, the Contractor shall establish a mechanism to record the quantities of C&D materials generated each month (using the “Monthly Summary Waste Flow Table”). The Contractor shall also provide in his EMP the estimated quantities of C&D materials that will be generated each year from the site during the whole construction period (using the “Yearly Summary Waste Flow Table”), and such information shall be updated on a half-yearly basis. In addition, the Contractor shall set up a disposal recording system as part of the EMP by adopting the trip-ticket system as stipulated in DEVB TCW No. 6/2010 (for public works contracts for which tenders are invited on or after 1 November 2010), for ensuring the proper disposal of C&D materials to designated outlets. Information returned by the Contractor in the Summary Waste Flow Tables shall be collected and collated by each works department. The project offices shall then upload the data to the “PWP Construction Site Safety & Environmental Statistics” (PCSES) System of DEVB. DEVB will coordinate with the DSEAs to monitor the returns from the contractors.

The PFSES has incorporated provisions requiring that all trucks used for the transportation of C&D materials to and from the Site shall be fitted with mechanical covers.

The Contractor’s environmental performance shall be monitored and controlled through the weekly environmental walks, SSEMC meetings and SSEC meetings under the PFSES. If the Engineer considers that the Contractor has exhibited consistently poor environmental performance, it should be duly reflected in the Report on Contractor’s Performance. See the guidance notes in Appendix 4B of the Contractor Management Handbook for details.

As per the review of SMS as mentioned in paragraph 11.10, ETWB TCW No. 19/2005 regarding the environmental management on construction sites has been updated by DEVB's memo ref. DEVB(W) 517/91/01 dated 29 March 2018.

13. VARIATIONS

13.1 AUTHORITY FOR VARIATIONS

(SDEV's memo ref. () in DEVB(W) 546/83/01 dated 20.9.2024)

The Engineer may order certain variations to any part of the Works in accordance with GCC Clause 60. It should be noted that such variations have to be made in writing. Under GCC Clause 62, the Engineer may also order in writing that work to be carried out as a result of variations shall be executed on a daywork basis.

The ER may have delegated authority to order certain variations himself. When any variation exceeds the limit of delegation to the ER or when delegation is not made, orders for variations shall be made by the Engineer.

It is necessary to check whether the additional works are within the terms of the original Contract. If not, the works may need to be carried out in the form of supplementary agreement (see paragraph 13.4). Prior to any variation being ordered by the Engineer or the ER, it is necessary to check whether an increase in the contract sum would be involved. If a variation would involve an increase in the original contract sum, the approval for such an increase should be in accordance with Appendix V(B) of the SPRs . If such an increase would result in the APE being exceeded, prior approval from SFST must first be obtained for an increase in the project estimate. Pursuant to SPR 520(c), the cumulative value of contract variations in accordance with GCC Clause 60 for all contracts should not normally exceed 50% of the original contract value.

In addition, prior approval from the appropriate officer in accordance with the formal delegation of authority by the Head of the Department, or from the Director's Representative shall be sought by the Engineer for variations estimated to exceed \$1,400,000 in value for all works contracts (including term contracts), for which tenders are to be invited on or after 16 October 2024, as revised in SDEV's memo ref. () in DEVB(W) 546/83/01 dated 20 September 2024. For ongoing works contracts (including those under tender stage with tender invitation already made before 16 October 2024 and tender addendum not able to be issued in time), a supplementary agreement shall be executed between the contracting parties through exchange of correspondences by adopting the sample letters in Appendices 7.80 and 7.81 for GCC and NEC contracts respectively. In case project offices consider it not appropriate to implement the revised threshold for individual works contracts, approval from an officer at D2 rank or above shall be obtained. Justifications may include construction works nearing substantial completion, unlikelihood of issuing orders of higher values, etc.

For value less than that mentioned in previous paragraph, no prior approval is required provided that no increase in contract sum is necessary. Should increase in contract sum be required, the authorisation laid down in SPR 520 and Appendix V(B) of the SPRs shall be followed. When approval for variations under SPRs is being sought, the direct cost of the variation and the financial consequences it may generate (excluding extension of contract period) should all be lumped under Appendix V(B) Item A.I(a) for approval in terms of authority. For variations involving extension of contract period, Appendix V(B) Item A.V should be referred to for the appropriate level of approval authority.

Pursuant to SPR 520(d), the authorisation limits specified in Appendix V(B) of the SPRs concerning contract variations shall be strictly interpreted and not be evaded by

deliberately omitting unrelated works to bring the net value of a variation to within the limits. For avoidance of doubt, for a contract that involves variations leading to a decrease in contract value in one area and an increase in contract value in another during the contract period, only the variation that leads to an increase in contract value will count under the accumulated value of the contract for determining the appropriate level of authority for seeking approval for contract variation as specified in Appendix V(B) of the SPRs.

However, there are variations that inevitably involve deletion of works as well as additional works (such as replacing a 300mm diameter pipe with a 450mm one because of a change in design requirements and this variation involves deleting the 300mm diameter pipe and adding on the 450mm one) and they are all part and parcel of the subject variation. In these instances, the net value of the variation will be determined for the purpose of applying the authorities under Appendix V(B) of the SPRs. For variations that involve additions and omissions which are unrelated in cause (such as deletion of an item related to “assistance to the Engineer” and the creation of a new item for the provision of a new drainage pipe), they should be caught by SPR 520(d) mentioned above for the purpose of applying the authorities under Appendix V(B) of the SPRs.

For further guidance on the application of SPR 520 and Appendix V(B) relating to authorities for contract variations, reference should be made to SETW’s memo ref. (01BP9-01-2) in ETWB(W) 510/30/1 dated 8.1.2007. Copy of such memo should be available from the Departmental Contract Advisor.

For variation to a supplementary agreement for additional works approved under Items A.III and A.IV of Appendix V(B) of the SPRs, see paragraph 13.4.

13.2 VARIATION ORDERS

There is no provision in the GCC for issuing variations verbally for later confirmation in writing. All variation orders are to be made in writing and signed by the Engineer or ER with delegated authority.

The standard form for variation orders is at Appendix 7.21.

13.3 VALUATION OF VARIATIONS

(Ref.: SDEV’s memo ref. () in DEVB(W) 511/83/03 dated 19.3.2013)

Whenever practicable, the rates for variations are to be agreed prior to the issue of the variation orders. It is recognised that this is not always possible and that rates are often determined after the variation order has been issued and sometimes after the work has been carried out.

The principles for valuing variations are set out in GCC Clause 61. GCC Clause 61(1)(b) provides that if the varied work is the same as or similar in character to and executed under the same or similar conditions and circumstances to work priced in the Contract, then such Contract rates shall be used to value the varied work (“Rule 1”). The inherent profitability or otherwise of the rate is not relevant in applying Rule 1. It is immaterial that the Contract rates may appear “too high” or “too low”. Valuation under GCC Clause 61(1)(a) for work omitted also falls under the application of Rule 1. GCC Clause 61(1)(c)

provides that if the varied work is of a dissimilar character or is executed under dissimilar conditions to work priced in the Contract, then the Contract rates shall be used as the basis of valuation so far as may be reasonable (“Rule 2”). The word “reasonable” refers only to whether it is practical or feasible to use the Contract rates as the basis of valuation, irrespective of the monetary value of such rates. The fact that the rate itself may not be reasonable is irrelevant. GCC Clause 61(1)(c) also provides that the rate shall be agreed between the Engineer and the Contractor (“Rule 3”) if Rules 1 and 2 are not applicable. If Rule 3 comes into play and/or the circumstances contemplated by the proviso to GCC Clause 61(1) occur, the Engineer has to confer with the Contractor in an attempt to reach an agreement on the rate. However, the Engineer is not required under the Contract to seek the agreement of the Contractor as to the Engineer’s valuation under Rule 1 and Rule 2.

In the event that the Engineer and the Contractor fail to reach agreement on any rate for variations under Rule 3 and the proviso to GCC Clause 61(1), the Engineer shall, pursuant to GCC Clause 61(2), fix such a rate as shall in his opinion be reasonable and shall notify the Contractor accordingly.

It should be noted that there is a difference in nature between the valuation of variations under GCC Clause 61 pertaining to an issue of a variation order under GCC Clause 60 and the ascertaining of Cost incurred under GCC Clauses 46(4), 48, 54, and 63, etc. If in doubt, the Departmental Contract Adviser should be consulted.

When the Engineer values variations in accordance with GCC Clause 61, he shall notify the Contractor of such valuations in the form of a letter. A standard form of such a letter is shown at Appendix 7.22. The following shall be stated in the letter: (i) whether or not any rates are subject to Contract Price Fluctuation, (ii) the contract provisions under which the valuation is based, and (iii) when the valuations are valued pursuant to Rule 3 in GCC Clause 61(1)(c) or the proviso to GCC Clause 61(1), requesting the Contractor to make a reply within 28 days or such other longer period as may appear reasonable indicating whether he agrees to the Engineer’s valuations. The power to value variations is usually not delegated to the ER. As such, the letter valuing variations is to be signed by the Engineer.

If the Contractor does not reply after the period of time stated in the letter of request has expired or indicates a disagreement within such period, the Engineer shall review his valuations and decide whether to (a) further discuss the valuations with the Contractor in an attempt to reach agreement or (b) invoke GCC Clause 61(2) to fix the rate or rates. For the letter to be regarded as the letter for fixing rates, GCC Clause 61(2) should be referenced as shown in the letter at Appendix 7.22A.

For internal financial control, when letters concerning valuing variations are issued, a current financial statement as shown at Appendix 7.23 should be prepared and copied to relevant parties together with the letters of valuing variations.

The Engineer should finish the valuation of variations as soon as practicable. After the issuance of the last certificate of completion, the Engineer shall take stock of the variations where rates are still under discussion with the Contractor. The Engineer should investigate the reasons for the failure to reach an agreement and take appropriate actions, to expedite the finalization of the valuation of the rates of the variations. For those variations in respect of which the rates, valued under Rule 3 in GCC Clause 61(1)(c) and the proviso to GCC Clause 61(1), are not yet agreed, the Engineer may then invoke GCC Clause 61(2) to fix the rates for such problematic variations. The Engineer shall endeavour to finalise all the

rates, taking account the requirement under GCC Clause 79(6) that the Contractor shall submit to the Engineer a statement of final account within 90 days after the date of issue of the maintenance certificate.

Contracts with the deployment of a DRA have a particular set of time frames for valuation of variations, and the above time frame is not applicable.

13.4 EXECUTION OF WORK OUTSIDE THE ORIGINAL SCOPE OF THE CONTRACT AND CHANGES TO CONTRACT TERMS AND CONDITION

Where the execution of work outside the terms of the original Contract is proposed, prior approval from the appropriate authorities in accordance with SPR 520 and Appendix V(B) of the SPRs must be obtained for such changes.

Contract variations, especially those which are not provided for in the original contract, may amount to new procurements. For contract variations amounting to new procurements covered by World Trade Organization Agreement on Government Procurement (WTO GPA), Works Departments shall ensure that all relevant requirements of WTO GPA (https://www.fstb.gov.hk/tb/en/business/gov_procurement/guide-to-procurement.htm#topic-3) are complied with. In case of doubt as to whether contract variations amount to new procurements covered by WTO GPA, Works Departments should seek legal advice from LAD(W)/DEVB.

Should it be necessary to execute any work outside the scope of those allowed under the Contract or to change the terms and conditions originally specified in the Contract, the execution of such work, or such change of contract terms and conditions, shall be subject to a Supplementary Agreement, between the Government and the Contractor. Prior agreement must be obtained from the Contractor as to the execution of the work, the change in the terms and conditions, the rates for the relevant work and all cost, time and other implications. In addition, approval from the appropriate authorities as stipulated in Appendix V(B) of the SPRs must be sought before executing the Supplementary Agreement. Where a Supplementary Agreement involves acceleration of works the progress of which is susceptible to delays by unforeseen circumstances, consideration should be given to linking payment in the Supplementary Agreement with the implementation of the agreed acceleration measures.

Supplementary Agreement may be in various formats, such as by an exchange of correspondence or by an agreement on deed, depending on the importance and complexity of the content of the Agreement, the desired length of its limitation period and whether there is doubt on presence of consideration. The Government should be represented by the officer who signed the Contract for the Government or any other officer of at least D2 level, provided that such officer is not also the Engineer for the Contract. For an agreement on deed, the draft Supplementary Agreement has to be submitted through the Departmental Contract Adviser to Legal Advisory Division (Works) (LAD(W)), DEVB for legal vetting. After the execution of the Supplementary Agreement, a copy shall be passed to the Departmental Contract Adviser. The Department should also copy any signed Supplementary Agreement to the Director of Audit. For guidance on execution of Public Works Contracts as a deed, please refer DEVB TCW No. 7/2014.

It is also necessary to revisit the provision of liquidated damages in respect of post-

contract variation by ways of Supplementary Agreements. Consideration has to be given to whether or not the rate originally fixed for liquidated damages would remain appropriate for the Works or Section(s) where the scope of work under the original Works or Section(s) is altered. See ETWB TCW No. 4/2003 for details.

Supplementary Agreement for additional works approved under Items A.III and A.IV of Appendix V(B) of the SPRs should be treated as a separate contract for the purpose of effecting further variation to these additional works and the schedule of authorities for variation of contracts under Item A.I of Appendix V(B) of the SPRs should also be applicable where appropriate.

13.5 VARIATIONS AFFECTING ENVIRONMENTAL PERMIT

If the Engineer considers that the issuing of a particular variation may cause a material change to the designated project or to an environmental impact of the project as defined in the “Technical Memorandum on Environmental Impact Assessment Process”, he shall consult the Director of Environmental Protection (DEP). If the DEP considers that the environmental permit should be so varied, the Engineer shall advise the proponent department who shall apply for a variation of the environmental permit under Section 13 of the EIA Ordinance. After obtaining the variation of the environmental permit, the Engineer shall then order the variation under the Contract.

Should the Contractor submit an alternative proposal during the course of the Contract which may give rise to a material change to the designated project or to an environmental impact of the project, the proponent department shall consider whether it is more appropriate for him or the Contractor to apply for variation of the environmental permit. No agreement shall be entered into until it has been clarified whether a variation to the environmental permit is required and which party shall be responsible for making the application.

Reference should be made to ETWB TCW No. 13/2003.

13.6 OMITTED ITEMS AND THEIR VALUATION

(Ref.: In view of the findings in Chapter 3 of the Audit Report No. 53, SDEV requested in email of 19.2.2010 to strengthen the relevant PAH Sections on omitted items for reference by works departments and, where applicable, the consultants appointed as the Engineer for the Contract.)

From the viewpoints of financial control, omitted items should be kept to an absolute minimum through proper preparation of a BQ and Particular Preambles. Therefore, the Engineer should provide the Employer with the reasons justifying the acceptance of omitted items and the basis of his valuation.

Whenever practicable, once omitted items are identified, the Engineer should exercise his professional judgement in rendering a preliminary assessment of rates and reflect the existence of such items in his regular financial report (including a summary of all omitted item identified/valued, interim payment already certified for such items and a payment forecast for such items). For those contracts administered by the Consultants, the Consultants should provide the aforesaid information in his regular (usually on monthly basis) report on

financial matters required by the Director's Representatives.

After the Engineer has valued any omitted items in accordance with the GCC, he shall notify the Contractor of such valuation in the form of a letter. A standard form of such a letter is shown at Appendix 7.22. It shall also be stated in the letter whether or not any rates are subject to Contract Price Fluctuation. However, the power to value omitted items is usually not delegated to the ER. As such, the letter valuing omitted items should be signed off by the Engineer. When letters concerning valuing omitted items are issued, a current financial statement as shown at Appendix 7.23 should be prepared and copied to the relevant parties together with the letters.

13.7 DEALING WITH A VARIATION WITH VALUE EXCEEDING ITS ESTIMATE MADE AT THE TIME OF APPROVAL

If due to any reason other than contract price fluctuation the value of a variation exceeds its estimate made at the time approval was given, the following actions are required:

- (a) If the increase is due to a change in scope or a change in the nature of the original variation, the whole variation as changed shall be treated as a new variation and all necessary approvals by the public officer of appropriate rank shall be obtained;
- (b) If the increase is due to any reasons other than sub-paragraph (a) above, the public officer of appropriate rank shall be notified (via the original approving officer) with explanations of such increase. For the avoidance of doubt, if the increased value of the variation in the aforesaid case is still within the approval limit of the original approving officer, only notification to the original approving officer is required.

14. CONTRACTUAL CLAIMS

14.1 GENERAL

The General Conditions of Contract makes provision for the Contractor to claim additional payment. In all cases the Contractor should, in accordance with GCC Clause 64, notify his intention to claim within the period of time stated in the Contract, citing the clause and sub-clause under which it is being brought. Should any claim not cite the clause(s) then the Contractor is to be asked to provide this information before further action is taken. A standard reply letter to the Contractor in respect of this case is given in Appendix 7.24.1.

Should the Contractor refuse or be unable to cite the clause(s), then this is to be brought to the attention of the Engineer who should give instructions on the matter.

Should the Contractor fail to give notification within the period stated in the Contract, then the claim should not be considered. Standard reply letters in respect of this case as shown in Appendices 7.24.2 & 7.24.3 shall be issued by the Engineer accordingly.

After receiving notification, the Engineer may wish to exercise powers under the Contract to call for detailed and contemporary records to be maintained, and the ER should recommend this course of action if it appears that any special record is necessary. Standard letters concerning the discussed subject are at Appendices 7.24.4 & 7.24.5.

It is not uncommon that the Contractor submits notification to claim for time extensions and additional costs under different clauses of the GCC. To facilitate future claim assessment, it is advisable to assign separate claim numbers for time extension and cost claims and use the appropriate standard letters described above, with modifications where necessary.

14.2 HANDLING OF CLAIMS

The analysis and evaluation is to be carried out by the ER for the approval of the Engineer. Full details of the analysis and evaluation are to be presented on a separate file with copies of all supporting information such that any officer called upon to examine the claim at a later date will have all the necessary information and reasoning to hand.

The method of analysis and evaluation of a claim is a matter for professional judgement but some aspects will be common to many claims such as:

- (a) Evaluation must be based on the provisions of the Contract, which are either expressed or reasonably implied. If there are no provisions, then no claim under the Contract can be considered. The Engineer may not evaluate a claim for breach of Contract that is not dealt with by the contract terms. Such claim shall be referred to Legal Adviser (Works) (LA(W)), DEVB.
- (b) Notification of the claim should be made within the period of time stated in the General Conditions of Contract. The date of incident leading to the claim should be documented and compliance with the time bar should be justified.
- (c) The Contractor must be able to support the details submitted.

- (d) The Contractor should have taken all reasonable steps to mitigate the effects of the situation that gave rise to the claim.

After giving notice of a claim, the Contractor is to provide full and detailed particulars including justifications for the proposed approach in assessing the claim as soon as is reasonable. Should any detail not be supported by site diaries or other records maintained by the site supervisory staff, the ER shall request the Contractor to supply supporting information. If the Contractor fails to provide the full details required, the Engineer should consider writing to the Contractor setting out what in his opinion is a reasonable period of time for such submissions. If the Contractor fails to respond or provide sufficient reason, then the evaluation of the claim is to proceed as provided for in Clause 64(6) with all reasonable speed.

The ER shall contest any ill founded parts of the claim, indicating that clarification is being sought on behalf of the Engineer for the Contract and that no outright rejection is being given. Any doubt as to the validity of a claim or any part thereof may be referred to the Departmental Contract Adviser for an opinion, who may refer the matter further to LAD(W), DEVB if considered necessary. Requests for further details from the Contractor, if required, should not be used as a means of delaying the evaluation. On the other hand, whenever a Contractor makes an invalid argument, in particular when this has major cost implications, it should be rejected by the Engineer in no uncertain terms. Any double reimbursement to the Contractor for variation order and prolongation cost should be checked.

The reasons behind every claim are to be considered by the works division and should it appear that the circumstances giving rise to the claim could be repeated then the matter is to be reported in brief to the design division for necessary action.

The correspondences of sensitive nature related to claims should be filed in a restricted manner. The following correspondences/documents should be classified as restricted:

- (a) Documents/correspondences related to the Engineer's assessment of the claims (including claim analysis and evaluation) that are not going to be disclosed to the Contractor;
- (b) Legal advice on claims, the disclosure of which will put Government in an unfavourable position in claims negotiation;
- (c) Documents/correspondences related to extra-contractual settlement of claims, such as Controlling Officer's recommendations to Financial Services and the Treasury Bureau (FSTB), the ceiling figure of any monetary offer and waiving of any rights etc., the disclosure of which will put Government in an unfavourable position in extra-contractual settlement of claims; and
- (d) Any other documents/correspondences the disclosure of which will put Government in an unfavourable position in claims processing.

For detailed guidance of the processing of claims, reference should be made to "Guidelines for Claims Management and Conduct of Negotiations in Works Contracts under the Public Works Programme" prepared by DEVB (then WB) and promulgated under S for

W's memo ref. WB(W) 206/32/5(97) dated 30.12.97. Such Guidelines should be available from the Departmental Contract Advisor. The Guidelines provide guidance for claims management with the objective of resolving contractual claims efficiently without delay. It is imperative to note that all claim notifications received from the Contractor should be duly logged chronologically in a claims register maintained on site and in the head office in accordance with paragraph 5.2.1.3 of the Guidelines.

14.3 AUTHORITY TO SETTLE CLAIMS

It should be noted that the certification of claims should be made under the relevant clauses in the GCC and should not be confused with valuing variations. The standard letter at Appendix 7.25 may be issued for certifying claims made under the Contract.

It should be noted that, pursuant to Appendix V(B) of the SPRs, the officer who is delegated the authority by the Controlling Officer may authorise increase in contract sum within certain limit to meet the certified claims or arbitration awards. No such limit is imposed on the Controlling Officer himself, subject to the limit of APE not being exceeded. As a related issue, reference should also be made to WBTC Nos. 20/2000 & 16/2002, the Brief for consultancy agreements (for consultant-managed contracts) and relevant departmental circulars (for in-house contracts) regarding constraints on duties and powers of the Engineer, and the requirement of reports and response time limits.

On the other hand, in accordance with Item E.I of Appendix V(B) of the SPRs, where a claim to be settled is not certified by the Engineer and is not the subject of an arbitration award or an award of the court, the limit of delegated authority of the Controlling Officer or designated officer at directorate level to approve such payments is an accumulated value up to \$7 million (according to the August 2018 version of SPRs) and must be based on the advice of Department of Justice (D of J) or LAD(W), DEVB. The responsible officers are reminded to refer to Item E.I of Appendix V(B) of the SPRs and the quotation limit as specified in SPR 220(b) for the latest accumulated value. If the limit has been exceeded, a recommendation has to be made to PSTsy to approve such a payment. In considering the settlement of claims not certified by the Engineer, the chance of success of the Employer's case shall be taken into consideration, even in cases where the chance is considered small.

15. REPORTS ON CONTRACTORS' PERFORMANCE

15.1 OBJECTIVE

The basic objective of the reports on contractors' performance is to monitor the contractors' performance and assess their suitability for future work. These reports also form the major basis on which action will be taken as to upgrading, suspension, downgrading or deletion from the Lists of Approved Contractors for Public Works.

15.2 PROCEDURE AND GUIDANCE

Section 4 and Appendices 4A, 4B and 4C of the Contractor Management Handbook give detailed procedures and guidance notes for the completion of report on contractors' performance. In particular, the reporting timetable as stipulated in paragraph 4.6.4 and Appendix 4D of the Handbook shall be strictly followed. When recommending an adverse report, the responsible officers should entirely satisfy that there is adequate documented evidence to prove such reports are warranted before endorsement/amendment. Also refer to Sub-section 5.4 of the Contractor Management Handbook for regulating actions to be taken against contractors with adverse reports.

For contracts carried out by a joint venture, a single performance report should be made on the joint venture with comments on the input and information on the value of the share of the Works of the participants or shareholders. The report shall be copied to all management departments of the categories of works undertaken and also to the individual files of the joint venture participants or shareholders.

A performance score is to be assigned to each report on contractor's performance, and a weighted average of the performance scores given in all the reports written on the performance of a contractor in Government works contracts in the preceding 12 reporting periods will be taken as the contractor's current performance rating. The method of evaluation is given in ETWB TCW No. 3/2007 and DEVB TCW No. 3/2007A. Contractors' performance reports are normally due on the last day of February, May, August and November covering the three-month reporting periods up to those dates. Departments shall take the responsibility of uploading all contractors' performance reports to the Contractor Management Information System (CMIS) within the time limit specified in the Contractor Management Handbook after the date due for the report. DEVB will then generate the new performance rating on the first working day of May, August, November and February and contractors on the Approved List will be advised of their respective new performance ratings by post. Departments may obtain a report on a contractor's recent performance ratings over the past two years from the CMIS terminals.

On the aspect of site safety, under the Score Card System, one Score Card is to be completed by the ER and endorsed by the Engineer for completion of each contractors' performance report, irrespective of whether the reporting period is 6-weekly or quarterly. The assessment should reflect the observation during routine site inspections and day-to-day administration and site supervision of the contract during the reporting period. Score Cards are required to be completed throughout the whole contract period unless otherwise instructed by the Engineer. However, Score Card is not required during the maintenance period, defects liability period or establishment period. Completed Score Cards are to be kept by the project

office for record purpose. See DEVB TCW No. 1/2020 and paragraph 11.11 for detailed procedures for completing the Score Cards in relation to the report on contractors' performance.

16. DETERMINATION OF CONTRACTOR'S EMPLOYMENT

16.1 GENERAL

Determination of Contractor's employment may only take place for the reasons given in GCC Clause 81 or the SCC Clause as promulgated in ETWB TCW No. 23/2004 - 'Right of the Employer to Terminate for Convenience and Risk Allocation with respect to Changes in Law'. No action towards determination of Contractor's employment under the Contract can be taken for reasons that are not given in the Clauses. Should a situation develop that is considered likely to give rise to the need for determination of Contractor's employment, then the Engineer is to liaise with LAD(W), DEVB who are to be kept informed of all future developments.

Reference should be made to WBTC Nos. 16/99, 16/99A & 16/99B and ETWB TCW No. 16/99C for detailed contractual and financial procedures to be followed in case of determination of Contractor's employment.

16.2 WARNINGS PRIOR TO DETERMINATION OF CONTRACTOR'S EMPLOYMENT

Whenever it is apparent that the Contractor is having difficulty in carrying out the Contract and before the invocation of the determination of Contractor's employment provision, the Engineer shall notify the Contractor of the complaint leading to the possibility of determination of Contractor's employment. He shall also request explanations and proposals for a course of action to remedy the situation. This notice must be served in ample time to allow the Contractor to improve his efforts before a final decision is made. In the case of the Contractor failing to proceed with due diligence, action under paragraph 6.4 is necessary.

Should the early written warning of dissatisfaction or action under paragraph 6.4 fails to produce the required improvement, and after conferring with the Government officer authorised to sign the Contract on behalf of the Government, the Engineer shall issue to the Contractor a letter as given in Appendix 7.26.

Upon being advised by copy of the letter at Appendix 7.26, all relevant departments are to provide the department concerned, as soon as possible by fax and copied to CTA(F), DEVB, with details of all contracts that the departments have with the defaulting Contractor for which further payment has yet to be made by the Government under these contracts. Nil returns are required.

If the letter at Appendix 7.26 produces the desired results and no further action is to be taken, then the recipients of the copies of the letter are to be notified accordingly. Otherwise, the ER shall arrange for the following:

- (a) All gates and doors giving access to any part of the Site to be secured by new padlocks.
- (b) A 24-hour security guard to be posted to ensure that no plant or materials leave the Site without the expressed permission of the Engineer.

16.3 ACTION TO EFFECT DETERMINATION OF CONTRACTOR'S EMPLOYMENT

16.3.1 General

If the letter at Appendix 7.26 fails to produce the desired result and determination of Contractor's employment is to be initiated, then the Engineer shall inform the Head of Department (via the Government officer authorised to sign contract on behalf of the Government) of such recommendation. To effect the determination of Contractor's employment, a sample recommendation by the Engineer to the Employer is given in Appendix 7.27. This certification is to be made on the expiry of the time period stated in the warning letter at Appendix 7.26. A draft notice of determination of Contractor's employment as shown in Appendix 7.28 should also be attached with the Engineer's certification. In each case, the notice must be cleared with LA(W), DEVB. Upon agreement, the Head of Department shall sign and despatch the notice of determination of employment to the Contractor.

16.3.2 Actions upon the Serving of a Notice of Determination of Contractor's Employment

When the formal notice of determination of Contractor's employment at Appendix 7.28 is issued, the ER shall arrange for the following:

- (a) A copy of the notice of determination of Contractor's employment, suitably protected from the weather, should be posted in a prominent place on the Site.
- (b) The nearest police station should be informed of the event.
- (c) The Site including any works and borrow areas, storage yards and the like and their immediate areas to be extensively photographed to show, amongst other things:
 - (i) The extent and standard of temporary works and permanent work;
 - (ii) The condition and location of any plant;
 - (iii) The condition and quantity of any unused materials; and
 - (iv) Details of any poor workmanship or temporary works that may have influenced the decision of the Engineer to recommend determination of Contractor's employment.
- (d) The Engineer shall give written notice to the Contractor, under the provisions of the relevant GCC Clauses on vesting of constructional plant and temporary buildings and of materials, prohibit the removal from the Site of any such properties owned by the Contractor. Refer also to Item 2.3 of Appendix A of WBTC No. 16/99.
- (e) Hired plant essential for the completion of the remainder of the work shall be retained on Site. Refer also to Item 2.4 of Appendix A of WBTC No. 16/99.

16.3.3 Actions upon Determination of Contractor's Employment

On the notified day of determination of Contractor's employment, an officer, specifically authorised in writing by the Director to do so, shall enter upon the Site on behalf of the Government. The ER shall then arrange for the following:

- (a) The officer being authorised to enter the Site should record in the site diary that he has entered upon the Site and that the Site has been re-entered. He should certify to the Director that he has entered upon the Site on the behalf of the Government and expelled the Contractor therefrom.
- (b) A copy of notice of re-entry, suitably protected from the weather, should be posted in a prominent place on the Site.
- (c) Enhance site security and additional security guard should be hired if necessary since all plants, temporary buildings and materials on the Site have become the properties of the Government upon re-entry. Close liaison with the Police should be made.
- (d) Despite the record taken after the serving of the notice of determination of employment, a complete photographic record of the Site, the Works and all items on the Site shall be made as soon as possible upon re-entry.
- (e) If applicable, a letter together a copy of the notice of re-entry posted on the Site shall be sent to the Bondsman by registered post advising him that the Site and the Works have been re-entered. The Bondsman must be advised that a formal claim on the Bond may be lodged once the financial position is known. A sample letter is shown in Appendix 7.29.
- (f) Other parties which should also be informed of the re-entry includes:
 - (i) the insurer(s) who provide(s) insurance required by the Contract,
 - (ii) any Nominated Sub-contractor, and
 - (iii) any Specialist Contractor.
- (g) Every effort should be made to keep the Specialist Contractors working. If not possible, the Engineer shall be obliged to order a suspension of the Works in accordance with the relevant GCC Clause. Refer also to Item 3.3 of Appendix A of WBTC No. 16/99.
- (h) The remaining plant on the Site should be valued by Electrical and Mechanical Services Department (EMSD) if necessary.
- (i) Continued provision of utility services for the necessary maintenance of the Site should be ensured.
- (j) Under some circumstances, the need for emergency work should be assessed and the required works should be carried out.

Notwithstanding the above, no action is to be taken that can be construed as meaning that the Contract has been brought to an end. When determination of Contractor's employment takes place under GCC Clause 81, the Contract is still in force and confers certain rights and obligations on both the Contractor and the Government.

When bankruptcy of the Contractor occurs, the procedure is similar except that no certification from the Engineer to the Head of Department or letters prior to this certification is necessary. Whenever possible, determination of Contractor's employment should take place before bankruptcy occurs although it is recognised that it is not always possible to accurately assess the developing situation.

16.3.4 Actions after Determination of Contractor's Employment

The ER shall arrange for all the records and measurements of the works carried out by the defaulting Contractor to be brought up-to-date.

From the date of the determination of Contractor's employment until another contractor commences the remainder of the Works, all staff (including consultants' staff) engaged in the determination of Contractor's employment and re-entry process should make detailed record of the time and cost spent. This should include the additional resources related to the preparation of new tender documents and analysis of tenders, if applicable. It should however be noted that work on the preparation and processing of new tender documents should be carried out with all reasonable speed so as not to jeopardise Government's right of recovery of the related cost. It would be beneficial to record the time and cost for any work associated with the re-entry process which extends beyond the start date of a new contract. Calculation of the staff cost should be based on the actual salary of the officers and not the mid-point of their salary scale. The departmental STA should be consulted for assistance in this respect.

Following re-entry upon the Site, the Engineer shall prepare a full report to the Head of Department including:

- (a) Name of Contractor;
- (b) Contract sum;
- (c) Due date for completion;
- (d) Amount already certified;
- (e) Value of completed work not yet certified;
- (f) Retention money withheld;
- (g) Amount of Bond and name of Bondsman (if any);
- (h) Liquidated damages to be deducted (if any);
- (i) The estimated cost of completing the work using Term Contractor(s) or carrying out the works under any other existing contract(s);

- (j) The estimated cost of completing the Works by calling new tenders;
- (k) The likelihood of calling in and exceeding the Bond (if any);
- (l) The effect on current financial provisions for contract sum and project vote; and
- (m) A recommendation as to how to complete the Works and an outline programme for the preparation of documents, calling for tenders and completion of the Works.

There is a general duty under common law to mitigate any loss. After re-entry, it is important that the Works are completed as quickly and economically as possible, otherwise the defaulting Contractor may have grounds for contesting some of the expenses incurred or damages sustained by the Employer. Preparation work for completing the Works, either by tendering new contracts or utilising existing term contracts or other means, should start as early as possible. Prompt decisions should be made as to arrangements for:

- (a) Any hired and hire-purchase Constructional Plant and its assignment;
- (b) Any Nominated Sub-contract; and
- (c) Any other contract related to the Works.

It is necessary to formulate a disposal strategy in respect of the forfeited Constructional Plant and to retain those that are suitable for re-use on Site for the completion of the Works left undone by the defaulting Contractor. Department shall conduct a risk-benefit analysis to assist in reaching a decision on the treatment of the forfeited Constructional Plant. The considerations should take into account conditions of the plant if reused, the required cost and time for plant replacement if they are removed in advance and the possible programme gain associated with advanced removal, etc. The risk-benefit analysis should at least cover the items of the forfeited Constructional Plant which are critical to the completion of the Works. Where forfeited Constructional Plant are used to complete the Works, departments shall consider to include a disclaimer clause, where appropriate, to disclaim liability on the part of the Employer resulting from the use of the forfeited Constructional Plant. LAD(W) of DEVB should be consulted on the drafting of such a disclaimer clause.

The employment of any Nominated Sub-contractor is terminated upon re-entry of the Site. The contractual status of the original or any new Nominated Sub-contractor should be clarified and ascertained as soon as possible. See Item 4.2 of Appendix A of WBTC No. 16/99.

The Engineer with the assistance of the ER/Surveyor shall ascertain the financial position of the Contract and settle the final account with the defaulting Contractor at the earliest possible time. The financial procedures as stipulated in Appendix B of WBTC No. 16/99 & WBTC No. 16/99B should be followed. This may include determination of the expenses and damages incurred by the Government, assessment of any sources from which money may be recovered, establishment of debt or recovery of money by set-off from other contracts etc.

On expiry of the Maintenance Period and after the financial position of the Contract have been ascertained, a Final Statement shall be issued to the defaulting Contractor and copied to CTA(F), DEVB and the Bondsman. A checklist for the preparation and a sample format of a Final Statement is given in Appendix C of WBTC No. 16/99. Appropriate written enquiry and/or legal procedures shall be initiated if the Contractor fails to pay the money due in time and in full. See Item 5 of Appendix B of WBTC No. 16/99.

Once it is established that the defaulting Contractor has caused the Government to sustain expenses and/or damages which cannot be recovered by set-off and the defaulting Contractor has not honoured the Final Statement, the Department should inform CTA(F), DEVB to call in the Bond. LA(W), DEVB must be kept informed of the calling in of the Bond and their advice should be sought before any action is taken. Where the debt to the Government is less than the value of the bond, a sum equal to the debt shall be called in. Refer also to Items 6.2 & 6.3 of Appendix B of WBTC No. 16/99.

The SCC Clauses promulgated under WBTC No. 11/2001 empowers the Engineer to issue an interim certificate to the defaulting Contractor if he is satisfied at any time prior to the completion of the Works that there is any net sum due to the Government. The interim certificate shall then be considered as a debt due from the defaulting Contractor to the Government and shall be paid by the Contractor within 21 days of the date of interim certification by the Engineer. This would protect the Government's right to recovery of sums from being delayed unnecessarily. See WBTC No. 11/2001 for reference.

16.4 CHECK-LIST FOR ACTIONS REGARDING DETERMINATION OF CONTRACTOR'S EMPLOYMENT

The following is a checklist for actions regarding determination of Contractor's employment. This is not meant to be exhaustive and is for guidance only. Departments should produce their action checklists to suit their departmental situation in order that appropriate and timely action is taken by their staff to effect the necessary procedures for the determination of Contractor's employment.

Activity	Ref.	Action Initiated by	Action Taken (with date)
<u>Prior to Determination of Contractor's employment</u>			
1. Issue letter(s) to the Contractor pointing out the observed deficiencies and request for explanations and remedy proposal	Para. 6.4 Para. 16.2		
2. Issue warning letter to the Contractor advising likelihood of determination of employment	Para. 16.2 App. 7.26		

Activity	Ref.	Action Initiated by	Action Taken (with date)
3. Control Site access: (a) use new padlocks for all doors/gates access to any part of the Site (b) engage 24 hour security guard(s) on Site	Para. 16.2(a)		
<u>Notice of Determination of Contractor's employment</u> In case of NO improvement after issuing the warning letter in item 2 above: 4. Consult LA(W), DEVB and clear the draft notice of determination of Contractor's employment 5. Recommend determination of Contractor's employment to Head of Department by the Engineer 6. Issue Notice of Determination of Contractor's employment to the Contractor (on expiry of the deadline stated in the warning letter in item 2 above)	Para. 16.3.1 App. 7.28 Para. 16.3.1 App. 7.27 Para. 16.3.1 App. 7.28		
<u>After Serving Notice of Determination of Contractor's employment</u> 7. Post Notice of Determination of Contractor's employment on the Site 8. Inform the nearest police station 9. Take photographs for record 10. Give written notice to the Contractor to prohibit removal of properties from Site 11. Retain hired plant	Para. 16.3.2(a) Para. 16.3.2(b) Para. 16.3.2(c) Para. 16.3.2(d) Para. 16.3.2(e)		
<u>Upon Determination of Contractor's employment (after re-entry of the Site)</u> 12. Effect re-entry of the Site 13. Post notice of re-entry on the Site 14. Enhance site security and maintain liaison with the Police	Para. 16.3.3(a) Para. 16.3.3(b) Para. 16.3.3(c)		

Activity	Ref.	Action Initiated by	Action Taken (with date)
15. Make complete photographic record of the Site	Para. 16.3.3(d)		
16. Issue letter to Bondsman	Para. 16.3.3(e) App. 7.29		
17. Inform insurers, Nominated Sub-contractor and/or Specialist Contractor	Para. 16.3.3(f)		
18. Order suspension of Works to the Specialist Contractors if necessary	Para. 16.3.3(g)		
19. Valuation of plant by EMSD if necessary	Para. 16.3.3(h)		
20. Maintain essential utility services	Para. 16.3.3(i)		
21. Assess the need for and carry out emergency works if necessary	Para. 16.3.3(j)		
<u>After Determination of Contractor's employment</u>			
22. Update all records and measurements of the Contractor and the Work	Para. 16.3.4		
23. Keep detailed records of time and cost of all staff involved	Para. 16.3.4		
24. Prepare full report to the Head of Department	Para. 16.3.4		
25. Resolve assignment of hired plant	Para. 16.3.4		
26. Settle Nominated Sub-contract(s)	Para. 16.3.4		
27. Ascertain financial position of the Contract in consultation with LA(W), DEVB and departmental STA	Para. 16.3.4		
28. Prepare new tender document and call for new tender if necessary	Para. 16.3.4		
29. Prepare and issue Final Statement on expiry of the Maintenance Period	Para. 16.3.4		
30. Call in the Bond if necessary	Para. 16.3.4		

16.5 RETENTION OF DOCUMENTS/FILES UNTIL APPROVAL OF WRITE-OFF FOR DEFAULTING CONTRACTORS AND DEFAULTING CONTRACTS

Documents and files in relation to any defaulting contractor(s) and defaulting contract(s) should be retained until approval of write-off of debt.

Attention should be paid to FSTB's requirement that works departments are required to prepare a write-up of the case with all details about the defaulting contractor and the defaulting contract(s) involved for FSTB to process a write-off

application. Works departments are also required to provide accurate information regarding defaulting contractor(s) and defaulting contract(s) in response to queries from FSTB. In this connection, all files and records related to the defaulting contractor and the relevant contract(s) should be kept intact and retained until the write-off is approved. Necessary action should be taken to avoid disposal of files and records related to defaulting contractors and relevant contracts pending approval of write-off.

17. DAMAGE REPAIRS AND EMERGENCY WORK

17.1 DAMAGE REPAIRS GENERALLY

Damage to the permanent or temporary works caused by weather or other factors except those ‘expected risks’ as defined in GCC Clause 21(4) is the responsibility of the Contractor up to 28 days after the issue of the certificate of completion, or until the date the Government takes over the Works, whichever is earlier. GCC Clause 21 should be referred to for the requirements on the care of the Works.

If in doubt as to the allocation of responsibility and expenses for the damage and repair of the Works, the departmental contract adviser and/or STA should be consulted.

17.2 DAMAGE TO CROPS AND PROPERTY ON AGRICULTURAL LANDS

In the wet season, especially during typhoon and heavy rainstorm conditions, flooding may occur and silt may wash down from the Site or borrow areas onto agricultural lands causing damage to crops and/or property. Damage may also result from other aspects of construction work. The ER should ensure that the Works proceed in such a way as to obviate the risk of this as far as possible. After damage has been suffered, additional improvement work should be considered to eliminate the likelihood of recurrence.

Whenever there is any damage to crops and/or property on agricultural lands which is believed to be arising from the construction works concerned, the procedures set out at the Appendix A of WBTC No. 28/92 should be followed. The procedures are intended primarily to avoid delay in payment of small claims for compensation where crops or property on agricultural land are damaged as a direct consequence of execution of the Works under the Contract.

In order to ensure that any claimant will only be offered a level of ex-gratia payment, which is acceptable to the Government, the SFST should be consulted in all cases of complaint, irrespective of the size of the monetary claims, before any formal approach is made to the claimant.

17.3 EMERGENCY WORK

Where any remedial or other work of repair becomes urgently necessary for security or the safety of the Works, the following steps should be taken:

- (a) At the time of the inspection that identified the need for urgent repairs, a site instruction listing the required remedial or repair works should be issued by the ER to the Contractor. This should be followed up by written confirmation from the Engineer (sent by registered post or by hand) not later than one working day after the issue of the site instruction.
- (b) If after 7 days (or earlier if the circumstances require) the Contractor has made no reasonable effort to carry out the required works, the Engineer should make a request to the Head of Department for authority to use either another contractor or the Term Contractor to undertake the works. The request should

be sent urgently by hand to the Head of Department for approval. A standard form of request is given in Appendix 7.30.

- (c) Upon receipt of the authority from the Head of Department, the Engineer shall inform the Contractor of the actions being taken and a sample letter is shown in Appendix 7.31. On the other hand, a Works Order to the Term Contractor, or an instruction to another contractor, whichever the case may be, should be issued. The instruction shall include a specified time for completion and shall be endorsed by the contractor concerned regarding acceptance of the required completion date.
- (d) Any excess cost incurred in completing the remedial or repair works shall be deducted from monies due to the Contractor who failed to comply with the original request from the ER or the Engineer.

17.4 REPORTING OF MAJOR EMERGENCY INCIDENTS

ETWB TCW No. 20/2005 sets out the procedures for upward reporting of major emergency incidents from Works Department to the DEVB. Basically, major emergency incidents, which may occur during or outside office hours, are classified into two categories based on the following fundamental criteria:

- (a) Whether or not the incident is a crisis, and
- (b) Whether or not the incident will likely develop into a crisis.

A Category 1 emergency incident is one, which is itself a crisis when it occurs. A Category 2 emergency incident refers to one which is not a crisis itself but will likely develop into a crisis. Works Department should exercise their judgement sensibly as to which major incidents should be classified as Category 1 or Category 2. Some characteristics and consequential implications of a crisis are provided in ETWB TCW No. 20/2005.

Departments should follow the reporting procedures stipulated in ETWB TCW No. 20/2005 whenever any of the above two categories of major emergency incidents occurs. When an incident involves more than one Works Department, the lead department shall, with the assistance from other supporting departments, coordinate the information and be responsible for upward reporting to DEVB. The responsibilities for emergency works among Works Departments should follow the established practice under various technical circulars in force. In the interest of time, the Works Department that first arrives at the scene shall take up the co-ordinating role in the first instance until the lead department is identified and takes over control. Unless agreed otherwise, the lead department shall, in default, be determined with the broad guidelines set out in Appendix D of ETWB TCW No. 20/2005.

For the tree failure incidents involving (a) loss of human lives or major injuries, (b) damage to property or blockage of access and, (c) tree failure cases other than scenarios (a) and (b), departments are requested to remind colleagues who are responsible for handling tree failure incidents, to fully understand the arrangement of the “Direct Report of Tree Failure Incidents to the Tree Management Office (TMO) of the Development Bureau (DEVB)” given in Appendix 7.61.

18. PROCEDURE ON COMPLETION OF WORKS

18.1 PRIOR TO ISSUE OF CERTIFICATE OF COMPLETION

18.1.1 Criteria for Assessing Completion

Any Section of the Works or the whole of the Works can be assessed as complete after its substantial completion and that it has satisfactorily passed all prescribed final tests. Should the completed works form only part of the Works, the assessing criteria for completion may also include its capability of permanent occupation and/or permanent use by the Government. GCC Clause 53(5) is applicable in such circumstances.

18.1.2 Handing Over Completed Works

The following guidelines should be followed for handing over completed works to relevant division/department responsible for future operation or maintenance:

- (a) When the works are approaching substantial completion, the ER should arrange a joint inspection with the Office/Division responsible for the future operation or maintenance of the completed works. The results of the inspection shall be recorded to show, among other things, all incomplete items distinguishing between those items for which the Contractor is responsible under the Contract and those which are not.
- (b) When all works are completed, a further/final joint inspection shall be made.
- (c) In case of any disagreement on the standard of completed works or the extent of works that should be carried out before handing over, a report on the points of disagreement should be referred to the Engineer for a decision.
- (d) Handing-over notes covering at least the following headings should be prepared and jointly signed by the ER and the officer responsible for taking over the works:
 - (i) Date of joint inspection(s);
 - (ii) A list of outstanding works/defects (see paragraph 18.1.4);
 - (iii) Schedule of as-constructed drawings;
 - (iv) Schedule of the final set of revised contract drawings;
 - (v) References of relevant files; and
 - (vi) Any relevant remarks.
- (e) The ER/project office shall also ensure that all design calculations, spare parts, operation and maintenance manuals, maintenance equipment, warranty certificates and manufacturer's catalogues, where applicable, should be handed over to the maintenance authority.

- (f) If it has been decided that any temporary works (e.g. access roads, bridges, drainage etc.) are to be retained, the maintenance responsibility of such items must be clarified by the ER in collaboration with the relevant departments/division as appropriate. All agreements made shall be recorded in the handing-over notes and in the relevant files.
- (g) If slopes or retaining walls are involved in the Works, the procedures stipulated in DEVB TCW No. 2/2018 for the registration of catalogue of slopes should be followed. The GEO Checking Certificate for Slopes and Retaining Walls should also have been obtained in accordance with ETWB TCW No. 20/2004 prior to handing over of the geotechnical features.
- (h) For all tunnel works (see ETWB TCW No. 15/2005), the project office or its consultants shall submit to GEO for record:
 - (i) The geotechnical performance review and the monitoring/survey data obtained for the tunnel works (prepared by the designer and certified by the design checker);
 - (ii) The geological and hydrogeological data collected including field data obtained from the excavation faces; and
 - (iii) Maintenance manuals, where appropriate, for the maintenance and the long-term monitoring of special measures such as prestressed ground anchors (prepared by the designer and certified by the design checker).
- (i) For tunnel works, the project office or its consultants shall submit factual geological and hydrogeological data obtained during the construction of the tunnel works to the Public Section of the Geotechnical Information Unit, CEDD in accordance with DEVB TCW No. 4/2016. (The Hong Kong Geological Survey will refer to such data when preparing new or revised geological maps).
- (j) Where drainage works are involved, the guidelines given in DSD Practice Note No. 1/2010, Stormwater Drainage Manual and Sewerage Manual should also be followed. Particular attention should be made on the need to conduct additional inspections of works in dry conditions where such works have to be commissioned in parts or in stages prior to formal handing-over and the works will be under submerged condition during the final handing-over. Unless prior agreement has been made with the office responsible for future operation or maintenance of the works, such partially commissioned works shall continue to be looked after by the main contractor until the completeness of the remaining works and formal handing-over of all the works.
- (k) Where landscape softworks are involved, the new plantings would normally be handed over to the maintenance departments upon expiry of the contract Establishment Period. To facilitate smooth handing over of the plantings, the project office should arrange joint inspections with the maintenance departments nearing completion of the landscape softworks with a view to obtaining their agreement on aspects essential for the commencement of the

establishment and the final handing over. Further joint inspection with the maintenance departments should be conducted upon expiry of the Establishment Period for formal handing over of the plantings for long-term maintenance.

18.1.3 Liaison with DLO

No works project is considered complete until all reasonable steps have been taken to reinstate and, if possible, improve the appearance of the area affected by the Works. All rubbish and surplus materials must be removed and any temporary concrete floors etc. should be broken up and removed.

When the Works are approaching substantial completion, the ER should arrange a joint inspection with DLO regarding the land to be handed back. The results of the inspection should be recorded to show the items that require rectification and noting any illegal occupation if necessary. See also Chapter 3 for handing over of completed works to DLO.

When all structures and machinery have been cleared from the Site, including the Works Area, a joint meeting should be arranged with DLO to agree responsibility for taking over and maintaining the Site. This must be recorded in the contract file prior to the release of retention money.

18.1.4 Outstanding Works

A list of outstanding works requiring attention or action shall be prepared at the effective date of the certificate of completion. A certificate of completion shall not be issued until the Contractor undertakes to carry out all these outstanding works or otherwise agreed.

18.2 CERTIFICATE OF COMPLETION

18.2.1 Procedure

A certificate of completion for the Works, or any Section, should be issued to the Contractor as soon as the relevant work is completed in accordance with the terms of the Contract.

When a certificate of completion is requested in writing by the Contractor, accompanied by an undertaking to complete any outstanding work during the Maintenance Period, the Engineer shall, within 21 days of the receipt date of such notice either:

- (a) Issue a certificate of completion to the Contractor pursuant to GCC Clause 53(1)(a); or
- (b) Give written instruction to the Contractor listing all the works that are required to be done before a certificate of completion can be issued, pursuant to GCC Clause 53(1)(b).

The ER should recommend to the Engineer on whether a certificate of completion should be issued and the justification recorded in the contract file:

- (a) If the issue of a certificate of completion is recommended, the minute should include a statement or similar statement as “I certify that the Works/Section(s) was/were substantially completed on in accordance with the Contract and a certificate of completion should be issued taking into account of the undertaking by the Contractor to carry out the outstanding work as listed below during the Maintenance Period.” (If there is no outstanding work to be completed during the Maintenance Period, the last part of the sentence should be omitted.)
- (b) If the issue of a certificate of completion is not recommended, the minute should include a statement or similar statement as “The Works/Section(s) was/were not substantially completed on as required by the Contract. The outstanding works that must be completed by the Contractor before a certificate of completion should be issued are detailed in the attached draft letter to the Contractor. I recommend that this letter instructing the Contractor to complete the outstanding work be sent immediately.”

18.2.2 Standard Forms

Standard forms for certificates of completion are given in:

- (a) Appendix 7.32: Certificate of completion in respect of a part of the Works.
- (b) Appendix 7.33: Certificate of completion in respect of a Section of the Works.
- (c) Appendix 7.34: Certificate of completion of the Works.

18.2.3 Partial Completion

Pursuant to GCC Clause 53(5) and where permitted by the Contract, the Engineer can exercise his discretionary powers in favour of issuing a completion certificate for any substantial part of the Works not being a defined Section under the Contract. However, the prevailing site conditions should be fully considered as to the suitability and implication of granting such partial completion.

18.2.4 Release of Surety Bond and Security Deposit

When a completion certificate for the whole of the Works has been issued, the Surety Bond or Security Deposit, where appropriate shall be released to the Contractor.

A sample certificate of release of surety bond is shown in Appendix 7.35. The Engineer shall complete Part A of the certificate in triplicate. Two copies shall be issued to the Contractor together with the certificate of completion of the Works and the third sent direct to the Accounts Division of the departmental headquarters. On presentation by the Contractor of the certificate of release of surety bond, the Accounts Division shall release the surety bond in return for the Contractor’s receipt on Part B of the certificate.

Where a Cash Deposit has been held, the Accounts Division shall invite the Contractor to present the receipt to STA who shall endorse the receipt and notify the Treasury so that the Contractor may present the receipt to the Treasury for reimbursement.

18.3 MATTERS DURING MAINTENANCE PERIOD

18.3.1 Working During the Maintenance Period

The exact date on which the Contractor's responsibility for care of the Works ceases should be determined with reference to GCC Clause 21, 53 and 80.

During the Maintenance Period, any defects arising, which the maintenance office considers may be the Contractor's liability, should be referred to the ER or the Engineer for action.

If the Contractor is instructed to carry out repairs to damage occurring during the Maintenance Period, which is not due to the Contractor's fault or not due to materials or workmanship not being in accordance with the Contract, the work shall be paid for under the terms of the Contract. When the Contractor is required to carry out any investigation of defects, an instruction under the relevant GCC Clause should be issued.

It is important to make suitable arrangements for taking care of completed works if they are not handed over to the office responsible for their maintenance/operation immediately after completion is certified. This type of situation often arises when separate parts of a project are completed at different times but the office responsible for maintenance/operation will only take over the works when they are fully completed and functional. Arrangements for the care of such completed works should be made in consultation with the maintenance/operation office, who should render all possible assistance. Depending on the nature of the completed works, the services of a Term Contractor or the Contractor employed to construct the works or some other arrangement may be needed. Completed works must not be left unattended for a prolonged period of time.

18.3.2 Inspections Before the End of the Maintenance Period

Prior to any joint inspection with other relevant parties, the ER should be responsible to carry out thorough inspections towards the end of the Maintenance Period to ensure that all identified repair and outstanding works have been or will be completed on time and satisfactorily. Particular attention should be paid to the regular maintenance works required for the vegetation through the maintenance period to ensure their proper establishment and growth for the timely handover at the end of the maintenance period. Two to four weeks before the end of the Maintenance Period, the ER should arrange an inspection with the Contractor, the maintenance office and other parties if necessary, to check whether all outstanding works have been completed and any further works are required. If the condition is found to be in order, the Contractor may be relieved of all further obligations under the Contract. Should any defects or deficiencies of any kind be identified, then the Contractor shall be notified, preferably before the expiry of the Maintenance Period but in no case later than 14 days after its expiry. Failure to notify any defect that should have been revealed by a diligent inspection may jeopardise Government's right to having these defects repaired by the Contractor.

18.3.3 Maintenance Certificate

When all outstanding work, repair work and clearance of the Site has been completed, or when the Maintenance Period has expired, whichever is the later, a maintenance certificate shall be issued irrespective of there being any outstanding payments,

unsettled valuations or unresolved claims. If Professional Indemnity Insurance (PII) is procured under a works contract, the Engineer shall also check whether the PII policy period covers the requisite 6-year period after certified contract completion before issuance of the maintenance certificate. A sample maintenance certificate is shown in Appendix 7.36.

The ER should recommend to the Engineer for the issue of maintenance certificate to the Contractor. In the recommendation, the ER should provide details of the joint inspection with the maintenance office and other relevant parties such as the inspection date(s), persons involved and agreements made. The ER should also make a statement or similar statements covering the following subjects (but is not meant to be exhaustive):

- (a) All outstanding works have been carried out.
- (b) All repair works have been completed.
- (c) All areas including carriageways, footpaths, grassed and paved areas disturbed by the Contractor have been satisfactorily reinstated.
- (d) Temporary buildings/structures have been removed.
- (e) All constructional plant and temporary works have been removed.
- (f) All separate works area provided have been cleared of all plant, buildings, rubbish and surplus materials and that they have been or are capable of being handed back to the appropriate authorities.

18.3.4 Release of Retention Money

Within 14 days of the date of issue of the maintenance certificate for the Works, the Engineer shall issue a certificate for the release of Retention Money, using the form at Appendix 7.37.1 or Appendix 7.37.2 depending on whether Nominated Sub-contractors are engaged. The Government is then required to pay the Retention Money to the Contractor within 21 days of the date of such certificate.

18.3.5 Report on Completion of the Contract

Within one month of the issue of the final payment certificate, a report on completion of the Contract should be prepared and signed by the Engineer. A standard report form is shown in Appendix 7.38.

18.3.6 As-built Survey

All as-built survey plans and as-built BIM models in machine readable format (such as BIM, CAD, GIS) should be sent to the SMO of the Lands D (Attn: Technical Division, SMO) for updating the relevant maps and records. See paragraph 5.4.3 of Chapter 3 of PAH and DEVB TCW No. [1/2025](#) [Amd No. 1/2025](#) or its latest version for reference. In addition, the following should also be noted:

- (a) Civil engineering works

When construction of a project is completed, a copy of the as-built survey

plans should also be sent to the DLO for record and preparation of Government Land Allocation Plan if the construction of a Government installation is involved. Another copy of as-built survey plans and as-built BIM models should also be sent to SMO of the Lands D (Attn: Technical Division, SMO).

(b) Building works

When construction of a project is completed, the responsible department should advise the Government Property Agency who will request the District Survey Office to prepare a Government Land Allocation Plan incorporating any adjustment or confirming the boundary.

(c) Geotechnical works

When construction of a project with prescribed geotechnical features meeting certain criteria is involved, the responsible department should complete a standard form with appropriate plans and send to CGE/SS of GEO requesting for the registration and updating of the Catalogue of Slopes maintained by GEO. The information being required should be provided to GEO when the feature formation is substantially completed. The detailed registration procedures are given in DEVB TCW No. 2/2018.

(d) Tunnel Works

The project office or its consultants shall submit to GEO for record as-built survey plans (accepted by the Engineer/Architect/Supervising Officer under the Contract) showing the boundaries of the tunnels/shafts/caverns and the extent of any temporary works, which may affect future construction (see ETWB TCW No. 15/2005).

(e) Landscape Works

When construction of a project with landscape works completed, the responsible project office should provide a set of as-constructed drawings showing the completed landscape works and the landscape maintenance manual to the maintenance party such that the soft landscape design can be properly maintained in accordance with the original design intention.

18.3.7 Information for Maintenance Authority

On completion of the Works, the record drawings should be returned to the responsible drawing office for preparation of the as-constructed drawings for the designs carried out by the Engineer and the Contractor (if any). Upon completion of the preparation of such drawings, hard copy (signed and full size) and digital copy (in MicroStation (.dgn) and Acrobat (.pdf) formats) of relevant drawings should be sent to the maintenance office(s) for record purposes as soon as possible, preferably within three months. In the event that the project office cannot pass the as-constructed drawings within three months, they should inform the maintenance office(s) of the revised target completion date. The maintenance authority may also require additional information for specific works, e.g. site investigation reports during the construction stage, bearing and expansion joint details and performance

details for highways structures, construction cost, and design calculations etc. Copies of all drawings, in A3 size together with a digital copy in Acrobat (.pdf) format, should always be forwarded to the appropriate DLO. In addition, the relevant District Survey Office should be provided with both hard copy and digital copy in CAD format of all drawings.

For all highways structures to be handed over to the HyD, a set of hard copy (signed and full size) and digital copy (in MicroStation (.dgn) and Acrobat (.pdf) formats) of the as-constructed drawings, and both hard copy and digital copy (in Acrobat (.pdf) format) of the design calculation shall be forwarded to the respective maintenance office of HyD. The digital image and settings for creating Acrobat (.pdf) file for submission shall be no less than 200dpi, and 8-bit gray scale or 16-bit colour depth. The settings and details of the as-constructed drawings in MicroStation (.dgn) format shall be in accordance with the latest revision of the ETWB TCW Nos. 38/2002 and 38/2002A. The MicroStation plot configuration file, colour table setting file and the resources files shall also be submitted.

For at-grade road sections to be handed over to the HyD which are 6m or more above ground [for example, those on embankments steeper than 1 (vertical) : 4 (horizontal) or retaining structures] or adjacent to water bodies, the assessment table in Appendix 7.50 should be completed and submitted together with a plan showing the location and the extent of the subject road section to the respective maintenance office of HyD for record. If the road being handed over consists of multiple such road section, one assessment table should be completed for each of them.

For drainage works to be handed over to Drainage Services Department (DSD), the documents to be submitted by the project office are given in DSD Practice Note No. 1/2010, Stormwater Drainage Manual and Sewerage Manual. In particular, an Operation and Maintenance Manual is required. Guidelines on the contents, submission timeframe and control mechanism of such Manual are given in DSD Practice Note No. 1/2010.

18.3.8 Electronic Drawings

If the Contractor has been provided with electronic drawings containing digital map other than those mentioned in paragraphs 7.4.4(a)–(j) of PAH Chapter 1 supplied by the Lands D and the Contractor has provided an undertaking on such use, the ER or the Engineer shall check that the Contractor has executed and returned the “Confirmation by contractor on cessation of the use of Government digital map data” upon completion of the relevant work. See paragraph 8.4 of PAH Chapter 5 for reference.

18.4 POST-COMPLETION

18.4.1 Post-completion Review (Subsumed from ETWB TCW No. 26/2003)

A post-completion review shall be conducted upon the substantial completion of a major consultancy agreement or a major works contract on projects under the PWP. It is considered as a useful project management tool which serves the following key purposes:

- (a) to measure the success or otherwise of a project in achieving its planned objectives on time, within budget and at the specified quality level;**

- (b) to bring up the lessons learned, both good and bad, so that, where appropriate, these can be used to benefit future projects; and
- (c) to provide an opportunity to review the overall effectiveness of the procurement strategy and procedures in place in the light of project performance, so as to identify any necessary improvement areas.

Such a review and experience sharing process would also be conducive to continuous improvement in the performance of all parties involved and the development of long-term partnership.

There is no rigid definition for major projects or the minimum number of reviews to be undertaken by departments. As a broad guideline, it is considered that post-completion reviews are generally not warranted for consultancy agreements and works contracts of a project which has a total cost less than \$500 million or of a project which does not involve complicated technical and management issues. Some suggested indicators of the involvement of complicated issues are provided in Appendix 7.46 for reference. Based on the above guidelines, departments could select agreements/contracts to be reviewed at their discretion.

It is desirable that input from major project participants, including the service providers such as consultants and contractors, could be included in the review. Nevertheless, the participation of the service providers or any relevant party in the review is to be on a voluntary and good faith basis. More than one discussion session with the presence of different service providers may be conducted, if necessary. However, as consultancy assignments for feasibility studies or investigation may be completed long before the commencement of the works contract, departments shall consider if separate reviews for such feasibility study/investigation assignments are required taking into account the benefits of such reviews against the resources required.

The emphasis and objective of the review are to gain maximum benefit from the experience accrued, rather than to apportion blame, i.e. it is not intended to be an auditing exercise. Any observed shortfall in the procurement, contract management and practices, and monitoring of the performance of the consultants and contractors should however be critically reviewed and rectified to avoid repetition of the same mistakes in the future.

Guidance notes for the conducting of a post-completion review and the suggested issues to be examined in the review are given in Appendix 7.46. Nonetheless, departments should determine the scope and details of the review to suit individual project.

Upon the completion of a post-completion review, the department shall prepare a report documenting all concerned issues, findings, conclusions and recommendations for future reference by the department. If the findings of a review are considered useful to other departments/bureaux, the department may circulate the findings to other departments/bureaux for experience sharing purpose. Furthermore, if input has been offered or provided by any consultant or contractor or other service provider in the review, the report should also be copied to such service provider. Nevertheless, the report copied to a service provider may need to have the information or details of or on

the other service providers blocked out.

18.4.2 Works Contracts with Significant Amount of Omitted Items

Works contracts with a significant amount of omitted items should be reviewed upon substantial completion of the contracts with a view to identifying areas for improvement in preparation of BQ. In conducting the review, the project offices should make reference to the relevant recommendations given in Audit Report No. 53 Ch. 3 (http://www.aud.gov.hk/pdf_e/e53ch03.pdf) issued by the Audit Commission.

19. DEDUCTION OF MONIES FROM GOVERNMENT CONTRACTS

19.1 GENERAL

GCC Clause 83 stipulates the contractual provisions where monies recoverable from one contract may be set-off against monies due to the same Contractor under other contracts.

19.2 ADMINISTRATIVE PROCEDURE

When the amount of a debt owed by the Contractor has been ascertained and it has been established that recovery is not possible under the Contract for which the debt was incurred, the Engineer shall report to the Head of Department (via the Government officer authorised to sign contract on behalf of the Government) on the situation, giving but not limited to the following:

- (a) Particulars of the Contract, e.g. Contractor's name, contract number and title;
- (b) The ascertained amount of and details giving rise to the debt;
- (c) Details of other contracts currently being undertaken by the same Contractor within the jurisdiction of the same Division/Office;
- (d) His assessment of the implication and desirability of setting off the debt from any or all the contracts under control; and
- (e) His recommended ways forward.

The report should be copied to other Division/Office Heads who should advise the Head of Department regarding the details of current contracts being undertaken by the same Contractor in their Division/Office. They should also give their assessment of the implication and desirability of setting off the debt from any or all the contracts under control.

The Head of Department should consider the recommendation from the Engineer as well as all the views from the Divisions/Offices and decide the actions to be taken. The matter shall then be reported to DEVB enclosing the necessary details and copied to all other Works Departments. Upon receiving the report, all relevant departments shall provide DEVB with details of all contracts that the departments have with the Contractor concerned for which further payment has yet to be made by the Government under these Contracts, together with their views on possible set-off. Nil returns are required.

If considered necessary, a liaison group similar to the one required under WBTC No. 16/99 for the dealing of determination of Contractor's employment should be formed. LA(W), DEVB and/or S for J should be consulted before a decision is made. The liaison group should identify which contract(s) the debt should be recovered considering factors such as the effect on works progress of the affected contract(s), possible liabilities for payment of interest etc. CTA(F), DEVB should also be invited to advise on any accounting or financial implications. Once a decision is made, any special accounting arrangements as required by CTA(F), DEVB shall be followed by the departments concerned. Any payments and/or release of retention money shall be subject to the approval of CTA(F), DEVB who will

consult as necessary with the departments concerned before giving such approval.

After all the necessary set-off/deductions have been completed, the departments concerned shall report to DEVB on the latest situation and any follow-up actions that are needed.

Whenever the Engineer anticipated that a debt is likely to be incurred and not recoverable under the Contract but the debt is yet to be established, he should also report the case to the Head of Department (via the Government officer authorised to sign contract on behalf of the Government). This may happen in the determination of Contractor's employment when liquidated damages and additional cost for completion are likely to exceed any retention money or bond being held under the Contract. In his report, the Engineer should provide with the Head of Department, in addition to other particulars pertaining to the matter, his estimated amount of the debt. See also Section 16 for reference.

All administrative procedures relating to the set-off of debt owed by the Contractor should be dealt with under confidential cover.

20. CONTRACTS INVOLVING DESIGNS BY CONTRACTOR

20.1 ALTERNATIVE DESIGNS FROM CONTRACTORS AFTER CONTRACT AWARD

DEVB TCW No. 3/2014 introduces a set of SCC allowing the Employer to accept alternative designs from Contractors after contract awards under works contract other than design-and-build contracts, which is given in Appendix 7.60.

In the event that the proposal of an alternative design by the Contractor is accepted, it is important to ensure that the necessary independent checking of the Contractor's design against the contractual requirements by an Independent Checking Engineer (ICE) is complied with. The ICE must certify the works concerned by means of check certificates in the following standard forms:

- (a) Form I, Interim Check Certificate, for use by the ICE for stage certification of the Contractor's design.
- (b) Form II, Final Check Certificate, for use by the ICE where Interim Check Certificate(s) have been issued.
- (c) Form III, Check Certificate, for use by the ICE where stage certification is neither required nor proposed.

The standard forms of the above check certificates are given in DEVB TCW No. 3/2014.

If an alternative design proposed by the Contractor during the course of Works involves additional cost implications or additional works outside the terms of the original contract (provided that the additional works are within the approved scope of the project subject to funds being available), the alternative design has to be approved by the appropriate authorities as stipulated in Appendix V(B) of the SPRs. Otherwise, if no additional cost implications or no additional works outside the terms of the original contract is involved, officers at D1 rank or above can authorize acceptance of the alternative design.

If an alternative design proposed by the Contractor involves overall cost saving to the Contract, approval in accepting the Contractor's alternative design should be obtained from the appropriate authorities as stipulated in DEVB TCW No. 3/2014.

20.2 DESIGNS UNDERTAKEN BY CONTRACTORS FOR GEOTECHNICAL WORKS

For tunnel works, submission and audit requirements relating to the geotechnical design of permanent works and associated temporary works undertaken by the Contractor are given in ETWB TCW No. 15/2005.

For all foundation works in the Scheduled Areas of Northwest New Territories and Ma On Shan, and in the Designated Area of Northshore Lantau, submission and checking requirements relating to the design of the works undertaken by the Contractor are given in

ETWB TCW No. 4/2004.

20.3 PROFESSIONAL INDEMNITY INSURANCE FOR CONTRACTOR'S DESIGNS

For public works contracts involving contractors' design or independent checking of the contractors' design, relevant parties including contractors, their designers and independent checking engineers are required under relevant provisions in the respective contracts to procure Professional Indemnity Insurance (PII). Details of the requirements for PII and the implementation procedures are given in DEVB TCW No. 9/2007 and the revised SCE and SCC(A) at Appendix E of this circular, promulgated via SDEV's memo ref. (02245-01-13) in DEVB(W) 510/34/01 dated 6.10.2009.

Under exceptional circumstances when the required insurance can no longer be procured at reasonable commercial rates after award of the consultancy agreement/works contract, the Employer (an officer of D2 rank or above) may agree to reduce the requirement to that which is available at reasonable commercial rates. In such case, a supplementary agreement is required.

21. MISCELLANEOUS

21.1 STATUTORY NOTIFICATIONS

The Construction Industry Council Ordinance and the Pneumoconiosis and Mesothelioma (Compensation) Ordinance provide for the collection of levies from contractors on construction operations of a value exceeding \$3.0M, undertaken (or the tender submitted) on or after 30 July 2018. These Ordinances require the “authorised person” for construction work to notify the Construction Industry Council (CIC) and the Pneumoconiosis Compensation Fund Board (PCFB) within 14 days of commencement and within 14 days of the completion of such construction work together with the values of the work.

Notices are to be sent separately in respect of every contract exceeding \$3.0M although works carried out under a nominated sub-contract need not be reported.

The Chief Engineer of the Division responsible for the Contract is the designated “authorised person” for the statutory notifications to the CIC and PCFB.

Notices are to be given on CIC Forms 1 and 3. PCFB Forms 1 and 3 have been prescribed for giving notices to the Board but the regulations shall be complied with if the notices given to CIC (on Forms 1 and 3) are copied to the Board. This latter procedure should therefore be adopted when applicable. These forms can be downloaded from the web sites of CIC (www.hkccic.org) and PCFB (www.pcfb.org.hk).

For term contracts and capital works contracts using the GCC for term contract, one notification of commencement to CIC and PCFB should be made for the whole contract instead of on works orders basis.

Under Sections 34 and 36 of the Construction Industry Council Ordinance, ‘authorised person’ is required to give notice to the Construction Workers Registration Authority within 14 days of commencement and within 14 days of completion of construction operations of value \$3.0M or above, undertaken (or the tender submitted) on or after 30 July 2018. Pursuant to Section 24(4) of the Construction Workers Registration Ordinance, the ‘authorised person’ would comply with the requirement for the notifications if he has given notifications of commencement and completion to CIC under the Construction Industry Council Ordinance.

When a Contractor is permitted to operate a crusher on Site to produce aggregate (for site use or otherwise), this fact should be reported to the PCFB.

Upon the issue of the certificate of (substantial) completion, the ER shall submit Form 3 (with a copy for PCFB) as with Form 1 for preparation and signature by the Chief Engineer.

The date of completion to be reported is to be the date when the Works are handed over to Government. If the final value is not yet known, the approximate value should be stated and attention drawn to this.

In the event that a contract with an originally estimated contract sum in excess of \$3.0M does not, on completion, reach this value then the ER shall draft a suitable letter of

explanation in lieu of Form 3 for the signature of the Chief Engineer.

With the implementation of the MPF on 1 December 2000, the Engineer shall at the commencement of the Contract arrange for the completion of the MPF Notification Form at Appendix 7.41 and fax it direct to the Senior Manager, (Industry Schemes), Mandatory Provident Fund Schemes Authority (MPFSA).

21.2 TECHNICAL AUDITS

21.2.1 Technical Audits on Works Contracts (Subsumed from WBTC No. 15/2002 and ETWB TCW No. 53/2002)

The Contract Advisory Unit of each works department should carry out, among other duties, technical audits on all works contracts, including term contracts and those contracts supervised by consultants, for which the department is responsible. The technical audits should be carried out at various stages of a contract for compliance with written policies, procedures and instructions; including administration of the contract, site records, measurements, payments, claims and the valuation of variations. Also, selected contract final accounts should be audited, including where possible, spot remeasurement checks against “as constructed” drawings.

Technical audits should follow procedures set out in the “Manual for Technical Audits on Works Contracts” (included in Appendix 7.39), which provides guidelines for a consistent approach for conducting audits and reporting the findings. The manual describes the audits at various stages of a contract and provides guidelines on the procedures and report formats. Checklists and standard pro-forma audit reports are also included. However, departments may impose additional requirements or amend the pro-forma audit reports to suit their particular needs.

The Contract Adviser of each works department should submit quarterly activity reports on technical audits on works contracts to the Head or Deputy Head of Department, or equivalent, with copies to DEVB. Such reports are to show the technical audits carried out during the previous quarter, the proportion of time spent on technical audits, and a programme for the next quarter. As far as possible, at least 50% of the Unit’s combined staff time should be spent on technical audits on works contracts.

21.2.2 Independent Auditing for Prevention of Sub-standard Works in Public Works Construction (Subsumed from WBTC No. 4/2002)

Each department should have their own independent auditing system for prevention of sub-standard works. Independent technical audits should be carried out on a regular basis as work progresses and any malpractices identified should be sanctioned as appropriate to deter foul play in the future. The auditing system should be devised in accordance with the following principles:

- (a) Audits should be carried out by auditors strictly independent of the concerned projects and site supervisory teams to be audited, and preferably by a dedicated team.

- (b) Auditors should be appointed by the Head or Deputy Head of Department, or equivalent, and adequately empowered to conduct the audit.
- (c) Audits should be conducted on surprise/random basis. Priority should be given to strategic projects with significance.
- (d) Audits should cover critical site activities of works contracts including testing of end products rather than documentary checks of records.
- (e) Audits would be conducted in the presence and with the assistance of the concerned project and site supervisory teams.
- (f) Testing, if required, should be carried out by Public Works Central/Regional Laboratories as far as possible (departments should consult and provide Civil Engineering and Development Department (CEDD) for the attention of the Chief Geotechnical Engineer/Standards and Testing with the testing requirements in advance so as to allow the Laboratory to plan for the necessary resources for the testing).
- (g) Auditors should preferably possess the necessary auditing skills in addition to the general knowledge, experience and expertise relating to the activities to be audited.

As works departments operate differently with different nature and value of works, each department should decide on the staffing, frequency and procedures of the audits consistent with the above principles. The required testing should normally be funded by the project votes.

The PWL of CEDD may join the departmental audit team to conduct audits on site facilities and work practices related to compliance testing on construction materials as part of the audit for prevention of sub-standard works. Each department should send a list of projects to be audited for sub-standard works to PWL as soon as it is available. The PWL audit team would liaise with the departmental audit team to confirm which projects are to be audited and the date of audit.

21.2.3 Technical Audits on Consultancy Agreements (Subsumed from WBTC No. 9/2002)

Technical audits on consultancy agreements should be carried out by all works departments in accordance with the guidelines in the “Technical Audit Manual for Consultancy Agreements” (included in Appendix 7.40).

The auditing officers should be assigned by the Head or Deputy Head of Department, or equivalent. They should be at senior professional rank.

The auditing officers should prepare regular Consultancy Agreement Audit Activity Reports to the Head or Deputy Head of Department, or equivalent, with copies to DEVB. Such reports should be prepared quarterly or half-yearly depending on the number of audits carried out and planned. They should show the audits carried out

against the original programme during the last reporting period and the programme for the next.

21.2.4 Reporting of Audit Findings

(Subsumed from WBTC Nos. 4/2002, 9/2002 & 15/2002)

The technical audit reports (on works contracts/consultancy agreements or for prevention of sub-standard works) should be submitted to the Head or Deputy Head of Department, or equivalent, with copies to the relevant Division/Unit heads and CAS(W)7, DEVB. The Head or Deputy Head of Department, or equivalent, should determine the follow-up actions required and ensure their proper implementations. Audit reports on consultancy agreements may also be copied to the Chairman of the Architectural and Associated Consultants Selection Board or the Engineering and Associated Consultants Selection Board (EACSB), if considered necessary.

21.2.5 Implementation and Reporting of Follow-up Actions

(Subsumed from WBTC Nos. 4/2002, 9/2002 & 15/2002)

Works departments should critically review the audit findings and take follow-up actions with a view to rectifying the non-compliance and avoiding recurrence. If repeated non-compliances are observed, the cases should be thoroughly investigated and appropriate measures should be taken to remedy any shortcoming identified.

For cases where defaulting parties are clearly identified, works departments should seriously consider establishing sanction against the defaulting parties, e.g. reflecting the cases in the contractors' or the consultants' performance reports, or taking appropriate disciplinary actions against the personnel involved, as the case may be. Appropriate sanctions can serve as deterrence to future foul play.

When audit findings identify areas for improvement necessitating changes of existing policies, such findings should be brought to the attention of DEVB by an officer at D2 level or above. If the areas for improvement are of common interest to other departments, the initiating department should keep other departments informed of the proposed improvements.

Works departments should submit review reports to DEVB annually on the technical audits carried out in each calendar year, reaching DEVB before the first working day in March of the following calendar year. The review reports should include, inter alia, a brief summary of the audits carried out, the conclusions of the annual review, common non-compliances identified and also the follow-up actions taken. If the follow-up actions have not yet been completed at the time of reporting, their programme and progress should also be provided. For cases where defaulting parties are clearly identified, the sanctions taken should also be included in the report. If no sanction has been taken for such cases, works departments should state in the report the reasons why not.

21.2.6 Audits by GEO on Tunnel Works

The GEO may audit the geotechnical design, risk assessment, site supervision plan and related documents and undertake site audits. The Engineer/Architect/Supervising Officer for the works contract shall make suitable arrangements, make available to the GEO during

the site audits all records and other information related to the contract, and provide all assistance required by the GEO to facilitate these audits. See ETWB TCW No. 15/2005 for further details.

21.2.7 Audits by TMO/ Department on Tree Risk Assessment

To ensure that tree risk assessments have been properly and professionally carried out, department shall carry out internal audit on the tree risk assessments done. For details, please refer to the “Guideline for Auditing of Tree Risk Assessment for Tree Management Departments” in the Cyber Manual for Greening.

21.3 ASSIGNMENT OF CONTRACTORS’ FINANCIAL BENEFIT (Subsumed from ETWB TCW No. 13/2000)

Heads of Departments are vested with the authority to approve at their discretion applications made by Contractors under GCC Clause 3 for assignment of the Contract.

The Contractor shall be required to give his reasons for making the application for an assignment of his financial benefit and to provide details of the proposal in order that it can be ascertained that such an application is justified. A contractor’s application for an assignment of his financial benefit should normally be approved ^{see Note 1} regardless of his financial situation. However should the circumstances of the case warrant, the Head of Department may exercise his discretion in order to safeguard Government’s interests. For example, if re-entry is already contemplated and, judging from the Contractor’s performance, it is considered that the assignment is unlikely to result in a substantial improvement but simply defer the date of re-entry, then approval should not be given.

If the assignee asks for confirmation that written consent to assign has been given, the following paragraph should be included in the reply:

“This consent is given on the basis that no reliance has been placed on any information from the Employer nor have any representations or warranties been given by the Employer on the Assignor’s financial status.”

A standard form of the Deed of Assignment of Contractor’s Financial Benefits is shown at Appendix 7.48. Where approval to assign is given, the Contractor shall be required to use this standard form in its entirety. Should a contractor propose any amendment to the standard form, departments shall seek advice from LAD(W), DEVB.

Project officer’s attention is drawn to Clause 7.1 of the standard form of the Deed of Assignment of Contractor’s Financial Benefits, which stipulates that all monies payable by the Employer to the Assignor pursuant to the Contract shall, during the subsistence of this Deed of Assignment, be paid by the Employer direct to the Assignee. Should a contractor propose any method of payment other than that specified in Clause 7.1, departments shall seek advice from LAD(W), DEVB.

[Note 1: As an interim measure to streamline the process, in-principle consent is granted, if applicable, for the assignment of the Contract upon issuance of the Letter of

Acceptance. Also see PAH Appendix 6.17, SDEV's memos ref. (0348H-01) in DEVB(W) 510/33/02 dated 3.1.2020, (03969) in DEVB(W) 510/33/02 dated 12.5.2021 and () in DEVB(W) 510/33/02 dated 10.3.2022.]

21.4 MEDIATION/ADJUDICATION/ARBITRATION IN CONSTRUCTION DISPUTES

21.4.1 Capital works contracts and term contracts not adopting voluntary adjudication

In accordance with GCC Clause 86/89, any contractual dispute arising between the Employer and the Contractor shall be referred to and settled by the Engineer who shall state his decision in writing and notify both the Employer and the Contractor. Such decision shall be final and binding upon the Contractor and the Employer unless either of them requires the matter to be referred to mediation or arbitration as provided in GCC Clause 86/89.

Mediation shall be conducted in accordance with "The Government of the Hong Kong Special Administrative Region Construction Mediation Rules" (1999 Edition) (the Rules) given in Appendix A of WBTC No. 4/99 and ETWB TCW No. 4/99A, or any modification thereof being in force at the date of the Contractor's or the Employer's request of the matter be referred to mediation. The prevailing Administrative Guidelines given in Appendix B of WBTC No. 4/99 shall be followed as far as practicable. Reference should also be made to the "Guidelines for Claims Management and Conduct of Negotiations" (December 1997), which should be obtained from Departmental Contract Advisor upon requests by project teams on a need basis, for guidance on the preparation for and conduct of negotiation within the mediation process.

If the matter cannot be resolved by mediation, or if either the Employer or the Contractor do not wish the matter to be referred to mediation, then either party may, within the time specified in GCC Clause 86/89, require that the matter be referred to arbitration in accordance with and subject to the provisions of the Arbitration Ordinance (Cap. 609). SCC for adoption in capital works contracts and term contracts (not adopting voluntary adjudication) to the Arbitration Ordinance (Cap. 609) are provided in Appendices 7.56, 7.56A and 7.57.

21.4.2 Capital works contracts adopting voluntary adjudication

For public works contracts where provisions for voluntary adjudication are incorporated, adjudication is available as an alternative dispute resolution option for adoption on a voluntary basis. SCC for adoption in capital works contracts adopting voluntary adjudication to the Arbitration Ordinance (Cap. 609) are provided in Appendix 7.55. The decision whether to initiate or agree to participate in an adjudication is dependent on the particular circumstances of the dispute under consideration. Due consideration should be given to various factors by the Works Department administering the contract, including but not limited to the type of the dispute, the amount of the sum in dispute, the timing of the Contractor's request for adjudication, whether there are other adjudications pending under the same Contract, the prospects for successfully defending or pursuing the claim and staff resources. In general terms, adjudication is best suited to straightforward claims which do not

involve complex or disputed facts or technical issues or expert evidence requiring a lengthy hearing. The Works Departments should consult with LAD(W) on these issues before the decision is made on whether or not to adjudicate and should obtain advice and assistance from LAD(W) for the conduct of the proceedings. If either the Employer or the Contractor is dissatisfied with the adjudicator's decision, either the Employer or the Contractor may within 90 days of the date of the adjudicator's decision require that the dispute be referred to arbitration. Upon receipt of the adjudicator's decision, the Works Department should critically review the adjudicator's decision and timely consult with LAD(W) before the decision is made on whether or not to refer the dispute to arbitration.

For record purposes, works departments shall submit adjudication details to the DEVB in accordance with the prescribed forms at Appendix 7.58 and Appendix 7.59.

21.4.3 Disclosure of confidential information to the Public Accounts Committee

A SCC for revising GCC Clause 8 is provided in ETWB TCW No. 29/2003 to allow Government to disclose confidential information under certain conditions to the Public Accounts Committee of the Legislative Council concerning matters relating to settlement agreements or the outcome of the arbitration or any other means of resolution of dispute.

21.5 DISCOVERY OF ANTIQUES OR UNUSUAL/SUSPICIOUS OBJECTS (Subsumed from PWDTC No. 14/73; Ref.: SETW's memo ref. (01AVE-01-2) in ETWB(W) 515/84/02 dated 7.12.2006)

When any antique or article of value is discovered during the execution of public works, the following procedures should be taken:

- (a) For in-house contracts, the resident site staff (RSS) should report to the Engineer in charge of the contract who should then report the matter to the Head of his office and simultaneously contact the Executive Secretary (Antiquities and Monuments), Antiquities and Monuments Office of the Leisure and Cultural Services Department (AMO of LCSD). Upon receiving such report, staff of the AMO will conduct inspection at discovery site as soon as possible.
- (b) Where it is not possible to contact the AMO immediately, the Engineer should, at his discretion, decide on the measures to be taken and then confirm them with the AMO as early as possible.
- (c) For consultant-managed contracts, the RSS should adopt the same procedure as for in-house contracts and the Engineer should report the discovery to the Employer without delay.
- (d) The Contractor should also be instructed to carry out all necessary measures for protection or removal, if any, as requested by the appropriate authorities.

In the event that unusual or suspicious objects are found on the Site, it is important that the RSS and the Contractor pay particular attention and take care of these objects and, if in doubt, report immediately to the Police and ER for direction.

21.6 USE OF EXPLOSIVES

21.6.1 General

For projects that involve blasting for rock excavation, the Contractor shall obtain a Blasting Permit from the Commissioner of Mines under the Cap. 295 Dangerous Goods Ordinance (DGO), prior to commencement of the blasting works. The Contractor shall provide a Method Statement when applying for a Blasting Permit. The Method Statement should incorporate all the requirements defined in the Blasting Assessment Report prepared by the Consultants during the design stage, and shall include:

- (a) the method and sequence of the blasting work;
- (b) details of the proposed blast design;
- (c) procedures for review of the blast design based on information from drilling of blast holes and inspection of the blast location by a geologist;
- (d) preventive, protective and precautionary measures;
- (e) monitoring plans;
- (f) contingency plans; and
- (g) the organisation of the site personnel and their responsibilities.

The Contractor may make revisions to the Blasting Assessment Report prepared at the design stage to suit their method of work or the site conditions, provided that such revisions are endorsed by the project office or its Consultants and accepted by the GEO.

Where rock blasting is to be carried out under a flight path and flying rock may cause a hazard to aircraft (including helicopters), the Director of Civil Aviation shall be informed accordingly.

The Blasting Permit will not be issued until the Blasting Assessment and Method Statement have been found satisfactory and the site is ready for blasting with all the site preparatory works (e.g. construction of blasting cages, vertical screens, blast doors, monitoring stations, site magazine, designated unloading area, slope improvement works required etc.) completed to the required standards. The time required for processing a Blasting Permit application depends on the quality of the Contractor's submission and the progress of the site preparatory works. In cases where blasting works need to proceed urgently, the project office should liaise closely with the Mines Division of the GEO. Mines Division will facilitate the processing of applications, as far as possible, provided that safety and security in the transport, storage and use of explosives is not compromised.

21.6.2 Reporting

The details of the reporting system required by a Contract are normally stated in the specifications and such a system should be implemented and monitored accordingly. For each blast, the following data, additional to that required by the specifications should be recorded:

- (a) name(s) and Mine Blasting Certificate number(s) of shotfirer(s);
- (b) location and identification number of the blast;
- (c) date and time of the blast;
- (d) quantities and types of explosives and detonators delivered;
- (e) quantities and types of explosives and detonators destroyed on site, or returned to Government Explosives Depot or site magazine;
- (f) blasting details including numbers and pattern of holes drilled, depth, diameter and inclination of the holes, initiating system and sequence, actual charges per hole, rock face orientation and throw direction;
- (g) approximate volume of rock or length of tunnel blasted;
- (h) details of any vibration and air-overpressure readings taken;
- (i) records of implementation of any evacuation of premises and/or road closure prior to the blast; and
- (j) records of inspection of the sensitive receivers before and after the blast by the Contractor's Engineering Geologist or Geotechnical Engineer when required under the Contract.

For any adjacent sensitive receivers (e.g. structure, slope, building, utility, facility etc.) that may be prone to damage by vibration from blasting under the Contract, consideration should be given to taking appropriate vibration monitoring readings even if similar monitoring measures are not stated in the specifications. The Contractor should be instructed to take the necessary readings together with readings from other normally occurring vibrations for comparison purposes, e.g. vibration due to heavy road vehicles.

21.6.3 Resident Explosive Supervisors

Resident Explosive Supervisors (RES) belong to the Resident Site Staff (RSS) team. The project office shall liaise with Mines Division in the project planning stage to work out the explosives delivery logistics and the blasting programme so that any need for RES can be ascertained. The number of RES in the RSS team is dependent on the number of daily blasts required and the explosives delivery arrangement agreed with Mines Division. The site supervisory staff performing the duties of RES should be registered with the Competent Supervisor and their details sent to Mines Division for record. The project office or its Consultant should also consult Mines Division regarding the required training and experience, and the duties of the RES.

When required, RES should be deployed to accompany and keep watch over the explosives to be transported or handled by the contractor until all the explosives are stored in a site magazine, consumed or destroyed at the blasting site. This is to enhance security by preventing explosives being stolen, lost or otherwise mislaid.

In general, the RES duties should include the following:

- (a) check that the amount of explosives drawn from the Government Explosives Depot or site magazine complies with the explosives requisition documents;
- (b) ensure that all explosives drawn are delivered to either the project site magazine or the blast locations and loaded into the blast holes, and that explosives are not stolen, lost or otherwise mislaid (see (d) below for unused explosives);
- (c) check that the explosives drawn are loaded and connected by the shotfirer according to the shotfirer's Charging Details as shown in Appendix 7.42; and
- (d) witness the destruction of any unused explosives by the shotfirer on site, or the return of unused explosives to the site magazine.

21.6.4 Additional Site Supervision Requirements for Blasting Works

The supervision requirements for projects involving rock blasting are in addition to the qualified site supervision package of Category I, II and III supervisors as defined in ETWB TCW No. 29/2002, 29/2002A and Appendix 7.47 of the PAH. General requirements relating to the supervision of blasting works are given in paragraph 4.3.

The site supervision duties of the Competent Supervisor for blasting works should include:

- (a) checking the Contractor's Blasting Method Statement and the Contractor's Blasting Assessment;
- (b) checking (including both document and site checks) for each blast, that the Contractor's blast design and its implementation, including the installation of protective, precautionary, preventive measures, comply with the Blasting Permit requirements;
- (c) verifying on site that the ground conditions and geology are as stated or assumed in the Blasting Assessment, and that the preventive, protective and precautionary measures as given in the Method Statement are adequate for the actual site conditions;
- (d) ensuring that the preventive measures (e.g. slope upgrading works), when required, have been properly carried out prior to commencement of the blasting works, and that the protective and precautionary measures are carried out in accordance with the Method Statement prior to each blast;
- (e) monitoring regularly the condition of all sensitive receivers and carrying out

inspections and reviews before and after each blast;

- (f) supervising directly the work undertaken by the RES and Category III supervisors for blasting works; and
- (g) preparing monthly reports with records of the condition of the site, sensitive receivers, adjacent ground, structures and services, etc.

The additional duties of a Category III supervisor for blasting works should include the following particular items:

- (a) checking the locations and depths of all the blast holes for each blast;
- (b) inspecting the construction of preventive works, if required, for the sensitive receivers;
- (c) inspecting the provision and installation of all necessary protective and precautionary measures prior to each blast, in accordance with the blast design;
- (d) monitoring the site operations and working methods to ensure that they meet the safety requirements set out in the Blasting Permit;
- (e) inspecting the condition of all sensitive receivers before and after each blast;
- (f) checking the adequacy of monitoring of sensitive receivers before and after blasting; and
- (g) reporting the findings of the above checks and inspections to the Competent Supervisor before approval is given to go ahead with the blast.

21.7 PAYMENTS OF WAGES

Should it come to the attention of any staff on the Site that a group of workers may not have been paid or not paid correctly, then the matter should be relayed to the ER/Engineer. It is recognised that this information may only be rumour or hearsay but the ER/Engineer should consider the matter and, if deemed necessary, make prompt referrals to the Labour Relations Division of LD in respect of suspected non-payment of wages to workers. A standard proforma for reporting of incidents is shown in Appendix 7.43.

In July 2008, SDEV promulgated a set of contract measures to prevent non-payment of wages for implementation in all capital works contracts (other than maintenance contracts and E&M supply and installation contracts). The measures include installing smart card systems at sites to keep attendance records; requiring written employment contracts for site personnel and requiring employment of Labour Relations Officers (LRO (with title currently unified as ACO(LR))) to handle employment matters and to monitor payment of wages and Mandatory Provident Fund (MPF) contribution. Moreover, there are provisions for reimbursement of Contractor's contribution to the MPF for his site personnel. The requirement for reimbursement of MPF was ceased on 1 January 2017 according to SDEV's memo ref. (02VKU-01-3) in

DEVB(W) 510/17/01 dated 16.12.2016. For new contracts which tenders will be invited on or after 1 January 2017, the corresponding contract terms as highlighted in Annex A to the said SDEV's memo for reimbursement of MPF are no longer required and shall be deleted.

It is an offence under the Employment Ordinance for wages which become due on the expiry of the last day of the wage period to be paid later than 7 days thereafter. Whilst it is LD to take enforcement action against non-complying employers, works departments should take steps to prevent late payment of wages from happening on public works sites, in particular, under the contracts which have adopted the measures to prevent non-payment of wages to site personnel. SDEV has announced in the memo ref. (021QF-01-3) in DEVB(W)510/17/01 dated 26.6.2009 the measures in respect of monitoring of the situation of late payment of wages, compilation of statistics, referral of cases of late payment to LD and issue of advisory letters to the contractor, which should be adopted in public works contracts. For guidelines on wage payment monitoring and reimbursement of Contractor's and Sub-Contractors' contributions to the MPF for their site personnel and revised SCC on reimbursement of MPF Contributions to Subcontractors, please refer to DEVB's memo ref. (02FYE-01-11) in DEVB(W) 510/17/01 dated 27.7.2012 and ref. (02H25-01-1) in DEVB(W) 510/17/01 dated 8.11.2012.

21.8 OPENING CEREMONIES FOR PUBLIC WORKS PROJECTS

The procedures to be followed for opening ceremonies for projects under the Works group of departments are given in WBTC No. 3/89.

For all capital works contracts with an estimated value of greening works exceeding \$10 million, the project office should allow for community planting close to or after the completion of projects. Reference should be made to DEVB TCW No.5/2017.

In addition, all new structures (e.g. buildings, bridges, flyovers, roads, piers, treatment works, workshops, etc.), which are to be officially opened by guests, should incorporate a plaque commemorating the name of the person opening the structure and the office responsible for its construction. The works department should be responsible for preparing the commemorative plaque and sufficient time should be allowed for its manufacturing and installation. When ordering, details to be incorporated on the plaque should be given together with a plan showing the location and an elevated view of the structure. A similar plaque should also be prepared for buildings and other structures not officially opened by guests and for those designed and constructed by consultants. Sample commemorative plaques are shown in Appendix 7.44.

The following is a sample checklist for preparing and arranging the opening ceremony but is not meant to be exhaustive. The department or the project office concerned should compile its own checklist to suit the particulars of the project:

- (a) Submit details of the opening ceremony to and seek approval from SDEV, including but not limited to:
 - (i) Date, time and location of the event;
 - (ii) Person(s) officiating at the opening ceremony; and
 - (iii) Tentative invitation/guest list.

- (b) Seek approval of funds from the Head of Department, via the Office Head or Branch Head as appropriate. This should be in the form of a memo itemising the various costs for the opening ceremony, such as ceremony stage, photo display panels, commemorative plaques, refreshments and brochures etc.
- (c) Finalise and confirm date, time and person(s) officiating at the opening ceremony. It may be necessary to check with the Director of Protocol as to whether the proposed schedule and guests would clash with any other celebration events.
- (d) Prepare guest list in collaboration with SDEV, District Office(s) and other appropriate departments.
- (e) Prepare and send invitation cards, normally in the name of the Head of Department. A directional map should be shown on the reverse of the invitation card and a sample invitation card is shown in Appendix 7.45.
- (f) Arrange publicity such as:
 - (i) Brochure including order of proceedings; and
 - (ii) Press release, radio and television broadcasts, pamphlet, announcing the event which should include any special traffic arrangement.
- (g) Prepare draft speeches for the host and person(s) officiating at the ceremony.
- (h) Ordering commemorative plaque and arrange its installation.
- (i) Arrange refreshments.
- (j) Arrange transport, particularly for V.I.P. and regarding office cars (an officer should be designated to control movement of cars).
- (k) Organise any other transport and traffic matters that deem necessary, e.g. car parking arrangement, car parking labels, temporary traffic signs or temporary road markings.
- (l) Prepare banners if required.
- (m) Arrange dais, chairs and other furniture that may be required. Assistance from Government Logistics Department may be necessary.
- (n) Organise appropriate floral arrangements if required.
- (o) Prepare run-down and full details of the ceremony, preferably with appropriate drawings for reference. A contingency plan to account for bad weather should also be prepared.
- (p) Arrange public addressing devices which should include a back-up system for contingency.
- (q) Prepare seating plan for guests. The Director of Protocol should be consulted if necessary.

- (r) Prepare ribbons, scissors and/or curtain for the commemorative plaque if necessary.
- (s) Appoint a Master of Ceremonies for the event.
- (t) Arrange ushers for the guests if necessary.
- (u) Conduct rehearsal(s) for the event if necessary.

21.9 QUALITY ASSURANCE FOR STRUCTURAL CONCRETE

Guidelines prepared by the SCCT to assist the Engineer in vetting quality systems for production and supply of structural concrete are given in Appendix B of ETWB TCW No. 57/2002.

21.10 NOVATION

According to Sub-section 6.6 of the Contractor Management Handbook (CMH), application for substitution will be considered/allowed to cater for genuine organizational restructuring to suit the business needs of contractors whilst upholding government procurement principle of open and fair competition. Subject to the conditions and procedural requirements as set out in Sub-section 6.6 of CMH, a contractor may submit an application for substitution which, if approved, will permit another company (the “new company”) to inherit the company listing status, records of company experience, past performance, convictions, accidents and regulating actions of the company being substituted (the “outgoing company”).

According to Sub-section 6.7 of CMH, apart from the substitution process mentioned above, a contractor may apply to transfer his benefits and obligations under a contract with the Government to a third party only if he is being wound up, will no longer be in existence, or is unable to complete the contract. Under such circumstances, the Government may, on balance and in the interest of the Government and public fund, agree to a novation instead of terminating the contract.

The actions required to effect novation are stipulated in Sub-section 6.8 of CMH. For public works contracts, a novation agreement is a tripartite agreement entered into by the Government, the Contractor and a third party, whereby the Contractor is released from and the third party assumes all the Contractor’s obligations and rights under the Contract(s). The two standard forms of novation agreement are shown at Appendices 6C & 6D of CMH and any proposed change to the standard forms must be consulted with LAD(W), DEVB.

21.11 TREE PRESERVATION

The need for tree preservation and tree felling/transplanting to be included in the Contract should have been identified during the planning and design stage with necessary approvals obtained. Reference should be made to DEVB TCW No. 4/2020, DEVB TCW No. 5/2020 for Old and Valuable Tree (OVT), “Guideline on Pavement Renovation Works and Tree Stability”, “Management Guidelines for Stonewall Trees”, “Guidelines on Tree Transplanting”, “Management Guidelines for Mature Trees” and “Guidelines on Tree Preservation during Development” promulgated by DEVB. However, new tree felling/transplanting may be required during the execution of the Contract to facilitate the progress of Works or to suit conditions on the Site. In such case, the necessary approval shall be obtained from the Tree Works Vetting Panel (TWVP) of the project department in accordance with DEVB TCW No. 4/2020. It should nonetheless be borne in mind that all trees should be preserved as far as practicable. Factors such as site characteristics, project requirement, cost-effectiveness and merit of a compensatory planting proposal should be duly considered. It is necessary to ensure that no trees are unnecessarily felled or pruned. The project department should ensure that trees worthy of and suitable for preservation are identified in the planning and feasibility stage and properly preserved through careful and proper planning, design, implementation of protective measures, site monitoring, and post-construction maintenance. Due consideration should be given to preserving the existing trees that are healthy and structurally sound, and removal (i.e. transplanting or felling) should be considered only if preservation is impractical. The proposals to retain or transplant trees should reflect a balancing act taking into consideration the intrinsic tree factors, environmental factors, cultural factors, functional requirements of the project, engineering considerations and financial considerations. In the case of tree transplanting, sufficient time, normally not less than 12 months, should be allowed for sourcing of receptor location(s), identification of long-term maintenance party, consultation, obtaining approval and preparation of transplanting work.

The planning and design of a project must take into account the need to preserve and avoid any damage to tree(s) within and adjacent to the site. In addition, precautionary measures should be included in the design and contractual provisions to preserve and protect the trees during the construction stage. Details of the tree protection zone, tree inspections, monitoring, maintenance and other measures shall be in accordance with DEVB TCW No. 4/2020. If the construction works encroach upon the protection zone of an OVT in the register, the project office shall obtain the approval from the relevant TWVP. Details of the tree protection zone, tree inspections, protection, maintenance and other measures for OVT(s) shall be in accordance with DEVB TCW No. 5/2020.

The Contractor is required to identify any existing trees, including OVTs, on the Site. For preservation and protection of existing trees and, where required, the registered trees, reference should be made to the detailed methods, procedures and requirements as stated in DEVB TCW Nos. 4/2020 and 5/2020, General Specification for Civil Engineering Works (Section 26 on ‘Preservation and Protection of Trees’) and the Cyber Manual for Greening (<http://devb.host.ccgo.hksarg/en/contactus/index.html>). Where there are provisions under the Contract, the Contractor may also be required to employ a suitably qualified and experienced independent tree specialist to carry out the duties as stipulated in the relevant SCC.

For tree surgery work involving extensive crown, limb or root pruning that significantly affect the tree form, the justification, extent and supervision requirements of pruning works should be approved by the Senior Landscape Architect (SLA) or Landscape

Architect (LA) of the works department for contracts managed by in-house staff, or the project director of the landscape consultants for consultant-managed contracts. Detailed pruning proposal and method statements submitted by contractor should be approved by the Engineer before implementation, and monitored throughout the duration of the contract. In performing tree pruning works, the contractor shall follow the 'General Guidelines on Tree Pruning' and 'Dos and Don'ts in Pruning' which are available at the Cyber Manual for Greening. The Contractor shall also follow the planting and management guidelines for greening on the tree care during construction and proper planting practices in the Cyber Manual for Greening.

Where incidents of unauthorized removal or damage of trees occur in a Government project, the project office should investigate and take necessary regulating actions should the contractor be found responsible for the incidents. The contractor's performance on tree protection should be fully reflected in the report on the contractor's performance. In addition, any incidents of unauthorized removal or damage of trees within unallocated or allocated Government land should be promptly reported to Agriculture, Fisheries and Conservation Department (AFCD) or the allocatee department respectively for investigation and necessary prosecution actions under the relevant legislation. The report should also be copied to the Lands D for information.

For any incident of unauthorized tree removal or damage of trees that have attracted media attention and/or public scrutiny within unleased and unallocated government land or allocated government land or private land, AFCD or the allocate department or Lands D respectively shall alert Greening, Landscape and Tree Management Section of DEVB (GLTMS) immediately and submit an incident report to GLTMS within five calendar days from the date of the incident. The incident report should be in the form shown in Appendix F of DEVB TCW No. 4/2020 and should set out the background of the incident, location, number and types of trees affected (if known), course of actions taken and follow-up actions required, where appropriate.

21.11.1 Proper Tree Preservation at Construction Works Sites

To enhance tree preservation at construction works sites, works departments should ensure the following actions are undertaken throughout the construction period:

- (a) strengthen the knowledge and awareness of proper tree preservation and pruning works to all levels of project team members and contractors/consultants, including managerial, supervisory and frontline staff;**
- (b) bring to the attention of contractors/sub-contractors on a regular basis about the 'General Guidelines on Tree Pruning', "Dos and Don'ts in Pruning", guidelines on tree planting and other circulars and guidelines on tree works issued by the Works Branch;**
- (c) ensure contractors employ competent personnel in implementing all tree works on site, in particular tree preservation, pruning and transplanting work;**
- (d) remind contractors/sub-contractors about the procedural requirements for tree works as stipulated in the contracts, the General Specification for**

Civil Engineering Works and General Specification for Building in the first site progress meeting and subsequently at regular interval; and

- (e) step up site supervision of all tree works on site including the tree preservation, pruning and transplanting work, preferably by more senior ranking officers.**

Government circulars and guidelines concerning tree planting, preservation, pruning and transplanting are available at Cyber Manual for Greening (<http://devb.host.cgo.hksarg/en/contactus/index.html>).

21.11.2 Tree Risk Assessment

To better protect public safety, tree risk assessment and mitigation measures should be undertaken for trees under their management in accordance with “Guidelines for Tree Risk Assessment & Management Arrangement on an Area Basis and on a Tree Basis” promulgated by DEVB.

21.12 IMPORTATION OF SAND FROM MAINLAND CHINA BY BARGES

For contracts where importation of sand from Mainland China by barges is required, the procedures as laid down in WBTC Nos. 10/95 & 10/95A shall be followed, particularly on the need to carry on board the original versions of a list of permits that are required by the appropriate authorities. The list of permit may change from time to time and the Engineer should remind the Contractor that the latest list is kept.

21.13 ELECTRONIC DRAWINGS

If contract drawings are available in electronic form, the Contractor may ask the Engineer for additional copies of such electronic drawings for use under the Contract. Charges and further details regarding the supply of electronic drawings are given in Section 8.4 of PAH Chapter 5.

21.14 MANAGEMENT OF SUB-CONTRACTORS BY CONTRACTORS

21.14.1 Sub-contractor Management Plan

For contract that requires the submission of Sub-contractor Management Plans (SMP), the Contractor shall, within 30 days of the acceptance of the tender, submit a detailed version of the SMP in the form and contents as prescribed in the Contract. Thereafter, the Contractor shall update and submit the SMP on a quarterly basis. Should there be any major changes in the Contractor’s sub-contracting arrangement during the period before the next quarterly reporting, the Contractor should also notify the Engineer/ER in writing immediately. Upon receipt of the SMP, the Engineer/ER may offer his comments and notify the Contractor accordingly. No approval of the SMP is required from the Engineer/ER.

A contractor's performance in complying with the provisions in the SCC on

sub-contracting and submission of the SMP will be assessed as pursuant to Section 4 of the CMH. Regulating actions shall be taken against the contractor in accordance with Section 5 of the CMH for poor performance in complying with the above provisions, but the guidelines for monitoring of performance given in Sub-section 5.4 of the CMH should be followed prior to making a recommendation for suspension from tendering. (Subsumed from ETWB TCW No. 47/2002)

If a contractor fails to update and submit the SMP to show his latest changes to the sub-contracting arrangement within one month of the quarterly reporting as required in the SCC, the procuring department should warn the contractor in writing and urge him to submit the updated SMP, and copy the warning letter to the SDEV (Attention: PAS(W)4). (Subsumed from ETWB TCW No. 47/2002)

If, after expiry of the one-month period as stated in paragraph 3 above, the contractor has failed to comply with or submit the updated SMP, the procuring department should notify the SDEV (Attention: PAS(W)4) with a copy to the Chairman of the relevant Managing Review Committee requesting regulating actions against the contractor in accordance with Section 5 of the CMH. Upon receipt of the procuring department's notice, the SDEV will give a further opportunity to the contractor to present his case before deciding whether to immediately suspend the contractor from tendering. Copies of all correspondence will be sent to the procuring department and the Managing Department. Uplifting of the suspension will only be considered when the contractor has submitted the updated SMP showing his latest sub-contracting arrangement. (Subsumed from ETWB TCW No. 47/2002)

Apart from the SMP, the Contractor is also required, normally in the form of a SCC, to ensure that his sub-contractor would not further sub-contract the whole of the works sub-contracted to them and that his own staff would be employed to manage and supervise his sub-contractors.

In 2005, the then ETWB conducted a review on the status and effectiveness of the implementation of SMPs for contracts reported to have wages arrears problems. It is found that the measures taken in response to the SMP requirements on payments and control of wages arrears differ substantially from one contractor to another. The standard of vetting the SMP adopted by individual departments also varies to great extent. To facilitate project officers in vetting the SMP proposals submitted by the contractor, the then ETWB drew up the following list of examples of good practice in the SMP consolidated from the review exercise (Ref.: SETW's memo ref. (00VB3-01-10) in ETWB(PS) 109/11/1 dated 15.11.2005):

- (1) General
 - (a) The Contractor shall include all sub-contractors KNOWN to him in the SMP. (SMP requirement)
 - (b) The Contractor shall ensure that their sub-contractors report on the further subletting of their works (to other contractors) for including those details in the SMP. (SMP requirement)
 - (c) The Contractor will require its subcontractors to submit monthly updates for (b) above for his updating of the SMP.

- (d) Changes to the subcontracting arrangement will be discussed at monthly progress meetings with the Architects/Engineers to ensure that both the RSS and the Contractor's own site supervision team are well informed.
- (2) Measures for monitoring early industrial dispute problems (SMP Requirements)
- (a) Publicity
 - (i) The Contractor will put up posters issued by LD and distribute LD's leaflets on the site to ensure all workers of subcontractors understand their rights and responsibilities.
 - (ii) The Contractor will request and encourage all workers of subcontractors to report on any wages in arrears for over 7 days.
 - (b) Site surveillance
 - (i) The Contractor will set up an industrial dispute hotline so that workers of subcontractors can report to a designated management staff on such disputes.
 - (ii) The Contractor will set up a lockable suggestion box for workers to report their wages arrears problems privately and confidentially.
 - (iii) The Contractor will remind workers at least once a week during the pre-work exercise to report on any wages arrears problems.
 - (iv) The Contractor will remind workers of the requirements of submitting declarations of no "unsettled salary" through their employers and carry out random check on workers to verify the declarations received.
 - (v) The Contractor will designate site foremen to collect intelligence from workers for advance warnings over potential wages arrears problems.
 - (c) Evidence of wages received by workers
 - (i) The Contractor will require his sub-contractors to submit evidence of wages received by their workers together with the workers' declarations of no "unsettled salary" for the previous month when making their payment applications.
 - (ii) The declaration forms in (i) above should also be submitted for any months the sub-contractors concerned do not apply for any payment.
 - (iii) Declaration forms should be in the language known to the workers. The form should also be designed to take into account of the possibility of workers receiving dated cheque so that monitoring and if necessary, follow-up action can be made.
 - (d) Follow-up action
 - (i) Once a suspected case of wages arrears is established, the Contractor will appoint a senior management staff to investigate the incident and alert the Engineer/Architect without delay.
- (3) Measures for handling complaints from workers (SMP Requirements)
- (a) Upon the receipt of a complaint, the Contractor's designated investigating staff will first make an attempt to resolve it as appropriate with the relevant subcontractor and workers. Payment records, declaration of receipt of wages and site attendance records should be retrieved for investigation.

- (b) Where appropriate, the investigating staff will attempt to mediate the complaint for an agreement between the subcontractor concerned and his workers. If necessary, he should witness and record any payments made to settle the case.
 - (c) If agreement cannot be made, the investigating staff will seek assistance from the LD to take over the mediation of the complaint.
 - (d) The investigation staff will at all times co-operate with LD for earlier actions in handling the complaint.
 - (e) The investigating staff will keep the Architect/Engineer informed of the development of the complaint.
 - (f) The Contractor will also report on the monthly progress report whether wages arrears dispute is identified on site.
- (4) Measures for maintaining daily attendance records of all workers on the site. (SMP Requirements)
- (a) System in place
 - (i) A smart card, site pass or logbook system should be implemented under the supervision of a designated staff. Workers should be required to log in at the normal place of assembly or a site entrance.
 - (ii) Names and details of all workers, their employers and the trades in which they are employed will be recorded and kept on the site.
 - (iii) Security guards stationed at the entrance will be responsible for managing workers' in and out discipline.
 - (b) Counter-check mechanism
 - (i) Sub-contractors will be required to submit daily attendance records (with names) of their workers for checking against the site access system's records by a designated staff.
 - (ii) A designated senior staff will review the attendance record periodically to identify if there is any unreported further subcontracting or changes in subcontracting arrangement.
- (5) Ensuring timely payment to lower-tier subcontractors (SMP Requirements)
- (a) The Contractor will require subcontractors to submit declarations stating that they have duly paid their subcontractors at a lower tier, together with copies of the relevant evidence of payment, such as receipts.
 - (b) The Contractor will require their subcontractors to impose the same obligation as (a) on their subcontractors at a lower tier so that it is filtered down to subcontractors at all levels.
 - (c) The Contractor will appoint a designated staff to encourage subcontractors at all levels to report on any overdue payments.

While the specific measures under each category cited in the above list are mere examples and might not be applicable to all contracts, project staff should exercise their judgement in making reference to them. On the other hand, the measures proposed by the contractors as part of their SMP for monitoring individual disputes problems should fall broadly within the four categories of heading identified in the good practices, i.e. publicity, site surveillance, evidence of wages received by workers and follow-up actions. Engineer/ER should ensure that all these elements are present when checking/ reviewing SMPs.

In December 2008, DEVB promulgated the following enhancement measures to improve the enforcement of the SMP (Ref.: SDEV's memo ref. DEVB(W) 109/11/01 Pt. 9 dated 19.12.2008). These enhancement measures should be implemented in all public works contracts to be tendered on or after 1 February 2009.

(a) Payment for Sub-contractor Management Plan

To address the quality issues, separate BQ items have been introduced for submission and updating of SMP.

(b) Contractual provisions for empowerment

To empower the Engineer to obtain documentary proof from contractors, contract provisions have been introduced to require the contractor, upon request by the Engineer, to submit relevant documents.

(c) Standard checklist

To assist project officers in vetting SMP submissions and conducting site compliance checks, a standard checklist has been designed. The checklist is given in Appendix 7.49.

(d) Regular internal audit

To strengthen the monitoring of SMP submissions, the Technical Audit procedures in Appendix 7.39 have been revised to include checking of SMP compliance.

**21.14.2 Engagement of Sub-contractors registered under the Sub-contractor Registration Scheme
(Subsumed from ETWB TCW No. 13/2004 & SDEV's memo ref. (02KJ8-01-4) in DEVB(W) 510/94/02 dated 22.7.2013)**

The contractors of all capital works and maintenance works contracts with tenders invited on or after 15 August 2004 are required to only employ sub-contractors (whether nominated, specialist or domestic) registered under the respective trades available in the Primary Register of the Voluntary Sub-contractor Registration Scheme (VSRS) introduced by the Provisional Construction Industry Co-ordination Board (PCICB). The CIC took over the management of the VSRS in January 2010. CIC has completed a review of the VSRS and launched Stage 2 of the VSRS on 1 January 2013. Major enhancements include incorporation in the scheme a new entry requirement for registration on the Primary Register to facilitate new entrants to the subcontracting industry; strengthened regulatory action against convictions of offences under the

Prevention of Bribery Ordinance, Employment Ordinance (in relation to payment of wages), Mandatory Provident Fund Schemes Ordinance, safety related ordinances and Immigration Ordinance; and refinement of operational details where appropriate to improve efficiency of the management of the scheme. The VSRS was also renamed as Subcontractor Registration Scheme (“SRS”). Details of the SRS can be found in the Rules and Procedures which latest version is available at the following website of CIC:<http://www.cic.hk>. In end 2018, the CIC completed a review of the SRS and subsequently proposed to rename the SRS as the Registered Specialist Trade Contractors Scheme (RSTCS) with a couple of enhancements. Please refer to paragraph 21.14.3 for details.

All sub-contractors registered under VSRS have automatically become Registered Sub-contractors under the SRS (hereinafter referred to as “RSTCS” with effect from 1 April 2019) and no application is required. They are governed by the RSTCS and subject to the Rules and Procedures as aforementioned.

Where the contractor is to sub-contract/ sub-let part of the Works involving trades available under the Primary Register of the RSTCS, he shall engage all sub-contractors (whether nominated, specialist or domestic), as stated in his latest updated submission of the SMP, who are registered under the relevant trades in the Primary Register of the RSTCS. Should the sub-contractors further sub-contract (irrespective of any tier) any part of the part of the Works sub-contracted to them involving trades available under the Primary Register of the RSTCS, the contractor shall ensure that all sub-contractors (irrespective of any tier) as stated in the Contractor’s latest updated submission of the SMP are registered under the relevant trades in the Primary Register of the RSTCS.

Should those contractors on DEVB’s List of Approved Contractors for Public Works and List of Approved Suppliers of Materials and Specialist Contractors for Public Works be engaged as sub-contractors (whether nominated, specialist or domestic) or their further sub-contractors in a public works contract, where in such cases if part of the Works involving trades available under the Primary Register of the RSTCS, they are still required to register from the respective trades under the Primary Register of the RSTCS.

To allow greater flexibility for the contractor’s planning of his sub-contracting at early stage, it is acceptable to allow the sub-contractors (whether nominated, specialist or domestic) and their further sub-contractors proposed in the latest updated SMP submission by the contractor to complete their registration under the RSTCS before the commencement of the works under the relevant sub-contracts and further sub-contracts respectively. For the avoidance of doubt, when a sub-contractor or further sub-contractor is suspended or in the process of an appeal against his suspension from registration under the Primary Register of the RSTCS, he is still considered not having complied with the above requirements for engagement of sub-contractors unless the suspension is lifted before the commencement of the works under the relevant sub-contracts or further sub-contracts respectively.

If the contractor fails to comply with any of the contractual requirements for engagement of sub-contractors, works department shall warn the contractor in writing and urge him to fulfil such contractual requirement within one month. The works department shall forward copies of all relevant correspondence to the SDEV (Attention:

PAS(W)4). If, after expiry of the one-month period, the contractor has still failed to comply with such contractual requirement, the works department shall notify the SDEV (Attention: PAS(W)4) with a copy to the Chairman of the relevant Managing Review Committee requesting for regulating actions to be taken against the contractor in accordance with Section 5 of the latest version of the Contractor Management Handbook.

Upon receipt of the works department's notice, the SDEV will give a further opportunity to the contractor to present his case before deciding whether to immediately suspend the contractor from tendering. Regulating actions will not be taken if such non-compliance is not within the control of the contractor. Copies of all correspondence will be sent to the works department concerned and the Managing Department of the relevant category of the List and/or the Specialist List. Uplifting of the suspension will only be considered when the contractor has complied with all the relevant contractual requirements.

21.143 Registered Specialist Trade Contractors Scheme

(Subsumed from SDEV's memos ref. () in DEVB(W) 510/94/02 dated 28.3.2019 and 11.12.2024 Amd No. 1/2025)

The CIC completed a review of the SRS in end 2018, and subsequently proposed to rename the SRS as the RSTCS with a couple of enhancements. Under the revamped framework, the RSTCS comprises the lists of both the Registered Specialist Trade Contractors (RSTC) and the Registered Subcontractors (RS). The RSTC are further classified into Group 1 and Group 2 subject to different admission criteria and tender limits.

Upon the launch of the RSTCS by the CIC on 1 April 2019, a total of twenty-one trades as listed below Amd No. 1/2025 have been included under the Register of Specialist Trade Contractors. Upon the launch of the RSTCS, the registered subcontractors in the SRS under the first Amd No. 1/2025 seven designated trades were Amd No. 1/2025 automatically transferred to Group 1 RSTC. These registered subcontractors may also apply for direct admission to Group 2 RSTC if they can meet the respective criteria. For other registered subcontractors in the remaining trades, they have been retained as RS under the RSTCS (previously SRS). More information of the RSTCS can be found on the website of CIC (<http://www.cic.hk>).

Amd No. 1/2025

	Trades included under the Register of Specialist Trade Contractors	Date of Inclusion
(1)	Concreting	1 April 2019
(2)	Concreting Formwork	1 April 2019
(3)	Curtain Wall	1 April 2019
(4)	Demolition	1 April 2019
(5)	Erection of Concrete Precast Component	1 April 2019
(6)	Reinforcement Bar Fixing	1 April 2019
(7)	Scaffolding	1 April 2019
(8)	Plastering	1 January 2021
(9)	Suspended Ceiling	1 April 2022

(10)	Tower Crane (Erecting, Dismantling, Altering Height)	1 April 2022
(11)	Building Drainage Installation	1 September 2022
(12)	Levelling and Setting Out	1 March 2023
(13)	Building Maintenance	1 October 2023
(14)	Interior Fitting-out	1 October 2023
(15)	Painting	1 May 2024
(16)	Metal Work	1 May 2024
(17)	Structural Steelwork	1 May 2024
(18)	Horticultural Works	1 May 2024
(19)	Arboriculture Works	1 May 2024
(20)	Skyrise Greenery Works	1 May 2024
(21)	Truss-out Scaffolding	1 January 2025

Amd No. 1/2025

Revised Requirements for Subcontractor Management Plan

Under the new arrangement as promulgated by DEVB on 28 March 2019 Amd No. 1/2025, the contractors should provide the details of subcontract(s), including but not limited to the trades (and groups if applicable) of the subcontractor(s) under the RSTCS and the Amd No. 1/2025 value of the subcontract(s) in the SMP.

Streamlining Requirements on Subcontractor Registration

(Ref.: SDEV's memo ref. () in DEVB(W) 546/83/01 dated 24.4.2024)

The prevailing requirements on subcontractors in public works contracts are outlined in the following contract provisions:

- (a) ACC V:5 under ECC HK Edition / ACC C3 under NEC4 ECC – Requirement on Specialist Contractors
- (b) ACC V:4 under NEC ECC HK Edition / ACC C6 under NEC4 ECC – Requirement on Subcontractor Registration Scheme

As the policy intent of requirements (a) and (b) above are different and the registration requirement for the former is generally more stringent than that of the latter, DEVB on 24 April 2024 revised the standard contract provisions concerned such that when both requirements apply, the subcontractor is no longer required to fulfill both of them. Instead, compliance with requirement (a) suffices to meet the policy intent. In other words, the subcontractor concerned does not need to be registered in the RSTCS if it is already a specialist subcontractor on the List of Approved Contractors for Public Works / the List of Approved Suppliers of Materials and Specialist Contractors for Public Works.

For ongoing works contracts, supplementary agreements could be executed between the contracting parties for the purpose of bringing in the revised requirements, through the exchange of correspondence.

Amd No. 1/2025

21.15 TRANSPORTATION OF ABNORMAL LOAD

For transporting construction plants and/or materials with abnormal weight and dimensions, submission to Transport Department for the approval of the abnormal load routing is required.

21.16 MAINTENANCE OF EXISTING HIGHWAY

The arrangement on the maintenance of existing highway network within the project sites is given in Chapter 15 of the Maintenance Administration Handbook published by HyD.

21.17 THE CASE ON ENTRUSTMENT OF WORKS

(Ref.: SETW's memo ref. (008BT-01) in ETWB (W) 830/31/01 dated 12.7.2004, Audit Recommendation on Public Works Contracts)

- (1) There has been an experience that department A planned to entrust some works to department B, but owing to delay in funding approval, the entrustment was not effected. After the funding approval, the two departments agreed to coordinate the works of their separate contractors by sequential possession of site.
- (2) Finally, there were some delayed possession of sites resulting in delay to works, extension of time (EOT) and payment of prolongation costs.
- (3) The departments concerned should take remedial actions to deal with delay in completing works in situations where possession of sites cannot be given to contractors on time owing to delays caused by other parties. The remedial actions may include:
 - Entrusting the outstanding works to the other parties; or
 - Deleting the outstanding works from the contracts and employing term contractors to carry out the works upon possession of the sites.

21.18 CONTROL OF CONTRACT PRELIMINARIES FOR ONGOING CONTRACTS

(Ref.: SETW's memo ref. (00NKG-01-2) in ETWB(W) 925/50/01 dated 27.5.2005, Assignment No. 27/2004 - Assignment Report on Control of Contract Preliminaries)

- (1) Central acceptance and distribution of contract preliminary items

All contract preliminary items shall be provided to the office of the Engineer's Representative for central acceptance and distribution. The Engineer's Representative shall designate different officers to be responsible for the acceptance and distribution of the items. The Engineer for the Contract shall request the Contractor not to provide the items directly to an individual member of the site supervisory staff.

- (2) Avoid buying preliminary items from the contractor

Works departments/Engineer's Representatives should issue a notice to all staff that they should not purchase contract preliminary items from the Contractor during or

after the contract period in order to avoid any perceived or actual conflict of interest. Contract preliminary items refer to non-works items such as computers, mobile phones, personal protective equipment and contract transport, etc. provided for the use of the “Architect/Engineer” and his staff to facilitate implementation of the project.

Works departments/Engineer's Representatives should issues a notice to all staff and it should be displaced on the notice board of every site office and re-circulated annually.

21.19 MEASURES TO PREVENT ILLEGAL EXTRACTION OR IMPORTATION OF BOULDERS/COBBLES/PEBBLES

All works departments, Government consultants and contractors should pay more attention to ensure legality of natural boulders/cobbles/pebbles. In case of doubt, they should take prompt actions to clarify whether the materials are legal, and to report immediately to the relevant authorities if any illegal acts are suspected

21.20 DESIGN AND BUILD CONTRACT

For administration of design and build contracts, reference should also be made to the “Administrative Procedures for Use with General Conditions of Contract for Design & Build Contracts” which can be found in DEVB’s website (under Publications and Press Releases\Publications\Standard Contract Documents\).

21.21 CONTROL OF OFF-SITE FABRICATION OF CONSTRUCTION COMPONENTS

(Ref.: SETW’s memo ref. (018RD-01-1) in ETWB (W) 925/50/01 dated 13.10.2006, Assignment No. 04/2006 - Control of Off-site Fabrication of Construction Components, paragraph 33 of the Assignment Study Report No. 15/2017 "Administration of Consultant-managed Mega Civil Engineering Contracts Adopting General Conditions of Contract" and ICAC Assignment Report No. 18/2017 – Control of Construction Components Prefabricated outside HK for Infrastructure Projects)

Off-site inspections are a corruption-prone area because inspection officers are vulnerable to offer of bribes and lavish entertainment by the manufacturers/Contractor. The project office should adopt the following guidelines in controlling off-site fabrication of construction components outside Hong Kong:

- (a) If an independent inspection agent (IIA) is to be employed by the Contractor to supervise and inspect the works in the fabrication area, the project office should implement the following measures:
 - (i) require the Contractor to submit the particulars of the IIA and his staff to the Engineer for approval;
 - (ii) require the IIA and his staff to declare any conflict of interest with the

- manufacturer/Contractor;
- (iii) require the IIA to submit to the Engineer for approval a site supervision and inspection plan for the fabrication works as well as subsequent changes, and to certify compliance with the site supervision and inspection plan;
 - (iv) caution the IIA and his staff not to accept lavish entertainment during supervision and inspection;
 - (v) require the IIA to submit site records and reports on any non-compliance with the Contract's requirements to the Contractor and the Engineer simultaneously;
 - (vi) require the IIA to submit periodic statistical returns (e.g. returns on the number and periods of supervision and inspections conducted by the IIA and his staff and the works covered in the supervision and inspection) for management information;
 - (vii) require the IIA to certify that the fabrication works have been constructed in accordance with the Contract's requirements; and
 - (viii) where practicable and on a need basis, carry out material tests on the fabricated components delivered on site, e.g. Schmidt hammer tests or concrete coring tests.
- (b) Normally, when the need for employment of IIA is identified during design stage of a project, the project office is required to stipulate the requirements in sub-paragraphs (a)(i) to (a)(vii) above in the contract documents in accordance with paragraph 9.28 of PAH Chapter 5. Under special circumstance when the need for employment of IIA is only identified during construction stage of a project (e.g. unanticipated large-scale fabrication works proposed by the Contractor), the Contractor should be required to obtain the project office's approval on the appointment of IIA and the project office should also require the IIA concerned to comply with the requirements in sub-paragraph (a) above.
- (c) If the resident site staff (RSS) are arranged to supervise and inspect the works in the fabrication area, the project office should implement the following measures:
- (i) ensure that supervision requirements and inspection arrangement for different types of works including off-site fabrication of construction components are included in the Quality Site Supervision Plan (QSSP) if applicable (please refer to paragraph 4.24 of EACSB Handbook for details);
 - (ii) require the RSS conducting supervision (including inspection) in the fabrication area to declare any conflict of interest with the manufacturers/Contractor;

- (iii) require the RSS to comply with departmental guidelines on the standards of transportation and accommodation allowed for off-site inspections, and the keeping of approval records for audit checks;
 - (iv) caution RSS not to accept lavish entertainment during supervision and inspections and require them to report any over-provision in excess of the approved standards;
 - (v) review any need for reimbursement of further subsistence allowance to the RSS due to recruitment difficulty, taking into account that accommodation and transport are normally provided through the works contracts. If this is necessary, seek the approval of the departmental Resident Site Staff Establishment Committee (RSSEC) on the proposed reimbursement cap which may be determined with reference to the similar prevailing Government practice if appropriate;
 - (vi) compile periodic statistical returns (e.g. returns on the number and periods of the supervision and inspections conducted by each RSS and the works covered in these supervision and inspections) for management information; and
 - (vii) where practicable and on a need basis, carry out material tests on the fabricated components delivered on site, e.g. Schmidt hammer tests or concrete coring tests.
- (d) If in-house staff are deployed to supervise and inspect fabrication of large-scale or safety-critical construction components in the fabrication area, the project office should suitably document the supervision arrangement for such construction components (e.g. inspection frequencies, rank of officers to conduct the inspections), in a format commensurate with or similar to Quality Site Supervision Plan (QSSP) adopted in consultant-managed projects.
- (e) The implementation of security labels on concrete cube / steel bar / bituminous samples are applicable to those delivered from fabrication yards outside Hong Kong, details see “Implementation of Security Labels on Concrete Cube / Steel Bar / Bituminous Samples” under CEDD website (see paragraph 5.15).
- (f) Where the required material compliance tests cannot be undertaken by the Public Works Laboratories as advised by CGE/S&T of GEO, it is an existing practice for the Contractor to propose an independent laboratory to perform the tests concerned, subject to the approval of the Engineer and compliance with the policy outlined in WBTC No. 14/2000. For test samples transported from the fabrication yard to such Contractor’s proposed laboratory, project office should implement appropriate measures (e.g. using non-detachable security tags/labels, locking test samples in a secured box, using designated trucks for delivery etc.) to ensure security of the test samples during the transportation process. Reference can be drawn to the Guidance Notes on the use of Security Labels for Concrete Cube/Steel Bar/Bituminous Samples published by Public Works Laboratories of GEO.

21.22 CENTRAL CONCRETE MIX DATABASE, REGISTER OF THE BRAND OF CEMENTITIOUS MATERIALS COMMONLY USED IN PUBLIC WORKS CONTRACTS AND QUALITY CONTROL OF AGGREGATES

Central Concrete Mix Database

In order to facilitate the approval process of concrete designed mixes, a central concrete mix database (CCMD) has been developed by the PWCL to provide data of concrete cube strength for reference by the Engineer in his assessment of the designed mix submissions in accordance with GS Section 16. The CCMD also records the mix composition of each approved mix. Reference should be made to the detailed implementation notes for the CCMD, prepared by PWCL and promulgated under ETWB's memo dated 2.3.2007 ref. (01DHD-01-4) in ETWB(W) 520/11/02 or any updated version of the detailed implementation notes subsequently issued by PWCL.

If it is a new design, the Engineer should process the submission following the approval procedures stipulated in GS. After the designed mix has been approved, the Engineer should send an email requesting for MIX ID enclosing the following: (1) a document showing the approval of the concerned mix by the Engineer, (2) the mix detail/composition of each mix with highlight on the mix requiring the assignment of a new MIX ID, and (3) the QSPSC certificate of the batching plant to PWCL for processing. PWCL will assign a unique MIX ID for the mix and then inform the concrete producer and the Contractor through the Engineer.

If the proposed concrete mix is one previously approved in another public works contracts and registered in CCMD, it will already have a unique MIX ID. The Contractor should quote the MIX ID in his submission, and the Engineer should send the MIX ID to PWCL and request the relevant information (viz. record of mix details and test results obtained by PWCL in the last 12 months) to assist his assessment on acceptability of use of the proposed mix. If the proposed concrete mix is for non-structural concrete or its concrete grade is Grade 20 or below, request for assignment of MIX ID will not be required and no MIX ID will be assigned by PWCL.

The site supervisory staff should check that the correct MIX ID has been printed on the concrete producer's delivery dockets before accepting the concrete. For request of testing of concrete cubes of an approved concrete mix, the site supervisory staff should print the MIX ID on the test request form so that PWCL staff can upload the test results to the CCMD under the correct MIX ID.

Testing of Cementitious Materials

PWCL also maintains a register of the brands of Portland cement, pulverised fuel ash, Portland fly ash cement and ground granulated blastfurnace slag commonly used in public works contracts. PWCL regularly collects samples of the registered brands directly from the suppliers (or from relevant government contracts if samples are not available from suppliers), conduct tests on them, prepare a bi-monthly Cement Circular to present the test results, and upload the Cement Circular onto CEDD website https://www.cedd.gov.hk/filemanager/eng/content_633/Cement%20Circular%20Sep2020.pdf. In general, PWCL would include the brand of the cementitious materials in the Cement Circular if it has been tested for more than three times and used in one or more Government contracts within the last six months. A brand not in use in any government

contract for more than six months will be deleted from the Cement Circular. The Engineer may also request PWCL to carry out tests on brands of cementitious materials being used in his works contracts using the test request form (Form No. 2322) available at CEDD website <https://www.cedd.gov.hk/eng/public-services-forms/public-forms/geotechnical-services/test-request-forms-for-laboratory-testing/index.html>. If the tests requested are on the commonly used brands which test results are available in the Cement Circular, explanations of the special circumstances (such as cementitious materials stored on site becoming contaminated as a result of inadequate protection) should be provided. The Engineer should assign a responsible site supervisory staff at Inspectorate level or above to check the test results given in the Cement Circular regularly, to see if there is any non-conformance with the specifications.

The Engineer may use the test results given in the Cement Circular and any additional relevant test results for:

- (a) considering his approval of the Contractor's proposal to use a certain brand of cementitious material, and
- (b) monitoring of the continuing compliance with the specifications of the brands of cementitious materials being used in his works contract.

Quality Control of Aggregates for Structural Concrete

Much of the rock used for concrete production in Hong Kong is excavated or crushed at Mainland quarries while some are from local quarries. Rock excavated from civil engineering projects (e.g. site formation and tunnelling contracts with significant rock excavation, locally or outside Hong Kong) is sometimes used. The excavated rock is crushed at a rock crushing plant (either a plant on site or at a quarry, or at a plant elsewhere) to produce aggregates for concrete production.

In accordance with the requirements of GS Clause 16.50, one representative sample of each type of the aggregates shall be provided at the same time as particulars of the material (i.e. concrete) are submitted to the Engineer under GS Clause 16.17(5). The samples shall be collected from the stockpiles or the stores at the ready-mixed concrete plant under the supervision of the Engineer. Method of sampling should be in accordance with Table 16.6 of GS. Sampling should cover both the average materials and materials that appear different from the average based on visual inspection. The samples shall be delivered to the Employer's Laboratories for testing to determine their compliance with GS. For the continued quality monitoring of aggregates for use in ready-mixed concrete in the public works projects, the Public Works Laboratories may also request the Engineer to arrange taking and delivering additional samples as stated above to the Employer's Laboratories for testing. Normally, the frequency of additional aggregate sampling is once in every three months for each quarry. The results will be provided to works departments for information.

21.23 HERITAGE CONSERVATION

Heritage impact assessment mechanism shall be adopted for capital works projects according to the procedure and requirements given in DEVB TCW No. 1/2022. It includes the requirement for assessing impacts on historic/heritage sites and buildings arising from the implementation of the project so that their conservation will be given due consideration.

The project office shall check that the works and the mitigation measures carried out

at the construction stage for heritage conservation, if any, comply with the requirements stipulated in the Heritage Impact Assessment (HIA) as approved by the AMO of LCSD at the design stage.

During the course of implementation of a project, if the project office considers that the project might affect item(s) with possible heritage value which is/are not included in the list of “heritage sites”, they should seek advice from AMO on the actions that need to be taken.

The HIA mechanism is not applicable to projects which have already attained Category A status and Category D items for which construction contracts have been awarded or works orders have been issued before 1 January 2008. However, if during the course of construction, new information is known that the works could probably affect or aggravate its effect on “heritage sites”, the responsible works agent should seek AMO’s advice immediately on the actions that need to be taken.

See DEVB TCW No. 1/2022 for further details.

21.24 TEMPORARY DRAINAGE IMPACT MITIGATION MEASURES AND MONITORING AND AUDIT REQUIREMENTS

ETWB TCW No. 2/2006 provides procedures on the application of the Drainage Impact Assessment (DIA) process to public sector projects, including monitoring and audit requirements for the construction stage. Besides the preparation of project profile and undertaking of DIA study at the project planning and design stages, the project office is responsible for monitoring the drainage performance of the project and also taking all measures necessary to mitigate unanticipated or unacceptable impacts arising during project construction.

The project office shall implement any temporary drainage impact mitigation measures and undertake any monitoring programme during the construction stage which have been agreed with DSD based on the findings of the DIA study. During construction stage, if the Contractor's proposal for temporary works or temporary mitigation measures does not comply with the specific requirements stated in the contract, the project office should seek DSD's advice and comments before consent under the contract is given.

A copy of all monitoring and audit reports during construction stage shall be sent to DSD once available. Also, DSD has the authority to conduct audit from time to time to check that the agreed mitigation measures are implemented. If any of the measures is found to be not undertaken or inadequate, DSD shall refer the case to the project office for rectification.

See ETWB TCW No. 2/2006 for further details.

21.25 CONTROL OF SITE CRUSHERS (Subsumed from WBTC No. 11/2002)

21.25.1 General

When a site crusher is to be included for use in a construction project, information should be provided to the Chief Geotechnical Engineer/Mines (CGE/M) of CEDD on a monthly basis on the amount and nature of the rock to be crushed, and crushed rock product requirements for the works, and the construction period. Where the crusher is used to process hard inert C&D material, details on the amount and nature of the material to be processed, the recycled products requirements, and the project period should also be submitted. Further advice on the use of a site crusher may be obtained from CGE/M. The Secretary of PFC should be consulted on matters relating to recycling of hard inert C&D material.

21.25.2 Amendments

If it is proposed to amend any clause regulating the use of a site crusher after the award of a contract then the revised clause shall be approved by DCED. If approval for an amendment is given, then the revised conditions shall be provided by DCED, which may include the payment of a royalty for the amendment.

21.25.3 Sales of Crushed Rock and Recycled Products

Approval from DCED is required for off-site sales of crushed rock and recycled products produced by a site crusher in a Government project. Where off-site sales are allowed, a royalty will be charged on crushed rock products that are produced from Grade II or better rock source and sold as virgin aggregates. No royalty will be required for off-site sales of recycled products produced from hard inert C&D material of other nature. Detailed information should be submitted to DCED as set out in paragraph 21.25.1.

The royalty charged on the crushed rock products described above shall be paid by the contractor of the Government project. CGE/M will obtain the necessary approval from the SFST for the royalty rates. Demand notes in respect of the royalty due shall be issued to the contractor by CGE/M at quarterly intervals based upon the contractor's sales returns, which should be duly certified by the relevant project office.

21.26 PROVISION OF UNIFORM FOR PERSONNEL WORKING ON PUBLIC WORKS SITES (Ref.: SDEV's memos ref. DEVB(Trg) 133/3(10) dated 23.1.2017)

SDEV's memos ref. DEVB(Trg) 133/3(10) dated 23.1.2017 sets out the policy and implementation details related to the provision of uniform to personnel working on public works sites. The policy is given in paragraph 9.45 of PAH Chapter 5. The implementation guidelines for all public works contracts tendered on or after 1 February 2017 are given in Appendix 7.71.

For all existing contracts tendered before 1 February 2017, the implementation

guidelines in revised Annex F of SDEV's memo ref. DEVB(Trg) 133/3(10) dated 18.8.2016 are still relevant.

21.27 IMPLEMENTATION OF MANDATORY CONSTRUCTION INDUSTRY COLLABORATIVE TRAINING SCHEME (CICTS) IN PUBLIC WORKS CONTRACTS

DEVB TCW No. 6/2019 sets out the policy on the implementation of CICTS in public works contracts with a view to increasing the supply of skilled workers. The following public works contracts of which the tender invitations issued on or after 30 September 2019 shall implement the mandatory CICTS through incorporation of the standard tender and contract provision as promulgated in Appendices A, B and C of DEVB TCW No. 6/2019 into the tender documents.

- (a) Building and civil engineering (B&C) capital works contracts (including design and build contracts) and term contracts with an estimated contract sum or estimated total expenditure exceeding \$300 million, with or without E&M works; and
- (b) E&M supply and installation contracts and term contracts with an estimated contract sum or estimated total expenditure exceeding \$50 million and with an estimated construction works period of not less than six months

For public works contracts tendered before 30 September 2019 and adopting the Mandatory Contractor Tradesman Collaborative Training Scheme (CTS) provisions for worker training under DEVB TCW No. 3/2017, should the contractors proposed to also participate in training Skilled Workers as stipulated in DEVB TCW No. 6/2019 at no additional cost, the Engineer/Supervising Officer may accept such training for the purpose of fulfilling the contract requirements.

For public works contracts tendered before 15 July 2017 and adopting the Mandatory Contractor Cooperative Training Scheme (CCTS) provisions as introduced in DEVB(Trg) 133/4(9) dated 5.8.2013 and 16.8.2013, the implementation guidelines are given in Appendix 7.72. Should the contractors propose to participate in CTS, which was integrated into CICTS, instead of CCTS for some of the trainees at no additional cost to the contract, the Engineer/Supervising Officer may accept CTS training to be equivalent as CCTS training of the same specified trades for the purpose of fulfilling the contract requirements.

21.28 ENHANCEMENT OF PRODUCTIVITY OF SKILLED WORKERS IN PUBLIC WORKS PROJECTS

In order to rationalize the demand for skilled workers in trades with projected shortage, the specific measures in construction process for individual trades given in the "Guidelines for Enhancement of Productivity of Skilled Workers in Public Works Projects" attached to DEVB's memo ref. (38) in DEVB(Trg) 133/8 dated 17.4.2013 should be followed. The guidelines are available on DEVB's website via the following link:

[https://www.devb.gov.hk/filemanager/en/content_29/Guidelines_Enhancement_of_Productivity_\(Mar_2013\)_English.pdf](https://www.devb.gov.hk/filemanager/en/content_29/Guidelines_Enhancement_of_Productivity_(Mar_2013)_English.pdf)

21.29 USE OF OFF-SITE PREFABRICATED STEEL REINFORCING BAR PRODUCTS

As promulgated under DEVB TCW No. 10/2018, off-site prefabricated rebar products may be used in a public works contract if the contractor of the contract opts to engage a yard on the List of Approved Steel Reinforcing Bar Prefabrication Yards for Public Works (“the List”) to supply prefabricated rebar products for the works under the contract. The Engineer / Supervising Officer of public works contracts shall not accept any prefabricated products produced in an off-site rebar prefabricated yard which is not on the List.

21.30 ADOPTION OF BUILDING INFORMATION MODELLING (BIM) FOR CAPITAL WORKS PROJECTS IN HONG KONG

Capital works project with project estimates more than \$30 Million shall use BIM technology. The policy is applicable for projects in the investigation, feasibility, planning, design or construction stages in the Capital Works Programme irrespective of the modes of delivery.

For construction works tenders with BIM adoption to be invited on or after 1 April 2025, the design BIM models shall form part of tender and shall be contractually binding including the parts of BIM models of the proposed works corresponding to the information on the 2-dimensional tender drawings, while Mechanical, Electrical and Plumbing installations, existing site conditions and attributes involving proprietary products, etc. will serve as reference.

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See DEVB TCW No. 2/2021 for further details.

21.31 ADOPTION OF DIGITAL WORKS SUPERVISION SYSTEM (DWSS)

Capital works contracts, including capital subventions contracts under Head 708, with pre-tender estimate exceeding \$30 million, shall adopt the DWSS. See DEVB TCW No. 2/2023 and No. 3/2016 for further details.

21.32 PROPOSAL ON INNOVATION AND TECHNOLOGY FOR PUBLIC WORKS CONTRACTS ADOPTING NEC FORM

SDEV’s memo ref. () in DEVB(W) 506/30/07 dated 20.4.2023 sets out a new set of additional conditions of contract (ACC)[#] on Proposal on Innovation and Technology (hereinafter referred to as I&T Proposal) to promote the adoption of I&T for enhancing site safety, site supervision efficiency or decarbonisation under public works contracts adopting NEC form. Given that an I&T Proposal entails additional cost to a contract, project teams should exercise professional judgement in assessing each I&T proposal to ensure that it is soundly justified. The project team should also ensure the issuance of relevant instructions

and approving authorities comply with applicable rules/criteria set out in the SPRs, as well as other applicable cost control mechanisms. See paragraph 9.56 of PAH Chapter 5 for further details.

This ACC is also incorporated into the NEC ECC HK Edition and become the secondary Option X30.

22. REFERENCES

AC No. 9/2005	Proper Maintenance and Retention of Accounting Books and Records
LWBTC No. 11/84	Contract Transport
LWBTC No. 7/87	Minimum Amount of an Interim Payment
WBTC No. 3/89	Opening Ceremonies for Public Works Projects
WBTC No. 28/92	Damage of Crops and Property on Agricultural Lands
WBTC No. 2/93	Public Dumps
WBTC No. 2/93B	Public Filling Facilities
WBTC No. 14/94	Use of PFA as General Fill in Reclamations
WBTC No. 10/95	Importation of Sand from the People's Republic of China by Barges
WBTC No. 10/95A	Additional Requirements Concerning Barge Routes and Third Party Insurance
WBTC No. 16/96	Wet Soil in Public Dumps
WBTC No. 4/98	Use of Public Fill in Reclamation and Earth Filling Projects
WBTC No. 4/98A	Use of Public Fill in Reclamation and Earth Filling Projects
WBTC No. 4/99	Construction Mediation Rules (1999 Edition) and Administrative Guidelines
ETWB TCW No. 4/99A	Construction Mediation Rules (1999 Edition) and Administrative Guidelines
WBTC No. 16/99	Contractual and Financial Procedures for Determination of the Contractor's Employment
WBTC No. 16/99A	Contractual and Financial Procedures for Determination of the Contractor's Employment
WBTC No. 16/99B	Contractual and Financial Procedures for Determination of the Contractor's Employment
ETWB TCW No. 16/99C	Contractual and Financial Procedures for Determination of the Contractor's Employment
WBTC No. 12/2000	Fill Management
WBTC No. 14/2000	Usage of Public Works Laboratories in Public Works Projects
WBTC No. 15/2000	Funding Arrangement for Public Works Regional Laboratories Operating, Monitoring and Accounting Procedures
WBTC No. 20/2000	General Conditions of Contract for Civil Engineering Works, 1999 Edition
WBTC No. 30/2000	Construction Site Safety Manual (CSSM) Second Updating of Chapters 3 and 12
WBTC No. 11/2001	Interim Certification after Determination of the Contractor's Employment

WBTC No. 12/2001	Safety Training for Departmental Staff and Resident Site Staff
WBTC No. 16/2002	General Conditions of Contract for Term Contracts for Civil Engineering Works, 2002 Edition
ETWB TCW No. 29/2002	Geotechnical Control for Slopes and Retaining Walls
ETWB TCW No. 29/2002A	Geotechnical Control for Slopes and Retaining Walls
ETWB TCW No. 38/2002	Computer-Aided-Drafting Standard for Works Projects
ETWB TCW No. 38/2002A	Computer-Aided-Drafting Standard for Works Project
ETWB TCW No. 50/2002	Contractors' Joint Ventures
ETWB TCW No. 57/2002	Quality Assurance for Structural Concrete
ETWB TCW No. 3/2003	Monthly Return of Site Labour Deployment and Wage Rates for Construction Works
ETWB TCW No. 3/2003A	Monthly Return of Site Labour Deployment and Wage Rates for Construction Works
ETWB TCW No. 4/2003	Assessment of Liquidated Damages
ETWB TCW No. 12/2003	Employment of Technician Apprentices and Building & Civil Engineering Graduates by Contractors of Public Works Contracts
ETWB TCW No. 13/2003	Guidelines and Procedures for Environmental Impact Assessment of Government Projects and Proposals
ETWB TCW No. 14/2003	Role of Departmental Safety and Environmental Advisor on Health, Safety and Environmental Protection on Construction Sites
ETWB TCW No. 22/2003	Additional Measures to Improve Site Cleanliness and Control Mosquito Breeding on Construction Sites
ETWB TCW No. 22/2003A	Additional Measures to Improve Site Cleanliness and Control Mosquito Breeding on Construction Sites
ETWB TCW No. 29/2003	Confidentiality clauses in works contracts and consultancy agreements
ETWB TCW No. 4/2004	Checking of Foundation Works in the Scheduled Areas of Northwest New Territories and Ma On Shan and the Designated Area of Northshore Lantau
ETWB TCW No. 17/2004	Impossibility / Unforeseen Ground Conditions / Utility Interference
ETWB TCW No. 20/2004	GEO Checking Certificate for Slopes and Retaining Walls
ETWB TCW No. 23/2004	Right of the Employer to terminate for convenience and Risk allocation with respect to changes in law
ETWB TCW No. 4/2005	Monthly Return on Construction Site Employment Statistics
ETWB TCW No. 15/2005	Geotechnical Control for Tunnel Works
ETWB TCW No. 19/2005	Environmental Management on Construction Sites

ETWB TCW No. 20/2005	Upward Reporting of Major Emergency Incidents from Works Departments
ETWB TCW No. 2/2006	Drainage Impact Assessment Process for Public Sector Projects
ETWB TCW No. 3/2007	Contractors' Performance Index System
DEVB TCW No. 3/2007A	Contractors' Performance Index System
DEVB TCW No. 9/2007	Professional Indemnity Insurance for Consultancy Services, Works Contracts Involving Contractor's Design or Independent Checking Engineer's Services
DEVB TCW No. 6/2010	Trip Ticket System for Disposal of Construction & Demolition Materials
DEVB TCW No. 8/2010	Enhanced Specification for Site Cleanliness and Tidiness
DEVB TCW No. 5/2013	Extension of Time due to Labour Shortage
DEVB TCW No. 3/2014	Contractors' Designs and Alternative Designs
DEVB TCW No. 4/2014	Tender Evaluation Methods for Works Contracts
DEVB TCW No. 4/2014A	Tender Evaluation Methods for Works Contracts
DEVB TCW No. 7/2014	Guidance on Execution of Public Works Contracts as a Deed
DEVB TCW No. 4/2016	Geotechnical Information Unit
DEVB TCW No. 3/2017	Implementation of Mandatory Construction Tradesman Collaborative Training Scheme in Public Works Contracts
DEVB TCW No. 4/2017	Employment of Skilled Workers in Public Works Contracts
DEVB TCW No. 5/2017	Community Involvement in Planting Works
DEVB TCW No. 2/2018	Registration and Updating of the Catalogue of Slopes
DEVB TCW No. 10/2018	Quality Assurance for Use of Off-site Prefabricated Steel Reinforcing Bar Products
DEVB TCW No. 1/2019	Railway Protection
DEVB TCW No. 6/2019	Implementation of Mandatory Construction Industry Training Scheme in Public Works Contracts
DEVB TCW No. 1/2020	Score Card for Assessment of Site Safety Performance
DEVB TCW No. 4/2020	Tree Preservation
DEVB TCW No. 5/2020	Registration and Preservation of Old and Valuable Trees
DEVB TCW No. 1/2025 Amd No. 1/2025	Adoption of Building Information Modelling for Capital Works Projects in Hong Kong
DEVB TCW No. 4/2021	Contract Price Fluctuation System for Civil Engineering and Building Contracts
DEVB TCW No. 1/2022	Heritage Impact Assessment Mechanism for Capital Works Projects
DEVB TCW No. 5/2023	Regulating Action against Contractors for Occurrence of a Serious Incident or Conviction for Site Safety or Environmental Offences
DEVB TCW No. 2/2023	Digital Works Supervision System

DEVB TCW No. 3/2023	Smart Site Safety System
FSTBCM No. 15/2017	Amendment to the Stores and Procurement Regulations
FSTBCM No. 12/2019	Amendment to the Stores and Procurement Regulations
FSTBCM No. 3/2017	Amendment to the Stores and Procurement Regulations
FC No. 2/2012	Procedures for making changes to the Estimates of the Capital Works Reserve Fund
FC No. 5/2017	Powers of Write-off
DEVB's email dated 19.2.2010	Proposed Amendments to PAH - Management of Omitted Items
DEVB's email dated 20.3.2012	Contractor Cooperative Training Scheme (CCTS)
SETW's letter ref. (015YP-01-5) in ETWB(W) 510/17/01 dated 27.7.2006	Contract Measures to monitor and control Payment of workers wages and sub-contracting Employment of Labour Relation Officer (LRO (with title currently unified as ACO(LR)))
CEDD's memo ref. () in CEDD GPWR/1-150/7 dated 31.7.2015	Compliance Testing of Construction Materials for Public Works Projects
S for W's memo ref. () in WB(W) 206/32/5(97) dated 30.12.1997	Guidelines for Claims Management and Conduct of Negotiations
SETW's memo ref. () in ETWB(W) 925/50/01 dated 29.1.2003	ICAC's Assignment No. 92/2001 Site Supervision of Civil Engineering Contracts
SETW's memo ref. (008BT-01) in ETWB(W) 830/31/01 dated 12.7.2004	Audit Recommendations on Public Works Contracts
SETW's memo ref. (00NKG-01-2) in ETWB(W) 925/50/01 dated 27.5.2005	Assignment No. 27/2004 Assignment Report on Control of Contract Preliminaries
SETW's memo ref. (00VB3-01-10) in ETWB(PS) 109/11/1 dated 15.11.2005	Examples of Good Practice in Sub-contractor Management Plan - Provisions for Early Monitoring of Wages Arrears Problems
SETW's memo ref. (0126S-01-6) in ETWB(W) 510/17/01 dated 26.4.2006	Contract Measures on Workers Wages and Multi-layer Subcontracting
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SETW's memo ref. (018RD-01-1) in ETWB(W) 925/50/01 dated 13.10.2006	Assignment No. 04/2006 - Control of Off Site Fabrication of Construction Components
SETW's memo ref. (01AVE-01-2) in ETWB(W) 515/84/02 dated 7.12.2006	PWDTC No. 14/73 - Discovery of Antiquities etc. by the Public Works Department
SETW's memo ref. (01D8Y-01-1) in ETWB(W) 516/70/03 dated 22.2.2007	5-Grade Contractors' Performance Reporting System
ETWB's memo ref. (01DHD-01-4) in ETWB(W) 520/11/02 dated 2.3.2007	Central Concrete Mix Database for Assessment of Designed Mix Submission
SDEV's memo ref. () in ETWB(W) 545/83/02 Pt. 2 dated 17.8.2007	Working Group on Contractor Performance Reporting System Independent Audit (available at Works Group Intranet Portal)
SDEV's memo ref. (01TAM-01-7) in DEVB(W) 510/17/01 dated 17.7.2008	Contract Measures to prevent non-payment of wages
SDEV's memo ref. () in DEVB(W) 109/11/01 Pt. 9 dated 19.12.2008	Enhancement Measures for Subcontractor Management Plan (SMP)
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SDEV's memo ref. (021QF-01-3) in DEVB(W) 510/17/01 dated 26.6.2009	Late payment of wages
SDEV's memo ref. (02245-01-13) in DEVB(W) 510/34/01 dated 6.10.2009	Professional Indemnity Insurance for Works Contracts Involving Contractor's Designs, Alternative Designs and Independent Checking Engineer's Services
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SDEV's memo ref. (024Q5-01-4) in DEVB(W) 510/17/01 dated 18.1.2010	Guidelines on Reimbursement of Contractor's Contribution to the Mandatory Provident Fund for his Site Personnel

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DEVB's memo ref. () in DEVB(W) 216/27/22 dated 25.5.2010	Fraudulent Acts by Site Personnel Attempting to Influence the Results of Sand Replacement Test (SRT)
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SDEV's memo ref. () in DEVB(W) 517/91/01 dated 29.3.2018	Environmental Management on Construction Sites
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SDEV's memo ref. () in DEVB(W) 566/10/94/02 dated 11.8.2020	Engagement of Subcontractors under Registered Specialist Trade Contractors Scheme (RSTCS) of the Construction Industry Council (CIC)
SDEV's memo ref. () in DEVB(W) 510/70/03 dated 13.11.2020	Particular Specification (“PS”) Clause on Request for Inspection and/or Survey Check
SDEV's memo ref. () in DEVB(W) 510/94/02 dated 4.12.2020	Addition of “Plastering” as One of the Designated Trades under the Registered Specialist Trade Contractors Scheme of the CIC
SDEV's memo ref. () in DEVB(PS) 108/34 dated 29.1.2021	List of Approved Contractors for Public Works (the List) and List of Approved Suppliers of Materials and Specialist Contractors for Public Works (the Specialist List) Revised Contractor Management Handbook
SDEV's memo ref. () in DEVB(W) 510/33/02 dated 5.3.2021	Extension of Interim Relief Measure to Assist the Construction Industry – Advance Payment under New Capital Works Contracts
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SDEV's memo ref. (03969) in DEVB(W) 510/33/02 dated 12.5.2021	Extension of Interim Relief Measure to Assist the Construction Industry – Streamlining the Approval Process of Contract Assignment
SDEV's memo ref. () in DEVB (PS) 107/3 dated 2.6.2021	Threshold for Submission of Forms GF527 and GF527A
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SDEV's memo ref. () in DEVB(W) 510/33/02 dated 8.7.2022	Interim Relief Measure to Combat the 5 th Wave of the COVID-19 Pandemic – Special Payment for Imported Items for Capital Works Contracts
SDEV's memo ref.(03E8T) in DEVB(W) 516/80/03 dated 3.8.2022	CSSM – Prohibition of Imposing Administrative Charges for Reporting of Site Accidents and Elimination of Under-reporting of Site Accidents
SDEV's memo ref. () in DEVB(W) 510/94/02 dated 1.12.2022	Addition of adding "Truss Out Scaffolding", "Gondola (Permanent)" and "Gondola (Temporary)" as Designated Trades under the Registered Specialist Trade Contractors Scheme of the CIC
SDEV's memo ref. () in DEVB WB WP4S-022-009-002-P001 dated 11.12.2024	Addition of "Truss-out Scaffolding" as Designated Trades under the Registered Specialist Trade Contractors Scheme of the Construction Industry Council
SDEV's memo ref.(03F9H) in DEVB(W) 516/71/01 dated 29.12.2022	Site Specific Induction Training
SDEV's memo ref. () in DEVB(W) 510/94/02 dated 1.2.2023	Addition of "Levelling and Setting Out" as One of the Designated Trades under the Registered Specialist Trade Contractors Scheme of the CIC
SDEV's memo ref.(03F7R) in DEVB(W) 516/70/03 dated 27.2.2023	Score Card for Assessment of Site Safety Performance
SDEV's memo ref. () in DEVB(W) 506/30/07 dated 20.4.2023	Proposal on Innovation and Technology for Public Works Contracts Adopting NEC form
SDEV's memo ref. () in DEVB(W) 510/94/02 dated 6.9.2023	Addition of "Building Maintenance" and "Interior Fitting-out" as Designated Trades under the Registered Specialist Trade Contractors Scheme of the CIC
SDEV's memo ref. () in DEVB(W) 546/83/01 dated 20.9.2024	Threshold of the Constraints on the Power of the Contract Administrator to Order Variation and the Related Matters
SDEV's memo ref. () in DEVB(W) 510/33/02 dated 22.11.2023	Extension of Interim Relief Measure to Combat the COVID-19 Pandemic-Special Payment for Imported Items
SDEV's memo ref. () in DEVB(W) 510/94/02 dated 10.4.2024	Addition of "Painting", "Metal Work", "Structural Steelwork", "Horticultural Works", "Arboriculture Works" and "Skyrise Greenery Works" as Designated Trades under the Registered Specialist Trade Contractors Scheme of the CIC

Amd No. 1/2025

SFST's memo ref. () in FIN CR1/6/581/87(02) Pt.65 dated 12.9.2002	Review of funding requirements for Category A projects in the Capital Works Programme
GEO Technical Guidance Note No. 40	Guidelines on Temporary Drainage Provisions and Precautionary Measures against Severe Rainfall during Site Formation Works and Construction of Reinforced Fill Structures
DSD Practice Note No. 1/2010	Guidelines for Hand-over of Completed Works to Operation and Maintenance Parties
Audit Report No. 53 Ch. 3 - Construction works under Castle Peak Road Improvement Project	http://www.aud.gov.hk/pdf_e/e53ch03.pdf
DEVB Cyber Manual for Greening	Dos and Don'ts in Pruning
	General Guidelines on Tree Pruning
	Guideline for Auditing of Tree Risk Assessment for Tree Management Departments
	Guidelines for Tree Risk Assessment and Management Arrangement on an Area Basis and on a Tree Basis
	Guideline on Pavement Renovation Works and Tree Stability
	Management Guidelines for Stonewall Trees
	Guidelines on Arboriculture Occupational Safety and Health
	Guidelines on Tree Transplanting
	Management Guidelines for Mature Trees
	Guidelines on Tree Preservation during Development
Engineering Survey Practice Guides for Works Projects	https://www.cedd.gov.hk/filemanager/eng/content_22/ESPG_2021.pdf
FSTB Stores and Procurement Regulations	http://fb.host.cngo.hksarg/spr/spr_e_clean_20220728.pdf
ICAC Best Practice Checklist on Construction Quality Control Testing	http://cpas.icac.hk/UploadImages/InfoFile/cate_43/2016/4b471f9b-e9ef-4c04-aa49-704f29d431a4.pdf
LD Guidance Notes on Safety and Health of Hand-dug Tunnelling Work	http://www.labour.gov.hk/eng/news/pdf/GN_on_S&H_of_Hand-dug_Tunnelling_Work_Eng.pdf

Mandatory Provident Fund Provision of Contractor Information to MPFA
Schemes Authority's letter
dated 31.10.2023

APPENDICES

APPENDIX 7.1 CONSENT TO ERECT TEMPORARY STRUCTURE ON CONTRACT WORKS SITE

(One consent to be issued for each temporary structure)

(This form is only to be used for cases where works sites cannot be defined in the contract documents)

File Ref.

**HIGHWAYS/CIVIL ENGINEERING/TERRITORY DEVELOPMENT/
DRAINAGE SERVICES/WATER SUPPLIES DEPARTMENT**

..... Region/Division Department/Office

Contractor

Contract No.

Approval is hereby given to erect the following temporary structure for the purpose of carrying out the above Contract:

Location:

Size and Description:

This consent expires on

#Signature

Name (in Block Letters)

Title

Telephone No.

Date

Distribution

Contractor (original + copy) - The original to be affixed to the temporary structure in most convenient position and the copy to be retained as office record

Issuing office of *HyD/CEDD/DSD/WSD

*Clearance Division, Housing Department

*Relevant District Office

Filed in Site record book

by Engineer or by ER with delegated authority

* Delete where inapplicable

APPENDIX 7.2 DRAINAGE TESTING FORMTesting of Gravity Pipelines for Drainage Works (GS Clause 5.101)

Location : _____

Date :

Internal Diameter of Pipe : D (m) _____

Length of Pipeline : L (m) _____

1. AIR TEST (Test for Pipeline of all Diameter)

Initial water head in glass U tube : 100mm

Final water head in glass U tube : _____ mm (not less than 75mm is a pass)

Test duration : 5 mins. (_____ to _____)

2. WATER TEST (Test for Pipeline of all Diameter)

Pipeline filled up with water at :

Pressure Head above the soffit of the pipe at the high / low end :

Test started at : _____

Test completed at : _____ T : _____ (mins.)

Permitted Leakage = $D \times L \times T / 60$ litres

= _____ litres

Amount of water added : _____ litres

Time	Time Elapsed (min)	Amount of water added (litre)
	0	
	5	
	10	
	15	
	20	
	25	
	30	

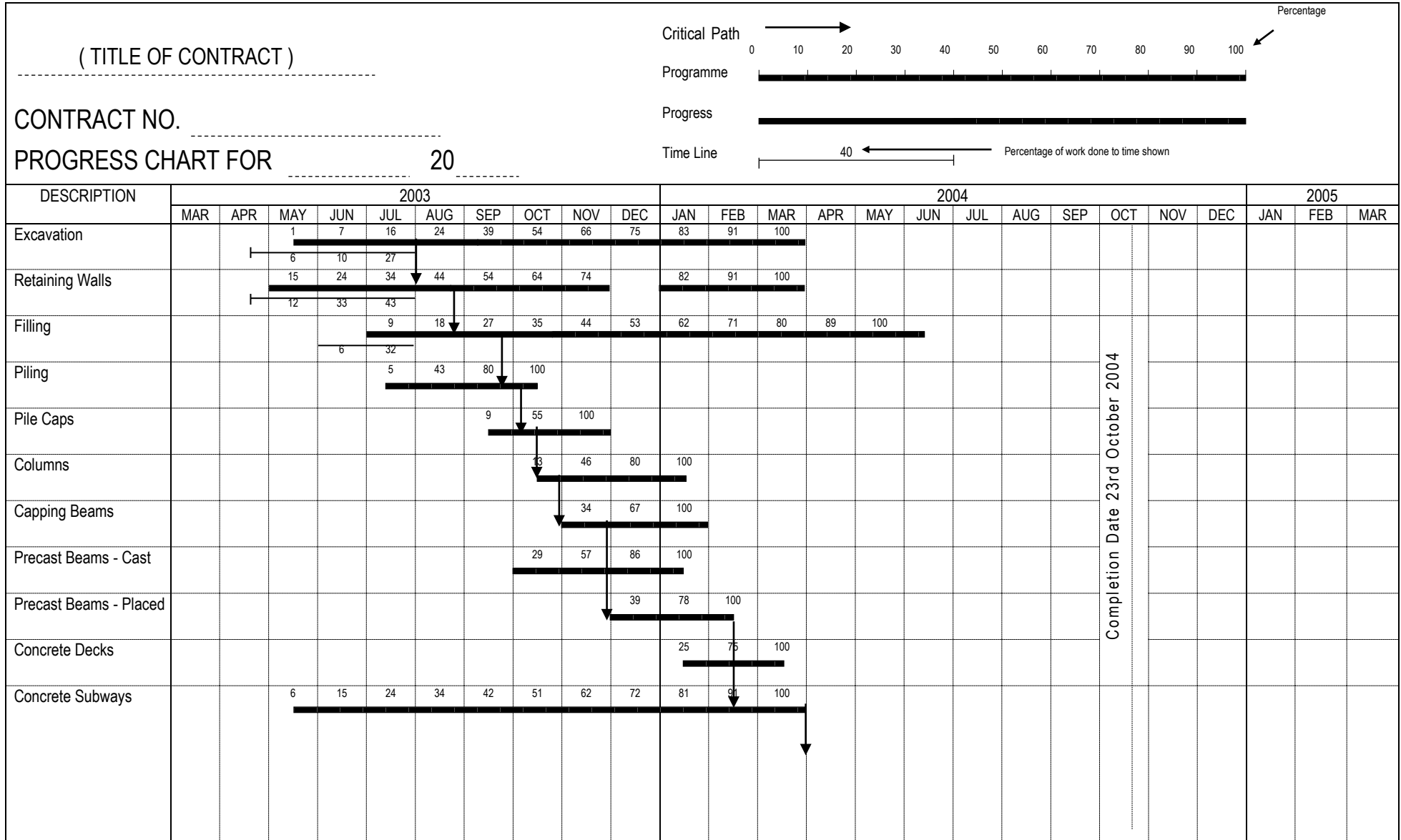
Testing pressure : 1.2m head of water above soffit of pipe at high end
(and less than 6m head of water at the invert of the low end of pipe.)**3. VISUAL INSPECTION (for Pipeline exceeding 900mm diameter)****4. INFILTRATION TEST (for Sewage Pipelines of all diameter BS 8005 : Part 1 Clause 13.6)****5. Remarks**

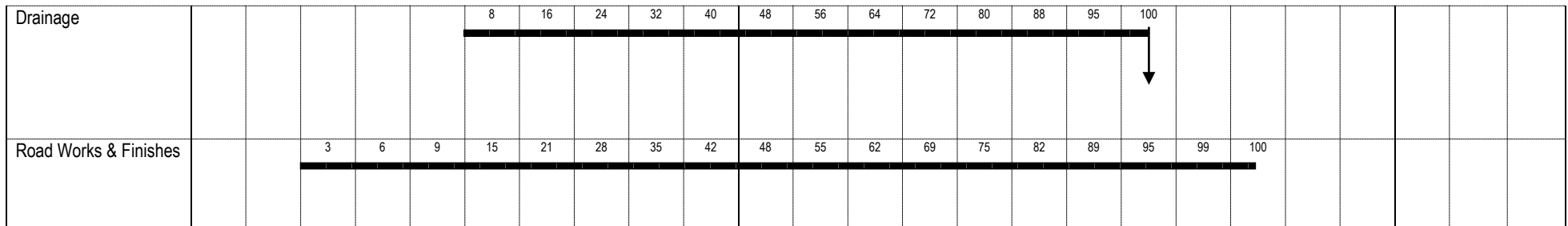
Test Result : PASSED / FAILED

Recorded By : _____

For (_____) Contractor_____
For Engineer's Representative

APPENDIX 7.3 SAMPLE PROGRESS CHART





APPENDIX 7.4 INCLEMENT WEATHER REPORT FORM

Contract No. _____

Date :

1. Rainfall recorded by the nearest rain gauge maintained by the Hong Kong Observatory within 24 hours ending 12:00 midnight : _____ mm

2. Records of weather conditions and Works affected (see below for legends):

Time	7	8	a.m.			10	11	noon		1	2	3	p.m.			5	6	7
Weather condition																		
Works affected																		

3. Number of workers : (a.m.) / _____ (p.m.)

4. Proposed activities : _____

5. Actual activities : _____

6. Was the work on the critical path of the works programme? YES / NO

7. Was the Contractor ready to work had weather conditions been favourable? YES / NO

8. Were delays caused by any other reasons? YES / NO
(If YES, state the reasons in "Remarks")

9. Did the Contractor take any measures to minimize the effects of the inclement weather? YES / NO

10. How long did it take to tidy up afterwards? _____ hours / days

11. Remarks : _____

No. of day(s)

Initial

Contractor's claim

Recommendation

Prepared by: _____

Countersigned by : _____

Designation: Designation _____

: _____

Legend : Weather conditions
L - Light rain
H - Heavy rain
S - Strong wind
O - Others to be specified

Works affected
A - Slightly affected
B - Seriously affected
C - All works stopped

APPENDIX 7.5 SITE INSTRUCTION FORM

SITE INSTRUCTION	
CONTRACT NO.	
FROM	TO
SITE INSTRUCTION NO.	DATE
FILE REF.	COPIES
Drawing/sketch attached : _____	
_____ Engineer's Representative	
Received by :	
_____ Contractor's Representative	
Date : _____ Time : _____	
NB : Top copy - White - File Record Duplicate - Yellow - Contractor Triplicate - Green - Remain in book	

APPENDIX 7.6 DAYWORKS DAILY RECORD FORM

Contract No. _____ Site Instruction No. _____
 Date _____ Sheet No. _____

Description and location of work _____

LABOUR

B.O. Item	Trade of Labour	Total No.	Normal Working Time			Overtime		
			Working time	Hours per man	Total hours	Working time	Hours per man	Total hours

PLANT

B.Q. Item	Description of Plant	Total No.	Working time	Hours per plant	Additional Hours (for plant specially brought on Site)	Total hours

MATERIAL

B.Q. Item	Description of Material	Unit	Quantity

Record agreed by : _____ Submitted by :

Designation : _____ Designation :

N.B. Top copy – White – Daily Record
 Duplicate – Yellow – Contractor's copy
 Triplicate – Green – I.P. File copy

APPENDIX 7.8 INVENTORY RECORD FORM FOR FURNITURE AND EQUIPMENT WHICH SHALL BE RETURNED TO THE CONTRACTOR

CONTRACT NO : _____

CONTRACTOR : _____

CONTRACT TITLE : _____

Reference Clause No.	Detail Description of Items	Acknowledge receipt in Good Order by Government Staff				Acknowledge Return by Contractor		
		Name	Designation	Signature	Date	Name	Signature	Date

Original Engineer's Copy
Duplicate Contractor's Copy

Note : Both copies of the inventory shall be updated and signed immediately after an item is delivered to site or returned to the Contractor

APPENDIX 7.9 NOT USED

APPENDIX 7.10 CONCRETE TEST CUBE REGISTER
(to be kept in a book)

Contract No. _____ Concrete Grade _____ Batching _____ Cement Brand _____ Additives _____ Coarse Agg. Source _____ Fines Source _____

Request Form No.	Date of Cast	Location	Slump (mm)	Compliance (Y/N)	28-day Results							Average four consecutive results	Standard Deviation (N/mm ²)	Compliance Criteria	Compliance (Y/N)	Remarks (Follow-up action)
					Test Certificate No.	Cube Mark	Date of Test	Age (days)	Density (kg/m ³)	Compressive Strength (N/mm ²)	Test Result					

Note : Please refer GS Clause 16.61 for compliance criteria for compressive strength of designed mix concrete.

APPENDIX 7.11 NOT USED

APPENDIX 7.12 SOIL COMPACTION TEST SUMMARY FORM

Contract No. _____

Period : _____ to _____

Fill Slope/Road Formation/ _____

Date of Test	Location in the Works	Depth below surface (m)	Test Results			Remarks
			+ In-situ dry density (Mg/m ³)	# Max. dry density (Mg/m ³)	Relative Compaction (%)	

Note : + All in-situ densities are measured using the sand replacement method (Test Method 11.1/11.2, Geospec 3) unless otherwise stated

Test Method 10.1/10.2/10.3/10.4/10.5/10.6/10.7/10.8, Geospec 3 unless otherwise stated

APPENDIX 7.13 BAR BENDING SCHEDULE

OFFICE / DIVISION _____ DEPARTMENT _____

CONTRACT NO. _____ BAR SCHEDULE NO. AMD

TITLE _____ DRAWING NO.

Location and member	Bar mark	Type and Size	No. of members	No. in each	Total No.	Shape code	A* mm	B* mm	C* mm	D* mm	E/R* mm	Length of each bar mm	Total length M#	Mass/metre kg %	Total mass kg %

<p><u>Legends</u></p> <p>* specified to nearest 5 mm</p> <p># specified to nearest 10 mm</p> <p>% specified to two decimal places</p>	Prepared by	Designation	Date	Checked by	Designation	Date	Amendments
	<p>Note: This Schedule is prepared for the Contractors' guidance only. The Contractor shall be responsible for checking all dimensions of reinforcement on the Site and/or from the drawings and no claim will be allowed in respect of any inaccuracies in this Schedule.</p>						

APPENDIX 7.14 TENSIONING RECORD FORM FOR PRESTRESSED STRUCTURE

Contract No. _____ Member No. _____

Location _____

Date Cast _____ Date of tensioning/transfer _____

Test Cube Record

Sketch

	At transfer
Date tested	
Cube strength (i) (ii) (iii)	
Average strength	
Specified strength	

Tensioning Record

Tendon	Strand or Wire	Load (Kg)		Extension (mm)		Anchorage pull-in (mm)	
		Specified	Measured	Calculated	Discrepancy %	Assumed	Measured

Remark:

Recorded by: _____ Designation: _____

APPENDIX 7.15 RECORD FORM FOR BITUMINOUS MATERIALS DELIVERED TO SITE

Type of Bituminous Material _____ Mixing Plant Order No. _____
 Contract No. _____ Date _____ Weather _____ Temperature _____ °C

Location	Source of Supply	Delivery Chit No.	Lorry No.	Time			Temperature °C			Remarks
				Left Mixing Plant	Arrived Site	Departed Site	At Mixing Plant	On Arrival	When Placing	

Recorded by _____

Designation: _____

APPENDIX 7.17 BEARING AND EXPANSION JOINT PERFORMANCE RECORD FORM

Performance Report on Completion of Works by
Approved Specialist Contractors for Bearings and
Expansion Joints for Highways Structures

1. Contract No. :

2. Project Title :

3. Name of Consultant/A.P./Engineer :

4. Name of Main Contractor :

5. Approx. Value of Bearings (including installation cost) : HK\$

6. Approx. Value of Expansion Joints (including installation cost) : HK\$

7. Details of Bearings :

Name of Manufacturer	Type# & Model No.	Name of Specialist Contractor	No. of Bearings Installed	Location (See Note 1)	Standard of Material	Standard of Installation
Objective Comments : (See Notes 2-4 for Requirement)						
<i>(PLEASE USE ADDITIONAL SHEET IF NECESSARY)</i>						

8. Details of Expansion Joints :

Name of Manufacturer	Type## & Model No.	Name of Specialist Contractor	No. (Length) of Expansion Joints Installed	Location (See Note 1)	Standard of Material	Standard of Installation
Objective Comments : (See Notes 2-4 for Requirement)						
<i>(PLEASE USE ADDITIONAL SHEET IF NECESSARY)</i>						

Prepared By : _____

Signed : _____

Name : _____

Post : PROJECT ENGINEER/ RESIDENT ENGINEER*
(* Delete where appropriate)

Date : _____

- Notes :
1. The location of bearings / expansion joints should be specific (e.g. by using chainage system, movement joint no. or column/pier no.) and cross reference to the as-built record. If possible, separate location plans should be enclosed.
 2. Description of movement for expansion joints and bearings performed during defects liability period.
 3. The comments should included records of movements over one cycle of seasonal change (quarterly) and permissible movement range.
 4. To comment on the performance whether the installed components have been performing as designed.
 5. Submission of catalogues for bearings and expansion joints is required.

#Bearing Type	##Joint Type	
<ul style="list-style-type: none"> ● Rocker Bearing ● Roller Bearing ● Knuckle Bearing ● Leaf Bearing ● Sliding Bearing ● Elastomeric (Rubber) Bearing ● Pot (Disc)Bearing ● Strip Bearing ● Laminated Bearing ● Plain Pad Bearing ● Mechanical Bearing : Reston ● Mechanical Bearing : Maurer-Spherical ● Mechanical Bearing : Maurer-Pot ● Mechanical Bearing : PSC Disc (Pot) ● Elastomeric Bearing : ● Reinforced Elastomeric ● Elastomeric Sliding ● Laminated and Pain Rubber ● Lasto Elastomeric Bearing ● Rubber-Metal-Technik (M) SDN BHD ● Other (please specify) 	<ul style="list-style-type: none"> ● ACME Trojan TR-300 ● ACME Trojan TR-400 ● ACME MSB 600 ● ASPHAPOL BURIED Joint ● Britflex BEJ Joint ● BEJ Expansion Joint ● CIPEC Wd80 ● CIPEC Wd110 ● CIPEC Wd160 ● CIPEC Wd230 ● CIPEC WP180 ● CIPEC W50 ● CIPEC W110 ● CIPEC W160 ● CIPEC W200 ● CIPEC W250 ● CIPEC WOSd ● Compression Sealant ● Compressive Rubber ● Felspan Expansion Joint ● FREYSSI P30 Joint ● FREYSSI P50 Joint ● FREYSSI P80 Joint ● Glacier GBM Series Expansion Joint 	<ul style="list-style-type: none"> ● Glacier-VSL ● Honel-132 FB ● Honel-132 FS ● Honel-161 NFS ● Honel-162 NFS ● MAGEBA Expansion Joint ● MAURER-Modular Expression Joint ● Onflex 25 with Aluminium Panel ● Onflex 25 with Elaston Panel ● Onflex 35 with Aluminium Panel ● Onflex 45 with Aluminium Panel ● SHO-BOND A-1 ● SHO-BOND A-2 ● SHO-BOND A-3 ● SHO-BOND New Cut-off Joint ● WABO Modular Joint ● WABO Stripseal System ● WSF Series of Expansion Joint ● WSL-VSL ● ZEBRAFLEX Bridge Joint ● Other (please specify)

(Please contact CHE/B&S, HyD for further information if necessary)

APPENDIX 7.18 STANDARD LETTER FOR GRANTING EXTENSIONS OF TIME FOR COMPLETION OF CONTRACTS
 (Subsumed from LWBTC No. 14/85)

Dear Sir,

Contract No. _____

(Title)

I refer to your letter(s) dated detailing your claim(s) for extension of time for completion of the above contract.

In accordance with Clause of the General Conditions of Contract and on consideration of your submitted detailed particulars, *in my opinion no extension of time is due/an extension of days is granted. The revised date for completion is *unchanged/ revised to

The days granted is in respect of the following:

	Days
(a) Inclement weather	
(b) Variation work ordered	
(c) Late supply of details/instructions	
(d)	
(e)	
(f)	
Total	_____

All known relevant factors including overlapping periods and time savings arising from variations have been taken into account in making the above assessment.

Yours faithfully,

.....
 The Engineer for the Contract

c.c. To suit department needs.

* Delete where inapplicable

APPENDIX 7.19 ENGINEER’S INTERIM PAYMENT CERTIFICATE

DEPARTMENT CONTRACT NO. / /

Title of Contract.....
 Contractor
 Address
 Date of commencement Date/Extended date for completion

ENGINEER'S CERTIFICATION NO.

Payment to be made by

(1) Estimated value at of :

- (a) Work done by Contractor \$
- (b) Nominated Sub-contractors’ work (see attached statement) \$
- (c) Materials on Site \$
- (d) Other sums due to Contractor \$

Total Estimated Value \$

- (2) Deduct Retention Money (percent/maximum) \$
- (3) Adjustment for Price Fluctuations (see back) Add/Deduct \$
- (4) Total \$

I certify that the total sum of the certificate is in accordance with the terms of Contract No. / / .

()
 Engineer’s Representative

Date

EMPLOYER’S STATEMENT FOR PAYMENT

- (5) Engineer’s Certificate at (4) \$
 - (6) Deductions
 - (a) Previous payments \$
 - (b) Liquidated damages (see attached statement) \$
 - (c) Value of materials supplied by Employer \$
 - (d) Other deductions* \$
- Net Sum Due for Payment : \$

Passed for payment
 for Vote Controller : Name Date
 Post

* State the contractual grounds for any such deduction

FINANCE DETAILS

Debit Expenditure	Contract Sum	\$
User Code : Amount	Authorised Change	\$
.....\$	Revised Sum	\$
.....\$		\$

Credit Deposits - Retention Money Authority
 User Code :
\$ Total gross payment to date \$
 (debit expenditure + retention money)

DEPARTMENT CONTRACT NO. / /

CONTRACT PRICE FLUCTUATIONS

EFFECTIVE VALUE OF WORK

Total Estimated Value (see front)	\$ _____
<u>DEDUCT</u> value of Nominated Sub-contractors' work (see front - item (1)(b))	\$ _____
<u>DEDUCT</u> value of work based on actual cost or current price	\$ _____
<u>DEDUCT</u> Effective Value of work completed to previous Certificate No.	\$ _____
Effective Value of work completed on this Certificate	\$ _____

ADJUSTMENTS FOR PRICE FLUCTUATIONS

Certificate No.	Effective Value (EV)	Price ** Fluctuation Factor (PFF)	Actual/ On-account	Contract Price Fluctuation (EV X PFF)
<u>Current</u>	\$			\$
<u>Previous</u>				
1 to	-	-	Actual	
Total Adjustment for Price Fluctuations				

** Calculation for any PFF not previously calculated is attached.

APPENDIX 7.20 ENGINEER’S FINAL PAYMENT CERTIFICATE

DEPARTMENT CONTRACT NO. / /

Title of Contract
 Contractor
 Address
 Date of commencement
 Due Date/extended date for completion Actual date of completion

Payment to be made by

- (1) Sum due under the Contract up to the date of the maintenance certificate:
- | | | |
|--|----|--|
| (a) Work done by Contractor | \$ | |
| (b) Nominated Sub-contractors’ work (see attached statement) | \$ | |
| (c) Other sums due to Contractor* (see attached statement) | \$ | |
| (d) Adjustment for Price Fluctuations (see attached statement) | \$ | |
| Total | \$ | |
- (2) Credit to the Employer up to the date of the maintenance certificate:
- | | | |
|---|----|--|
| (a) Previous payments | \$ | |
| (b) Liquidated damages (see attached statement) | \$ | |
| (c) Value of materials supplied by Employer | \$ | |
| (d) Other sums to which the Employer is entitled*
(see attached statement) | \$ | |
- (3) Balance due from **Employer to Contractor/
 **Contractor to Employer
- | | | |
|--|----|--|
| | \$ | |
|--|----|--|

I certify that the sum due under the Contract up to the date of the maintenance certificate and the balance due from **Employer to Contractor/**Contractor to Employer are as stated in items (1) and (3) respectively.

.....
()
Engineer
.....
Date of Certification

- * State the contractual grounds for any such sums due and/or credits
- ** Delete where inappropriate

EMPLOYER’S STATEMENT FOR PAYMENT

- ** The above balance due from Employer to Contractor is passed for Payment
- ** Demand Note No. dated in respect of the above balance due from Contractor to Employer is issued.

for Vote Controller : Signature
 Name Date
 Post

- ** Delete where inappropriate

FINANCE DETAILS

Debit Expenditure		Contract Sum	\$
User Code:	Amount	Authorised Change	\$
.....\$		Revised Sum	\$
.....\$		Authority	
.....\$		Total gross payment to date	\$
		(debit expenditure + retention money)	

DEPARTMENT CONTRACT NO. / /

CONTRACT PRICE FLUCTUATIONS

FINAL PAYMENT CERTIFICATE

EFFECTIVE VALUE OF WORK

Total value of work (see front – sum of items 1(a) and 1(c))	\$
<u>DEDUCT</u> value of work based on actual cost or current price	\$
<u>DEDUCT</u> Effective Value of work completed to previous Certificate No.	\$ _____
Effective Value of work completed on this Certificate	\$ _____

ADJUSTMENTS FOR PRICE FLUCTUATIONS

Certificate No.	Effective Value (EV)	Price ** Fluctuation Factor (PFF)	Actual/ On-account	Contract Price Fluctuation (EV X PFF)
<u>Final</u>	\$			\$
<u>Previous</u>				
1 to	-	-	Actual	
Total Adjustment for Price Fluctuations				

** Calculation for any PFF not previously calculated is attached.

APPENDIX 7.21 VARIATION ORDER FORM

VARIATION ORDER NO. _____

Dear Sir,

Contract No. _____

(Title)

In accordance with Clause 60 of the General Conditions of Contract, please carry out the following:

(For example:

- X/1. Additional reinforcement to walls as per enclosed Sketch No.
- X/2. Extend surface water channel by approximately 3 m as indicated on Site.
- X/3. Surface finish to all external walls of the Pumping Station to be mosaic tile.
- X/4. Clean out the existing manhole adjacent to Gate No. 2.)

* In accordance with Clause 62(1) of the General Conditions of Contract, Items Nos. are to be executed on daywork basis.

Yours faithfully,

.....
Name/Designation of the Engineer
or Engineer's Representative

c.c. *Engineer/Engineer's Representative

* delete where inapplicable

APPENDIX 7.22 STANDARD LETTER FOR VARIATION ORDER/OMITTED ITEM

(Ref.: In view of the findings in Chapter 3 of the Audit Report No. 53, SDEV requested in email of 19.2.2010 to strengthen the relevant PAH Sections on omitted items for reference by works departments and, where applicable, the consultants appointed as the Engineer for the Contract.)

[VALUATION OF VARIATION ORDER NO./OMITTED ITEM]* _____

Dear Sir,

Contract No. _____
(Title)

I refer to [Variation Order No. dated / omitted item(s)]* as follows:-
(please provide detailed description of the omitted item(s))

In accordance with [Clause 61(1)/the proviso to GCC61(1)/ Clause 61(1) and the proviso to GCC61(1)/Clause 59(3)]* of the General Conditions of Contract, the rate(s) for [the following items of work in the said variation order/the following item(s) of works which were (was) omitted from the Bill of Quantities]* shall be as follows:

<u>Item No.</u>	<u>Description</u>	<u>Quantity</u>	<u>Unit Rate</u>	<u>Amount</u>
-----------------	--------------------	-----------------	------------------	---------------

The above quantities are subject to re-measurement in accordance with the Contract.

* This valuation is/Items nos. are based on prices current at the time of tender and are subject to Contract Price Fluctuations.

* This valuation is/Items nos. are based on prices current on the dates on which the work was carried out and are not subject to Contract Price Fluctuations.

*Items nos.are valued in accordance with GCC 61(1)(c) of the General Conditions of Contract, please let me have your agreement to my assessed rates within [28 days] after receiving this letter. If your agreement is not received within the said [28 days], it will be treated as failing to reach agreement between us and I may fix such rates as shall in my opinion be reasonable and notify you accordingly.

Yours faithfully,

.....
The Engineer for the Contract

b.c.c.
D of A)
Relevant Consultants' Management Office) with current

(for consultant-managed contracts)) financial
Engineer's Representative) statement
STA (or responsible Accounts Officer))
SE/CA (or responsible Contract Adviser))

* delete where inapplicable

APPENDIX 7.22A STANDARD LETTER FOR FIXING RATES OF VARIATION ORDER/OMITTED ITEM

[VALUATION OF VARIATION ORDER NO./OMITTED ITEM]* _____

Dear Sir,

Contract No. _____
(Title)

I refer to [Variation Order No. dated / omitted item(s)]* as follows:-
(please provide detailed description of the omitted item(s))

I also refer to our letter ref: dated advising you the rates of the items therein.

Since an agreement cannot be reached on the following item(s), in accordance with Clause 61(2) of the General Conditions of Contract, the rate(s) for [the following items of work in the said variation order / the following item(s) of works which were (was) omitted from the Bill of Quantities]* shall be fixed as follows:

<u>Item No.</u>	<u>Description</u>	<u>Quantity</u>	<u>Unit Rate</u>	<u>Amount</u>
-----------------	--------------------	-----------------	------------------	---------------

The above quantities are subject to re-measurement in accordance with the Contract.

* This valuation is/Items nos. are based on prices current at the time of tender and are subject to Contract Price Fluctuations.

* This valuation is/Items nos. are based on prices current on the dates on which the work was carried out and are not subject to Contract Price Fluctuations.

Should you intend to claim a higher rate than for [the above item / any of the above items]* pursuant to Clause 64(1) of the General Conditions of Contract, please notify me within 28 days from the date of this letter. Otherwise, the rate(s) fixed above [is/are]* deemed to be accepted.

Yours faithfully,

.....
The Engineer for the Contract

b.c.c.

D of A

Relevant Consultants' Management Office
(for consultant-managed contracts)

Engineer's Representative

STA (or responsible Accounts Officer)

SE/CA (or responsible Contract Adviser)

)

) with current

) financial

) statement

)

)

* delete where inapplicable

APPENDIX 7.23 CURRENT FINANCIAL STATEMENT

(Ref.: In view of the findings in Chapter 3 of the Audit Report No. 53, SDEV requested in email of 19.2.2010 to strengthen the relevant PAH Sections on omitted items for reference by works departments and, where applicable, the consultants appointed as the Engineer for the Contract.)

Appendix to Valuation of Variation/Omitted Item No.
 DEPARTMENT
 OFFICE/REGION/DIVISION
CURRENT FINANCIAL STATEMENT
 (For internal use only, not to be issued to Contractor)

Current approved contract sum (C)	_____
(Approval ref. dated	
Anticipated final value of billed items (excluding omitted items)	
Value of valuation of omitted items issued	
Value of VOs issued	
Value of other sums certified to date (e.g. claims)	
CPF certified to date	
Sub-total (X)	_____
Contingency available before issue of this valuation (P) = (C - X).....	
Value of this valuation (V)	
* Contingency available after issue of this valuation (Q) = (P - V)

Estimated value of other work not yet covered	
by valuation of variation and/or omitted item	
Anticipated value of outstanding claims	
Anticipated further sum against CPF	
Any other items (give details)	
Sub-total (Z)	_____
# Anticipated further increase in contract sum (I) = (Z - Q)	
Anticipated Final Contract Sum (F) = (C + I)	
Note: The original contract sum was	
The original contingency was	
* if $Q < 0$, an increase in contract sum is required	
# if $Q > Z$, $I = 0$	

APPENDIX 7.24 STANDARD LETTERS REGARDING NOTICE OF CLAIM

APPENDIX 7.24.1

(Standard letter to be sent to the Contractor when the notice of claim under GCC Clause 64(2) does not refer to the clause(s) upon which the claim is based)

Dear Sir,

Contract No. _____

(Title)

Notice of Claim

I acknowledge receipt of your letter ref. dated notifying me under GCC Clause 64(2) of your intention to claim. However, as your letter does not state the contractual provision upon which your claim is based and is not therefore considered as a valid notice under GCC Clause 64(2), I am unable to consider your claim pursuant to GCC Clause 64(5) unless the aforementioned contractual provision is given.

Yours faithfully,

.....
The Engineer for the Contract

c.c. SE/CA (or responsible Contract Adviser)

APPENDIX 7.24.2**(Standard letter to be sent to the Contractor when the notice of claim under GCC Clause 64(1) has not been served within the stipulated 28-day period)**

Dear Sir,

Contract No. _____

(Title)

Notice of Claim

I acknowledge receipt of your letter ref. dated notifying me under GCC Clause 64(1) of your intention to claim a higher rate than one notified by me to you in my letter ref. dated pursuant to *GCC Clause 59(4)(b)/61(2)/84(4)(b).

As your notice has not been served on me within the 28-day period stipulated under GCC Clause 64(1) and in accordance with GCC Clause 64(5), I am unable to consider your claim.

Yours faithfully,

.....
The Engineer for the Contract

c.c. SE/CA (or responsible Contract Adviser)

* Delete where inapplicable

APPENDIX 7.24.3

(Standard letter to be sent to the Contractor when the notice of claim under GCC Clause 64(2) has not been served within the stipulated 28-day period)

Dear Sir,

Contract No. _____

(Title)

Notice of Claim

I acknowledge receipt of your letter ref. dated notifying me under GCC Clause 64(2) of your intention to claim an additional payment.

According to my records, the event to which you refer occurred on In my opinion, your notice has not been served on me within the 28-day period stipulated under GCC Clause 64(2) and, in accordance with GCC Clause 64(5), I am unable to consider your claim.

Yours faithfully,

.....
The Engineer for the Contract

c.c. SE/CA (or responsible Contract Adviser)

APPENDIX 7.24.4**(Standard letter to be sent to the Contractor when the notice of claim
has been served under GCC Clause 64(1).)**

Dear Sir,

Contract No. _____

(Title)

Notice of Claim

I acknowledge receipt of your letter ref. dated notifying me under GCC Clause 64(1) of your intention to claim a higher rate than one notified by me to you in my letter ref. dated pursuant to *GCC Clause 59(4)(b)/61(2)/84(4)(b).

I acknowledge that your notice has been served within the 28-day period stipulated under GCC Clause 64(1). The number has been assigned to this claim and should be referred to in all our future correspondence.

In accordance with GCC Clause 64(3), you are required to give me details of the records you are keeping as may reasonably be necessary to support your claim. I would then advise you of any additional records I wish you to keep and agree with the Engineer's Representative.

I have studied your claim and consider that a period of days from the date of this letter would be reasonable time within the meaning of GCC Clause 64(4) for the submission of your first interim account. Further submissions should then be made at *monthly/(or other as specified by the Engineer) intervals thereafter.

You are reminded that if you fail to comply with any of the above, I may consider your claim only to the extent that I am able on the information made available to me as stipulated under GCC Clause 64(6).

Yours faithfully,

.....
The Engineer for the Contract

c.c. SE/CA (or responsible Contract Adviser)

* Delete where inapplicable

APPENDIX 7.24.5**(Standard letter to be sent to the Contractor when the notice of claim has been served under GCC Clause 64(2).)**

Dear Sir,

Contract No. _____

(Title)

Notice of Claim

I acknowledge receipt of your letter ref. dated notifying me under GCC Clause 64(2) of your intention to claim an additional payment under GCC Clause(s)

I acknowledge that your notice has been served within the 28-day period stipulated under GCC Clause 64(2). The number has been assigned to this claim and should be referred to in all our future correspondence.

In accordance with GCC Clause 64(3), you are required to give me details of the records you are keeping as may reasonably be necessary to support your claim. I would then advise you of any additional records I wish you to keep and agree with the Engineer's Representative.

I have studied your claim and consider that a period of days from the date of this letter would be reasonable time within the meaning of GCC Clause 64(4) for the submission of your first interim account. Further submissions should then be made at *monthly/(or other as specified by the Engineer) intervals thereafter.

You are reminded that if you fail to comply with any of the above, I may consider your claim only to the extent that I am able on the information made available to me as stipulated under GCC Clause 64(6).

Yours faithfully,

.....
The Engineer for the Contract

c.c. SE/CA (or responsible Contract Adviser)

APPENDIX 7.25 STANDARD LETTER FOR CERTIFYING CLAIMS

Dear Sir,

Contract No. _____

(Title)

I refer your letter ref. dated and subsequent correspondence detailing your claim for additional payment under Clause of the General Conditions of Contract.

From the information made available to me, I have ascertained that payment in the sum of is due to you in accordance with the above Condition of Contract.

This sum *is/is not subject to Contract Price Fluctuations.

Yours faithfully,

.....
The Engineer for the Contract

b.c.c. D of A
Relevant Consultants' Management Office
(for consultant-managed contracts)
Engineer's Representative
STA (or responsible Accounts Officer)
SE/CA (or responsible Contract Adviser)

* Delete where inapplicable

APPENDIX 7.26 WARNING LETTER PRIOR TO DETERMINATION OF CONTRACTOR'S EMPLOYMENT

REGISTERED POST

CONFIDENTIAL & URGENT

Dear Sir,

Contract No. _____

(Title)

I refer my letter(s) ref. dated (quote relevant correspondence).

I consider that insufficient corrective action has been taken and I hereby now require you to (describe corrective action(s), e.g. remove unsatisfactory work, proceed with due diligence, remove sub-contractors).

If after receiving this Notice you fail to so proceed, I shall after the expiration of 14 days (or more should any other time appear to be appropriate) from the date of this Notice certify to the Employer that in my opinion you have failed to (correct the matter as set out above) and shall advise the Employer to exercise the power of Clause 81 of the General Conditions of Contract that of entering upon the Site and expelling you therefrom.

Yours faithfully,

.....
The Engineer for the Contract

c.c. SFST
 SDEV (Attn: DS(W)2, PAS(W)3 & CTA(F))
 LA(W), DEVB
 D of A
 D of DS }
 DWS } Please provide, BY FAX and copied to
 DEMS } CTA(F), ETWB, with details of all contracts
 D Arch S } that your Department have with the above-
 D of Hy } addressed Contractor for which further
 DCED } payment has yet to be made by the
 D of H } Employer under these contracts. Nil
 DAFC } returns are required.
 DHA }
 DEP }
 SE/CA (or responsible Contract Adviser)
 STA (or responsible Accounts Officer)
 Engineer's Representative
 Bondsman, Messrs. (Name) } By registered post
(Address)

APPENDIX 7.27 RECOMMENDATION FOR DETERMINATION OF CONTRACTOR’S EMPLOYMENT

CONFIDENTIAL

To *DCED/DHy//DDS/DWS
thro’ Government officer authorised to sign the Contract on behalf of the Government

Contract No. _____

(Title)

I hereby certify that on (quote relevant date) by letter ref., I served upon (insert Contractor’s name), the Contractor for the above works a written notice requiring him to (detail what corrective action(s) was/were required) and that in my opinion he has failed to do so.

Accordingly, I hereby recommend that pursuant to Clause 81 of the General Conditions of Contract, 7 days notice in writing should now be given to the Contractor of your intention to enter upon the Site and expel the Contractor therefrom.

I enclose herewith a notice of determination of Contractor’s employment for your perusal and signature please. The notice of determination of Contractor’s employment has been cleared with LA(W), DEVB.

.....
The Engineer for the Contract

c.c. SE/CA (or responsible Contract Adviser)
STA (or responsible Accounts Officer)
Engineer’s Representative

**APPENDIX 7.28 NOTICE OF DETERMINATION OF CONTRACTOR'S
EMPLOYMENT**REGISTERED POST (OR BY HAND)

Contract No. _____

(Title)

To: (Contractor's Name)

WHEREAS:

(1) By Articles of Agreement dated the day of (month), (year) and made between you as the Contractor and the Government of the Hong Kong Special Administrative Region it was agreed that you would construct the above Works for the consideration therein stated.

(2) By Clause 81 of the General Conditions of Contract annexed to and incorporated with the said Articles of Agreement I am empowered to enter upon the Site and the Works and expel you therefrom upon the Engineer certifying in writing to me that in his opinion you have (detail the fault e.g. failed to proceed with the Works with due diligence) and provided that I give you 7 days notice in writing of my intention to enter upon the Site and the Works and expel you therefrom.

(3) The Engineer has certified in writing to me that in his opinion you have failed to (detail what was required in (2)).

NOW THEREFORE TAKE NOTICE that acting under the power reserved by Clause 81 of the said General Conditions of Contract I will on the day of (month), (year) at o'clock enter upon the Site and the Works and take the same entirely out of your hands and I have authorised the Engineer to take possession of the Constructional Plant, Temporary Works and materials on the Site and the Works on behalf of the Government of the Hong Kong Administrative Region and the same shall be determined.

Dated the day of (month) of (year).

Director of *Civil Engineering & Development /
Highways / Drainage Services / Water Supplies
On behalf of the Government of the
Hong Kong Administrative Region

* Delete where inapplicable

c.c. (Urgent)
 SFST
 SDEV (Attn: DS(W)2, PAS(W)3 & CTA(F)) }
 LA(W), DEVB }
 D of A }
 D of DS }
 DWS } Please be advised that the above
 DEMS } Contract contains set-off provisions
 D Arch S } for recovery of monies due to the
 D of Hy } Employer
 DCED }
 D of H }
 DAFC }
 DHA }
 DEP }
 C of IR }
 SE/CA (or responsible Contract Adviser)
 STA (or responsible Accounts Officer)
 The Engineer for the Contract
 Engineer's Representative
 (Relevant) CE(s)
 (Relevant) SE(s)
 (Relevant) E(s)
 Bondsman, Messrs. (Name) } By registered post
 (Address)

APPENDIX 7.29 NOTICE TO BONDSMANREGISTERED POST

Dear Sir,

Contract No. _____

(Title)

I refer to the Bond dated into which you entered as Surety for the above Company in the sum of for the execution of the above Contract.

I wish to advise you that, pursuant to a notice served upon the above Company advising them that (describe the reason), the Government of the Hong Kong Special Administrative Region entered upon the Site and possessed the above Contract on (insert time, day, month and year).

I am now in the process of re-letting the above Contract to ensure that the Works are completed and upon such completion, I will finalise the account between the Government of the Hong Kong Special Administrative Region and the above Company.

It is anticipated that the final account will show a balance due from the above Company to the Government of the Hong Kong Special Administrative Region and in that connection it may be necessary for the Government of the Hong Kong Special Administrative Region to call upon your Company for payment under the terms of the Bond. I would emphasize that this letter is not a demand for payment but serves only to put you on notice that a claim under the Bond may be made on you in due course.

Yours faithfully,

(Designation of the Government Officer
authorised to sign contract on behalf of the
Government of the Hong Kong Special
Administrative Region)

.....Department

c.c. Contractor - (By registered post)
LA(W), DEVB
D of A
SE/CA (or responsible Contract Adviser)
The Engineer for the Contract
Engineer's Representative
Relevant CE

**APPENDIX 7.30 REQUEST FOR EMPLOYING ANOTHER / TERM
CONTRACTOR TO CARRY OUT URGENT REMEDIAL /
REPAIR WORKS**

URGENT BY HAND

To *DCED/DHy//DDS/DWS
thro' Government officer authorised to sign the Contract on behalf of the Government

Contract No. _____

(Title)

I instructed the Contractor, Messrs. under my letter ref. dated (copy attached), to carry out *remedial/repair works which in my opinion were urgently necessary for (give reason for the work, e.g. security, safety). The Contractor has failed to take *any/appropriate action in this matter within the stipulated time and your authority is hereby requested to take action under Clause 82(2) of the General Conditions of Contract to remedy the situation.

After due consideration of all the pertaining factors, I am of the opinion that the most expedient way of resolving the matter in hand will be to employ the *Term Contractor/the Contractor Messrs. to carry out the required remedial/repair work.

Upon receipt of your authority to the above, I will advise the Contractor, Messrs. of the action being taken and issue the necessary *order/instruction to the Contractor, Messrs. to complete the required *remedial/repair work.

.....
The Engineer for the Contract

c.c. SE/CA (or responsible Contract Adviser)
STA (or responsible Accounts Officer)
Engineer's Representative

* Delete where inapplicable

APPENDIX 7.31 LETTER INFORMING THE CONTRACTOR OF EMPLOYING OTHERS TO CARRY OUT URGENT REMEDIAL / REPAIR WORKS

BY REGISTERED POST (OR BY HAND)

Dear Sir,

Contract No. _____

(Title)

Notwithstanding my letter ref. dated requesting you to carry out *remedial/repair works which in my opinion were urgently necessary for (give reason for the work, e.g. security, safety), you have failed within the stipulated period to comply with such request. Pursuant to Clause 82(2) of the General Conditions of Contract, I am obliged to take immediate action in this regard by authorising the carrying out of the above works by others.

The works comprise and will be carried out by Messrs.

You are hereby reminded of your liability under Clause 82(2) of the General Conditions of Contract that all additional expenses properly incurred arising therefrom shall be recoverable under the Contract. All concerned works undertaken will be measured and recorded separately. I will inform you on the actual expenses incurred as soon as it is ascertained.

Yours faithfully,

.....
The Engineer for the Contract

c.c. * DCED/DHy/DDS/DWS (thro' Government officer authorised to sign the Contract on behalf of the Government)
SE/CA (or responsible Contract Adviser)
STA (or responsible Accounts Officer)
Engineer's Representative

* Delete where inapplicable

APPENDIX 7.32 CERTIFICATE OF COMPLETION IN RESPECT OF A PART OF THE WORKS

Dear Sir,

Contract No. _____

(Title)

Certificate of Completion No.
in respect of a part of the Works

In accordance with Clause 53 of the General Conditions of Contract, I hereby certify that the part of the Works as detailed in the attached Appendix and/or Drawing No. was completed on (date).

Yours faithfully,

.....
The Engineer for the Contract

c.c. D of A
Head of Office/Branch/Region
STA (or responsible Accounts Officer)
SE/CA (or responsible Contract Adviser)
Engineer's Representative

APPENDIX 7.33 CERTIFICATE OF COMPLETION IN RESPECT OF A SECTION OF THE WORKS

Dear Sir,

Contract No. _____

(Title)

Certificate of Completion No.
in respect of a Section of the Works

In accordance with Clause 53 of the General Conditions of Contract, I hereby certify that Section was substantially completed on (date).

Yours faithfully,

.....
The Engineer for the Contract

- c.c. D of A
- CTA(F), DEVB
- Head of Office/Branch/Region
- STA (or responsible Accounts Officer)
- SE/CA (or responsible Contract Adviser)
- Engineer's Representative

APPENDIX 7.34 CERTIFICATE OF COMPLETION OF THE WORKS

Dear Sir,

Contract No. _____

(Title)

Certificate of Completion of the Works

In accordance with Clause 53 of the General Conditions of Contract, I hereby certify that the Works were substantially completed on (date).

* Two copies of the completed form “Release of Surety Bond” are attached herewith.

* Please return your Treasury Receipt for the security deposit amounting to so that arrangement can be made for its release.

Yours faithfully,

.....
The Engineer for the Contract

- c.c. D of A
- CTA(F), DEVB
- Head of Office/Branch/Region
- STA (or responsible Accounts Officer)
- SE/CA (or responsible Contract Adviser)
- Engineer’s Representative

* Delete where inapplicable

APPENDIX 7.35 CERTIFICATE OF RELEASE OF SURETY BOND

Contract No. _____

(Title)

_____**RELEASE OF SURETY BOND****PART A** **Instruction to Contractor**

To obtain the release of the surety bond for this Contract, please arrange to have one copy of this form presented by your authorised representative to the Accounts Division/Section, *CEDD/DSD/HyD/WSD HQ at

(Address of Accounts Division/Section, Departmental Headquarters)

Your representative should bring with him the certificate of completion issued for this Contract, his HK Identity Card and your company chop.

In exchange for the surety bond your representative will be required to complete Part B of this form which will be retained by *CEDD/DSD/HyD/WSD.

Instruction to Accounts Division/Section, *CEDD/DSD/HyD/WSD HQ

The certificate of completion in respect of this Contract was issued on (date) and the surety bond in the sum of may now be released to the Contractor.

Date

()

The Engineer for the Contract

* Delete where inapplicable

PART B **Certification of Receipt by Contractor**

I hereby certify that the surety bond for the above Contract was received by me today.

Date

Signature of Authorised Representative

(Name)

Name and chop of Contractor

Original – for Contractor’s presentation to departmental headquarters

Duplicate – for Contractor’s retention

Triplicate – for departmental headquarters

APPENDIX 7.36 MAINTENANCE CERTIFICATE

Dear Sir,

Contract No. _____

(Title)

_____Maintenance Certificate of the Works***{*For contracts which do not require PII OR contracts which require PII and the policy covers the requisite 6-year period:}***

In accordance with Clause 80 of the General Conditions of Contract, I hereby certify that you, as the Contractor for the above Contract, have completed your obligation to execute the Works on (date).

{*For contracts which require PII but the policy does not cover the requisite 6-year period:}

In accordance with Clause 80 of the General Conditions of Contract, I hereby certify that you, as the Contractor for the above Contract, have completed your obligation to execute the Works on (date), but not continuing obligations under the Contract including without limitation those under Special Conditions of Contract [*insert number*] for Professional Indemnity Cover.

Yours faithfully,

.....
The Engineer for the Contract

c.c. D of A
CTA(F), DEVB
Head of Office/Branch/Region
STA (or responsible Accounts Officer)
SE/CA (or responsible Contract Adviser)
Engineer's Representative

**** Incorporate as appropriate***

APPENDIX 7.37 ENGINEER’S CERTIFICATE FOR PAYMENT OF RETENTION MONEY

APPENDIX 7.37.1 Engineer’s Certificate for Payment of Retention Money
 (To be used where Nominated Sub-contractors are not engaged)

FORM A

Contract No. _____
 Title of Contract: _____
 Contractor: _____
 Address: _____
 Date of issue of Maintenance Certificate: _____

ENGINEER’S CERTIFICATE FOR PAYMENT OF RETENTION MONEY

I hereby certify the payment of Retention Money in the amount of \$ _____ .

 ()
 The Engineer for the Contract

 Date of Certification

EMPLOYER’S STATEMENT FOR PAYMENT

(1) Retention Money due		\$
(2) *Deductions:		
(i)	\$	
(ii)	\$	\$ _____
	Net sum due for payment:	\$ _____

Payment to be made by _____ (state deadline date for payment to Contractor)

Passed for payment for Vote Controller:	Signature: _____ Name: _____ Post: _____	Date: _____
--	--	-------------

* List new deductions after the last interim payment certificate and state the contractual ground for such deductions.

FINANCE DETAILS

Credit Expenditure/Revenue		
User Code :	Amount	Total gross payment to date
..... \$		
..... \$		
..... \$		\$
Debit Deposits - Retention		
Money User Code :		
..... \$		

APPENDIX 7.37.2 Engineer’s Certificate for Payment of Retention Money

(To be used where Nominated Sub-contractors are engaged)

FORM B

Contract No. _____

Title of Contract: _____

Contractor: _____

Address: _____

Date of issue of Maintenance Certificate: _____

ENGINEER’S CERTIFICATE FOR PAYMENT OF RETENTION MONEY

I hereby certify the payment of Retention Money in the amount of \$_____ which sum includes Retention Money due to Nominated Sub-contractors as detailed in the attached schedule.

()
The Engineer for the Contract

Date of Certification

EMPLOYER’S STATEMENT FOR PAYMENT

(1) Retention Money due		\$
(2) *Deductions:		
(i)	\$	
(ii)	\$	\$ _____
	Net sum due for payment:	\$ _____

Payment to be made by _____ (state deadline date for payment to Contractor)

Passed for payment
for Vote Controller:

Signature: _____
Name: _____
Post: _____

Date: _____

* List new deductions after the last interim payment certificate and state the contractual ground for such deductions.

FINANCE DETAILS

Credit Expenditure/Revenue		
User Code :	Amount	
..... \$		Total gross payment to date
..... \$		
..... \$		\$
Debit Deposits - Retention		
Money User Code :		
..... \$		

CONTRACT NO. _____

Schedule of Retention Money due to Nominated Sub-contractors

The Retention Money due to Nominated Sub-contractors is as follows:

<u>Name of Nominated Sub-contractor</u>	<u>Amount of Retention Money due</u>
---	--------------------------------------

()
The Engineer for the Contract

APPENDIX 7.38 REPORT ON COMPLETION OF CONTRACT

_____ DEPARTMENT

Contract No. _____

(Title)

_____**REPORT ON COMPLETION OF CONTRACT**

1. Brief description of Works _____

2. Original Contract Sum \$ _____
3. Final Contract Sum + \$ _____
4. Excess/saving on Contract Sum \$ _____
5. Excess due to

(a) Variations	\$ _____
(b) Price fluctuation	\$ _____
(c) Claims	\$ _____
(d) Others	\$ _____
6. Original estimated time for completion of the Works _____ days
7. Date of commencement of the Works _____
8. Date of substantial completion of the Works _____
9. Actual time taken to complete the Works _____ days
10. Extension of time granted for completion _____ days
11. Deduction of liquidated damages for:

(a) Section _____, _____ days	(@ \$ _____/day)	\$ _____
(b) Section _____, _____ days	(@ \$ _____/day)	\$ _____
(c) Whole of the Works, _____ days	(@ \$ _____/day)	\$ _____
12. Maintenance Period was from _____ to _____.
13. Retention Money \$ _____ has been released to the Contractor on _____.

()
The Engineer for the Contract
Designation _____
Date _____

c.c.	D of A SEO(PS), DEVB STA (or responsible Accounts Officer) SE/CA (or responsible Contract Adviser)	CTA(F), DEVB Head of Office/Branch/Region Engineer's Representative
------	---	---

Legend:

+ For the avoidance of doubt, this is the sum after deductions such as liquidated damages made under the Contract.

**APPENDIX 7.39 MANUAL FOR TECHNICAL AUDITS ON WORKS
CONTRACTS**

**(Subsumed from ETWB TCW No. 53/2002 & Ref.: SDEV's memo
ref. () in ETWB(W) 545/83/02 Pt. 2 dated 17.8.2007)**

Manual for Technical Audits

on

Works Contracts

This Manual is intended for use in the technical auditing of architectural, civil, electrical and mechanical engineering capital works and maintenance contracts carried out in works departments. It covers the tendering and construction stages of contracts. This Manual serves as a guide only and does not purport to be exhaustive.

This Manual consists of two parts:

PART I - INTRODUCTION

This gives a brief description of the definition, types and objectives etc. of audits, and is particularly useful to officers who have not received any formal audit training.

PART II - THE AUDIT PROCESS

This describes technical audits at various stages of a contract and outlines the procedures to be followed. Checklists and standard pro-forma Technical Audit Reports are given at annexes.

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		Definition of Audit
		Internal and External Audits
		Types of Audit
		Technical Audit
		Objectives of Technical Audit
		Handling of Classified Documents
		Audit Officer
PART II	-	THE AUDIT PROCESS
		Technical Audit Programme
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PART I - INTRODUCTION

Definition of Audit

1. An audit can be defined as a systematic and independent examination of specific activities carried out by an individual or a group of individuals, in order to determine whether such activities and related results comply with planned arrangements, and whether these arrangements are implemented effectively and are suitable to achieve objectives.

Internal and External Audits

2. An internal audit is an audit carried out by one organisation on itself. It is also called a first party audit.
3. An external audit is an audit carried out by one organisation on another. A second party audit is an external audit carried out by one organisation, working on its own behalf, on another (e.g. an audit carried out by a contractor on its material supplier). A third party audit is an external audit carried out by an independent organisation on another organisation (e.g. an audit carried out by an accredited certification body on a contractor for the purpose of ISO 9000 certification).
4. Procedures laid down in this Manual are applicable to internal audits only.

Types of Audit

5. There are two main types of audit:

Adequacy Audit

6. This is also known as a system or management audit. Its objective is to determine the extent to which the documented system and the associated procedures adequately meet the requirements of the organisation or the applicable quality standard.

Compliance Audit

7. This is an audit which seeks to establish the extent to which the relevant standards, the documented system and the associated procedures are implemented and observed by the staff.
8. Procedures laid down in this Manual are mainly for compliance audits.

Technical Audit

9. A technical audit is an internal audit which concentrates on the technical aspects only. For works contracts, a technical audit essentially examines whether the project staff have observed laid down procedures/requirements and exercised reasonable and adequate professional skill in carrying out their duties.

Objectives of Technical Audits

10. The following objectives should be borne in mind when carrying out technical audits on works contracts:
 - a) to check whether laid down procedures/requirements are strictly complied with by project staff, and if not, the reasons for non-compliance (Note that if any laid down procedures are found out-dated or no longer practicable during the course of the audit, such procedures should be brought to the attention of the authorities which laid down the procedures together with suggestions, where applicable);
 - b) where appropriate, to check objectively whether reasonable skill and care have been exercised by project staff in carrying out their technical duties (for example, no over-certification or under-certification of payments, prompt issuance of site instructions etc.); and
 - c) where laid down procedures/requirements are not being followed by project staff, to recommend measures which may be applied to prevent future repetition.
11. A positive attitude of mind should always be adopted by officers carrying out audit work (hereinafter referred to as audit officers). However, it carries no implication that audit officers shall not report any malpractice by project staff that clearly surfaced from the audit findings.

Handling of Classified Documents

12. When an audit process touches on classified documents, such documents and hence the Technical Audit Report should be properly handled in accordance with the procedures set out in the Security Regulations and the prevailing circulars.

Audit Officer

13. **Audit officers shall obtain complete and accurate information about specific activities they are auditing.**

14. **Apart from being objective and independent, audit officers should also be:**

diplomatic	observant	interested
unbiased	inquiring	industrious
open minded analytical	patient	
resilient	trained	able to communicate well

15. **On the other hand, the following are attributes unfavourable to the work of audit officers:**

gullible	opinionated	nit picking
cynical	argumentative	accepts things at face value

PART II - THE AUDIT PROCESS

Technical Audit Programme

16. Each Contract Adviser should submit quarterly Activity Reports on technical audits in accordance with paragraph 21.2.1 of PAH Chapter 7. The contracts chosen to be audited should, as far as practicable, be of different sizes and types of works and be managed by different officers.

Technical Audits at Various Stages of a Contract

17. Technical audits of works contracts shall, as far as practicable, cover various stages of a contract. These stages include:
- a) tender documents preparation;
 - b) tendering;
 - c) tender assessment;
 - d) construction; and
 - e) final account including claims settlement.
18. Where it is impracticable to audit all the above stages, the Contract Adviser shall determine which work stage(s) should be audited.

Planning and Preparing for Technical Audit

19. Before conducting the technical audit on a chosen contract, the Contract Adviser shall:
- a) review the last Technical Audit Report (if any) on the contract, and note the areas of non-compliances and any follow up actions required to be taken;
 - b) define the scope of the audit, whether it will cover all or some of the stages of the contract;
 - c) prepare a time schedule indicating the dates on which the audit will take place. Preliminary contacts with the project staff concerned may be helpful in fixing mutually convenient dates;
 - d) determine the number of audit officers required to carry out the audit, and nominate a leader (hereinafter referred to as an audit leader) if more than one audit officer are required;
 - e) notify in writing the project staff of the contract to be audited. Such notification shall include the time schedule of the audit, name(s) of the audit officer(s) and the relevant documents (e.g. project files, tender documents, contract documents, payment certificates, measurements and

valuations of variations etc.) required to be made available for pre-audit reading by the audit officers; and

- f) ensure that audit officers are informed of the details of the contract to be audited, the scope and time schedule of the audit, and the standards to be used as a basis of the audit.
20. The following documents shall, where applicable, be the standards to be used as the basis of the technical audit:
- a) Environment, Transport and Works Bureau Technical Circular (Works);
 - b) Works Branch Technical Circulars/Works Bureau Technical Circulars;
 - c) Financial Circulars;
 - d) Departmental Technical Circulars/Instructions;
 - e) Relevant Building/Engineering Manuals and/or Handbooks;
 - f) Relevant General Conditions of Contract;
 - g) Relevant General Specifications and Standard Drawings;
 - h) Relevant Standard Method of Measurement;
 - i) Contract Documents and Supplementary Agreements (if any);
 - j) Consultancy Agreements; and
 - k) Any other relevant written policies, circulars, instructions or procedures which the Contract Adviser considers appropriate.

Opening Meeting

21. The technical audit shall start with an Opening Meeting. It serves as an introductory meeting and shall be chaired by the audit leader (if any) and attended by all audit officers and project staff of the contract to be audited. (If there is only one audit officer carrying out the audit, that audit officer shall assume the duties of the audit leader.)
22. At the Opening Meeting, the audit leader shall:
- a) introduce himself/herself and the audit officers;
 - b) briefly describe the scope and time schedule of the audit, the relevant standards to be used as the basis of the audit, the meaning of a non-compliance, and the method of reporting;
 - c) ascertain which project officer is responsible for which parts/aspects of the contract to be audited, including the arrangement of guides for touring the site (if necessary);
 - d) explain that before the preparation of the Technical Audit Report, the project staff will be informed at the Closing Meeting of any major non-compliances found during the audit, and will be asked to give their views and/or explanations for such non-compliances; and
 - e) invite and answer any questions the project staff may have about the audit.

Conducting Technical Audit

23. For contracts in **Arch SD**, audit officers shall audit, as far as applicable but not necessarily restricted to, the items in the Checklist at Annex A. For contracts in other departments using the Project Administration Handbook for Civil Engineering Works, audit officers should audit, as far as possible but not necessarily restricted to, the items in the Checklist at Annex B. For other contracts, audit officers should prepare a similar checklist with reference to the corresponding laid down procedures/requirements in the department. The Contract Adviser should be consulted in case of doubt.
24. It is usually necessary to carry out file perusals, staff interviews and site visits during the course of the audit. These works shall be so arranged as to minimize disruption to both the project staff and the construction works.
25. Personal checklists and aides-memoire are useful tools to audit officers. However, care must be taken to ensure that they do not restrict enquiry. Audit officers shall always be prepared to follow up other lines of enquiry which could lead to information discovery.
26. All notes, checklists, aides-memoire together with other information found during the audit should be properly kept by the audit officers for future reference when necessary.
27. The following are some useful auditing skills:
 - a) let project staff talk freely. Unless the talk diverts from the topic, audit officers should avoid interrupting as more information may be gathered from the talk;
 - b) do not argue with the project staff or criticize their work. This will only cause ill feelings and could be obstructive to later auditing work;
 - c) do not initiate to tell project staff how to do their work as this may cause ill feeling. However, audit officers when requested by the project staff, should advise the correct procedures to be followed when carrying out their duties;
 - d) ensure that questions are put at the right level. For example, questions about operations are directed to the working level whereas questions about management and control are directed to the management level. This will ensure that the correct answers are obtained and time is not wasted;
 - e) be polite in delivering questions. A rude or suspicious attitude will not generate cooperation from project staff;
 - f) avoid asking leading questions (i.e. questions in the form of a statement and will only require a simple answers of "yes" or "no"). The project

officer who answers such questions may give answers that he/she thinks will best protect him/her, whether or not they are true answers. Instead, audit officers should ask open questions wherever possible. Open questions normally begin with the words: "where.....; what.....; when.....; how.....; why.....; who.....; please show me";

- g) distinguish between facts and opinions in statements expressed or answers provided by project staff;
- h) be cautious of inefficient use of time by following false trails or attention on the minor and unimportant many;
- i) carefully monitor progress of the audit so that the entire scope of the audit is covered as scheduled. Unless new issues with significant implications or non-compliances are found, departure from the original schedule should be avoided; and
- j) try to programme interviews and site visits to fit the project staff's working hours, e.g. lunch break at a particular site may not be the same as that at head office.

Closing Meeting

- 28. At the end of the technical audit but prior to the preparation of the Technical Audit Report, the audit leader shall arrange a Closing Meeting with the project staff. The Meeting should be chaired by the audit leader and, whenever possible, involve the same people who attended the Opening Meeting.
- 29. Before holding the Closing Meeting, the audit leader should carefully review the findings of the audit to ensure that the entire scope of the audit is covered and that all non-compliances found are based on sound and objective evidence.
- 30. At the Closing Meeting, the audit leader shall:
 - a) recapitulate the scope of the audit, the relevant standards used as the basis of the audit and the meaning of a non-compliance;
 - b) state that although many things were found to be in compliance with the standards, only non-compliances and findings of significance will be reported;
 - c) give a disclaimer that it is possible that not all non-compliances which exist were identified during the audit;
 - d) describe the major non-compliances and/or other findings of special interest, and ask project staff to give their views and/or explanations on such non-compliances and/or findings;
 - e) state that all audit findings will be submitted to the Head or Deputy Head of Departments, or equivalent, in the form of a Technical Audit Report;

**and that appropriate recommendations will be included in the Report;
and**

- f) invite and answer any questions that the project staff may have.**

Technical Audit Report

- 31. After the Closing Meeting, the audit leader shall prepare and submit the Technical Audit Report as soon as practicable to the Contract Adviser for endorsement and onward submission to the Head or Deputy Head of Department, or equivalent.**
- 32. For technical audits in Arch SD, the standard proforma Technical Audit Report at Annex C shall be used. For technical audits in all other works departments, the standard proforma Technical Audit Report at Annex D shall be used. The items listed in "Part III - Audit Findings" of these Reports follow the same sequence as the items listed in the corresponding Checklists at Annexes A and B.**
- 33. In preparing the Technical Audit Report, care should be taken to avoid minor non-compliances being reported out of proportion.**

Follow up Actions

- 34. Upon perusal of the Technical Audit Report, the Head or Deputy Head of Department, or equivalent, shall determine the follow up actions in accordance with PAH 7.21.2.4 and 7.21.2.5 .**

Annex A - Checklist for Architectural Services Department Contracts**Abbreviations**

AOTI	Architectural Office Technical Instruction
Arch SD	Architectural Services Department
ASDTI	Architectural Services Department Technical Instruction
BSB	Building Services Branch
ETWB TCW	Environment, Transport and Works Bureau Technical Circular (Works)
FC	Financial Circular
GCC(BW)	General Conditions of Contract for Building Works (1999 Edition)
PAH	Project Administration Handbook for Civil Engineering Works
PAHx.x	First digit = Chapter number. Second digit = Section number
PAHx.x.x	First digit = Chapter number. Second & third digit = Paragraph number
PWDTC	Public Works Department Technical Circular
QSTI	Quantity Surveying Technical Instruction
SPRs	Stores and Procurement Regulations
WBTC	Works Branch Technical Circular/Works Bureau Technical Circular

A. PRE-CONTRACT**ITEMS****REQUIREMENTS****A.1 Contract Documents**

Contract documents and drawings together with the selection and specification of equipment and materials should be prepared with proper care, skill and good professional practice in accordance with the Arch SD Manual and appropriate technical instructions. Bills of Quantities are to be measured in accordance with Hong Kong Standard Method of Measurement of Building Works and Hong Kong Standard Method of Measurement for Building Services.

BSB Instruction No. 6 of 1999 is to be followed on the selection and specification preparation of BS equipment and materials.

A.1 Contract Documents (cont'd)

The project team are required to keep proper records of the following:

- (1) selection of contract types;
- (2) selection of contract form for Specialist Works;
- (3) assessment of contract period and liquidated damages;
- (4) use of Dispute Resolution Advisor.

<u>ITEMS</u>	<u>REQUIREMENTS</u>
A.2 Project Estimates	The estimate of the project should be reasonably accurate, especially for upgrading projects to Category ‘A’. ASDOI 3/93 is relevant.
A.3 Tender Procedures including prequalification, press release, gazette notice, restricted tendering and tender reports	SPRs, FC, Arch SD Manual, other relevant WBTC and ASDOI are to be followed.
A.4 Execution of Contracts	Contract signing procedures in WBTC No. 22/85 and PAH 6.8 and 6.9 are to be followed.
B. SITE AUDIT (During construction)	
<u>ITEMS</u>	<u>REQUIREMENTS</u>
B.1 Statutory notifications	Check notifications to CIC, PCFB and Labour Department.
B.2 Original programme chart	The approval of the original and any subsequently updated works programme bar charts are to be recorded in the Site Record Book.
B.3 Schedule of a. Contract drawings b. Approved Contractor’s drawings	The schedules are to be included in the Site Record Book in accordance with ASDOI 6/79.
B.4 Architect’s Instructions	The issue and the authority to raise Architect’s Instructions is to be in accordance with Arch SD Local Manual No. 6 Chapter 4 and No. 12 Chapter 3 as well as GCC(BW) 60. The financial consequences of late changes in project scope should be particularly noted. All Architect’s Instructions issued are to be recorded in the Site Record Book.
B.5 Additional information, drawings/documents issued to Contractor	All documents (other than the Contract Drawings) issued to the Contractor should be recorded in the Site Record Book in compliance with ASDOI 6/79. GCC(BW) 5(2) should also be followed.

<u>ITEMS</u>	<u>REQUIREMENTS</u>
B.6 Store requisition and delivery notes, allocated and combined requisition vouchers	All Government stores are to be issued to the Contractor in compliance with ASDOI 14/84 and 15/85.
B.7 Samples	All samples should be recorded in the Site Record Book in compliance with ASDOI 6/79. The procedure relating to the approval of samples of materials is set out in Arch SD Local Manual No. 6 and ASDOI 19/78.
B.8 Materials	<p>Materials should be recorded in the Site Record Book in accordance with ASDOI 6/79. The requirements of ASDTI 1/90, as supplemented by 14/90 and 16/90, regarding acceptable materials for use in projects should be followed.</p> <p>Alternative BS equipment and materials submitted by contractor should be approved by project engineer as set out in BSB Instruction No. 2/96.</p> <p>The BS equipment and materials delivered and installed on site are to be checked against the approved equipment/materials as set out in the BSB Instruction No. 2/00.</p> <p>Check compliance with ETWB TCW No. 57/2002 on quality assurance for structural concrete.</p>
B.9 Concreting	The progress of pouring concrete is to be recorded in the Site Record Book in compliance with ASDOI 6/79. The procedure for accepting non-complying concrete under ASDTI 14/87 should be followed.
B.10 Use of Public Works Laboratories	Check compliance with WBTC No. 14/2000 including that any independent laboratory engaged must have no affiliation as a legal entity to the Contractor and its sub-contractors.
B.11 Test results, reports and certificates	The test results are to be recorded in the Site Record Book in accordance with ASDOI 6/79. If any unsatisfactory material or works have been instructed under GCC(BW) 46 to be removed check that the Contractor has met the expense involved. Also, check whether under GCC(BW) 42(3) that the expense has been taken under GCC(BW) 46 to see if the expense has been borne by the Contractor in the event that any tests show that the Contractor has failed to comply with the Contract.

<u>ITEMS</u>	<u>REQUIREMENTS</u>
B.12 Explosives	The procedures for blasting set out in PAH 7.4.3 and 7.21.6 should be followed..
B.13 Contractor's labour return and weather records	The Contractor is to provide daily labour returns in accordance with GCC(BW) 32(3). Inclement weather is to be properly recorded in the Site Record Book in compliance with ASDOI 8/80.
B.14. Qualified tradesman and intermediate tradesman	Check compliance with WBTC No. 13/2002.
B.15 Trip ticket system	Check compliance with procedures for disposal of public fill and C&D waste detailed in WBTC No. 21/2002, ETWB TCW No. 31/2004 or DEVB TCW No. 6/2010, where applicable, including implementation of follow-up actions for non-compliance.
B.16 Contractor's plant	The Contractor's and any Sub-contractor's plant, hired plant, plant brought onto the Site not for the Works should each be recorded separately in the Site Record Book in accordance with ASDOI 6/79. Documented records should be available for checking compliance with GCC(BW) 71, 73 & 74.
B.17 Site diary	The Clerk of Works is to make daily entries in the Site Diary. The Contractor's authorized agent is required to sign the Site Dairy in accordance with GCC(BW) 32(2). The daily site activities should be recorded in compliance with ASDOI 6/79. Any defects and shortcomings of the Contractor in respect of the Works together with any Contractor's queries should be recorded in the Site Record Book in accordance with ASDOI 8/80.
B.18 Site visitor's records	Any comment or instruction given by the supervisory staff, or other senior staff visiting the Site, should be recorded in the Site Record Book in accordance with ASDOI 8/80.
B.19 Works order records (Term Contract only)	Any Works Order for works associated with the Term Contract are to be recorded in the Site Record Book in accordance with ASDOI 6/79.
B.20 Sundry records, handover/test certificates	Handover should be in accordance with Arch SD Local Manual No. 6 Chapter 4 and Manual No. 12 Chapter 3. Other sundry records are to be recorded in the Site Record Book in accordance with ASDOI 6/79.

<u>ITEMS</u>	<u>REQUIREMENTS</u>
B.21 Site meetings	All Site Meetings are to be confirmed by minutes in compliance with Arch SD Local Manual No. 6 Chapter 4. Communications between site supervisory staff and Consultants should be recorded either in the Site Record Book or in the minutes of Site Meetings in accordance with ASDOI 6/80.
B.22 Revised programme charts	A copy of the approved programme and/or revised programme is to be kept on Site. If the rate of progress of the Works or any Section is unsatisfactory, check whether the Architect has informed the Contractor in writing to revise the Programme in accordance with GCC(BW) 51(1).
B.23 Site measurement book	It shall be kept and maintained by the Clerk of Works.
B.24 Site safety	Site staff are to ensure that the SCC for the site safety requirements and relevant sections of the Construction Site Safety Manual (CSSM) are strictly complied and proper records of all safety matters are maintained. WBTC No. 21/99 is relevant.
B.25 Possession of site record	The Contractor is not allowed to enter the Site prior to the Date of Commencement. Arch SD Manual No. 12 Chapter 3 on early handing over the Site to the Contractor should be followed.
B.26 Setting out records	The procedures for setting-out are laid down in Arch SD Local Manual No. 6 Chapter 4.
B.27 Existing services records	The existing services affecting the Works should be removed or diverted without delay as required by ASDOI 14/77.
B.28 Piling records and pile test records	Piling records and pile test records are required to be maintained. When unsatisfactory caisson or other piling work is rectified by the superstructure Contractor, the cost of remedial work and any consequential costs is to be charged against the defaulting piling contractor. Check compliance with particular specifications and relevant technical circular, if any, issued by the department of the project office.

<u>ITEMS</u>	<u>REQUIREMENTS</u>
B.29 Progress of the Works and payment	If the rate of progress of the Works or any Section is unsatisfactory, the Architect should inform the Contractor in writing to expedite the completion of the Works under GCC(BW) 51(1). The procedures set out in ASD Local Manual No. 12 Chapter 3 should be followed. Spot checks on the valuation of interim certificates should be made.
B.30 Record photographs	In accordance with ASDOI 13/83, photographs are to be taken as a record of the Works and the installation of equipment.
B.31 Security on site, records of theft, break-in, etc.	The obligations for Site security, damage, loss or injury to the Works or any Specialist Works, etc. is placed on the Contractor under GCC(BW) 20 & 21.
B.32 Nominated sub-contractors and domestic specialist sub-contractor	To ensure a contractually enforceable chain of responsibility between the Government through Main Contractor to Nominated Sub-contractors and Domestic Specialist Sub-contractors, management of Nominated Sub-contractors should follow the Arch SD Local Manual No. 12 Chapter 3. Check compliance with requirements to employ listed specialist contractors for specified works.
B.33 Site cleanliness	The Contractor is required to remove rubbish and keep the Site clean and tidy in compliance with GCC(BW) 38 and GS Clause 1.60. Under GCC(BW) 35, he should also clear away and remove from the Site all surplus materials and rubbish as soon as practicable after the issue of the completion certificate.
B.34 Obvious violation of statutory acts	The Contractor is required to conform with enactments and regulations in compliance with GCC(BW) 30. Particular attention shall be directed to the hours of piling, employment of illegal labour, etc.
B.35 Record of work by other departments	The Contractor should provide attendance for works carried out by Government departments in compliance with GS Clause 1.42. Records of works carried out by other departments shall be referred to when checking the extension of time awarded to the Contract.

<u>ITEMS</u>	<u>REQUIREMENTS</u>
B.36 Extension of time	Check whether the Contractor’s notice has been given to the Architect in writing and whether the Architect has responded in accordance with GCC. The Practice Note of Arch SD Local Manual No. 12 Annex 3-JA should be followed.
B.37 Liquidated damages	In the event of the Works has not been completed on the completion date or extended completion date check whether the Liquidated Damages has been imposed or the reason for not imposing the Liquidated Damages. Refer to GCC(BW) 52. Check whether the procedure for imposing Liquidated Damages has been carried out in accordance with Practice Notes of Arch SD Local Manual No. 12 Annex 3 - NA.
B.38 Claims	Check whether any notice of claim has been served in writing to the Surveyor in accordance with GCC(BW) 64. Check whether the substantiation of the Contractor’s claim is justified and whether the project team has been responded expeditiously to the claim.
B.39 Sub-contractor Management Plan	Check compliance with the SCC for the Management of Sub-contractors: <ul style="list-style-type: none">i) Contractor’s compliance with the requirements as stipulated in SCCs has been checked. In particular, the SMP submitted contains the information stipulated in the Guidelines on Scope and Contents of SMP at Appendix.ii) Whether the SMP submitted by the Contractor tallies with the actual sub-contracting arrangement on site has been checked (based on records of the relevant items in the Standard Checklist for monitoring of the SMP completed by the Architect/Engineer).iii) Proper records of the Standard Checklists and documentary proof requested by the Architect/Engineer for demonstrating the Contractor’s compliance with the provisions in the SMP are maintained.
B.39A Engagement of sub-contractors registered under the Registered Specialist Trade Contractors Scheme (RSTCS)	Contractor’s compliance with SCC on the engagement of sub-contractors who are registered under the respective trades available in the Primary Register of the RSTCS has been checked.

<u>ITEMS</u>	<u>REQUIREMENTS</u>
B.40 Quality Site Supervision Plan (QSSP)	Implementation of QSSP (including compliance of guidelines of inspection outside Hong Kong, if applicable).
B.41 Independent Inspection Agents	Inclusion of measures and their compliance as required in PAH.
B.42 Report on Contractor's Performance	Compliance with Contractor Management Handbook (CMH): i) Preparation and submission of the Report on Contractor's Performance complied with the procedures outlined in the CMH. ii) Preparation of the Contractor's performance ratings has considered the guidance notes for individual aspects of performance (based on records of Evaluation Standard Checklists* completed by the Reporting Officer for Sections 1 and 2 (i.e. workmanship and progress of the Aspects of Performance, Appendix 4B, CMH).

[Note: *

The Evaluation Standard Checklists should be prepared with reference to Part D, Guidance Notes for Completion of Reports, Appendix 4B of the latest version of the CMH available at DEVB's website.

For more details on the completion of this part of the audit and a sample of the Evaluation Standard Checklist, please refer to SDEV's memo ref. () in ETWB(W) 545/83/02 Pt. 2 dated 17.8.2007.]

C. ASSESSMENT OF CLAIMS AND VALUATION OF VARIATIONS

	<u>ITEMS</u>	<u>REQUIREMENTS</u>
C.1	Extension of time	See Section B Item 36.
C.2	Measurement of variations	The dimensions and the items measured in the variation account should be checked. Ensure that the adjustment for any omissions item has not been missed.
C.3	Authority for the issue of variations	Check that variations have been ordered in writing. Under the General Conditions of Contract, no variation should be made by the Contractor without an order in writing by the Architect. Refer to Arch SD Local Manual No. 12 Chapter 3.
C.4	Valuation of variations	Variations are required to be valued in accordance with GCC(BW) 61. Check the rates for valuation with the contract rates. Pro-rata rates, “star” rates, percentage adjustment, prolongation cost, profit and attendance items on P.C. Sums shall also be checked. The valuation of variation orders issued after completion should be fair and reasonable. Where alternative materials have been used the SCC regarding approval of materials should be noted when checking the valuation of variations.
C.5	Daywork	Under GCC(BW) 62(1) the Architect may order in writing that the variation work is to be executed on a daywork basis. Check to see that the variation order has been valued on the basis of daywork. The daywork sheets are required to be endorsed by the Clerk of Works/Building Services Inspector. The rates for daywork should be reasonable where there are no rates set out in the Contract.

<u>ITEMS</u>	<u>REQUIREMENTS</u>
C.6 Contractual claims	<p>In accordance with GCC(BW) 64, the notice of claim is to be given to the Surveyor in writing within 28 days. The Contractor is required to submit the accounts and details as required by the Surveyor in accordance with GCC(BW) 64(4). The assessment of claims (all extension of time, loss and expense/disruption) should be checked to see whether they have been assessed reasonably in accordance with the relevant GCC Clauses and Practice Notes. The causes, justification and substantiation of the claim should be checked. The adequacy of site records in connection with claims should also be checked.</p> <p>Note: The acceptance of ex-contractual claims (Common Law Claims) should only be made on the advice of Legal Advisory Division of Works Bureau. Check to see why common law claims have arisen and review the assessment of these claims.</p>
C.7 Ex-contractual claims	Check compliance with SPRs.

D. CONTRACT FINAL ACCOUNTS

<u>ITEMS</u>	<u>REQUIREMENTS</u>
D.1 Variations	See Section C Items 1 to 4 inclusive.
D.2 Remeasurement of provisional quantities	Remeasured quantities should be spot checked against “as constructed” drawings. The rates should also be checked.
D.3 Nominated Sub-contractor’s Accounts	The statement of sums payable to the Nominated Sub-contractors should be checked to see whether the Nominated Sub-contractors’ accounts have been prepared properly.
D.4 Claims	See Section C Item 5.
D.5 Contract Price Fluctuations	Price fluctuations are required to be calculated in accordance with GCC(BW) 89, relevant SCC and DEVB TCW No. 4/2021.
D.6 Adjustment of Prime Cost & Provisional Sums	Check the adjustment of Prime Cost & Provisional Sums including the Contingency Sum as well as profit and attendance items. Refer to GCC(BW) 65, 66, 67 & 68.

- D.7 Retention money and maintenance certificate** Retention money is to be adjusted in accordance with GCC(BW) 79(1) and SCC. In compliance with GCC(BW) 79(3) the Surveyor is required to issue a certificate for the payment of Retention Money within 14 days of the date of issue of the maintenance certificate. Check also compliance with GCC(BW) 80 on maintenance certificate.
- D.8 Liquidated damages** If the Contractor fails to complete the Works within the time for completion or such extended time, the Employer is entitled to impose the Liquidated Damages in accordance with GCC(BW) 52. Refer to Practice Note of Arch SD Local Manual No. 12 Annex 3 - NA.
- D.9 Reconciliation of stores items** The quantities of stores items issued to the Contractor should be checked against the actual requirement in accordance with ASDOI 14/84 and 15/85. Any discrepancies including any surplus items which the Contractor has failed to return are required to be charged to the Contractor at the value of the stores + 20% on cost.
- D.10 Other deductions e.g. charges for remedial works** The cost of remedial work and any consequential costs should be charged against the defaulting Contractor. Refer the SCC for piling contracts.
- D.11 Authority to increase the Contract Sum** The necessary approval for any increase in contract sum should follow the Arch SD Local Manual No. 12 Chapter 3 and SPRs. The prior approval of PSTsy is required where an increase in a Contract Sum is required for additional works outside the scope of the Contract but within the approved scope of the Project.
- D.12 Final Account for Re-entered Contracts** Final accounts for re-entered contracts should be prepared in accordance with GCC(BW) 81. Any necessary action to recover amounts owed to the Employer should be checked to see if it has been carried out expeditiously.

**Annex B - Checklist for Contracts of Works Departments
except Architectural Services Department**

Note: For contracts not using the Project Administration Handbook for Civil Engineering Works, the corresponding laid down procedures/ requirements of the department should be used as a basis for auditing.

Abbreviations

DEVB TCW	Development Bureau Technical Circular (Works)
ER	Engineer's Representative
ETWB TCW	Environment, Transport and Works Bureau Technical Circular (Works)
FC	Financial Circular
GCC(CE)	General Conditions of Contract for Civil Engineering Works (1999 Edition)
GS(CE)	General Specification for Civil Engineering Works (1992 Edition)
LWBTC	Lands and Works Branch Technical Circular
PAH	Project Administration Handbook for Civil Engineering Works
PAHx.x	First digit = Chapter number. Second digit = Section number
PAHx.x.x	First digit = Chapter number. Second & third digit = Paragraph number
PS	Particular Specifications
PWDTC	Public Works Department Technical Circular
SPRs	Stores and Procurement Regulations
WBTC	Works Branch Technical Circular/Works Bureau Technical Circular

A. PRE-CONTRACT

ITEMS

REQUIREMENTS

- | | | |
|------------|---|---|
| A.1 | Contract Documents | Contract documents and drawings shall be prepared with proper care, skill and good professional practice in accordance with Chapter 5 of PAH and appropriate technical instructions. Bills of Quantities shall be measured in accordance with the Standard Method of Measurement for Civil Engineering Works (1992 Edition) published by the Hong Kong Government. |
| A.2 | Tender Procedures including prequalification, press release, gazette notice, restricted tendering and tender reports | Chapter 6 of PAH and appropriate technical instructions shall be followed. |

B. CONTRACT ADMINISTRATION

<u>ITEMS</u>	<u>REQUIREMENTS</u>
B.1 Statutory notifications	Check notifications to CIC, PCFB and Labour Department.
B.2 Joint venture	Check submission of joint venture guarantee from incorporated jointed ventures in accordance with ETWB TCW No. 50/2002.
B.3 Engineer's site staff organisation	Check Engineer's site staff to ensure it is the same as that indicated in the organisation chart. For contracts involving pile foundation works, the resident site staff should comply with relevant technical circular, if any, issued by the department of the project office.
B.4 Letter of delegation of Engineer's power to ER	The duties and powers which the Engineer will delegate to the ER should be identified and communicated in writing to the Contractor (PAH 7.4.1) and in compliance with the guidelines established in the relevant WBTCs and ETWB TCW.
B.5 Contractor's superintendence	Check compliance with requirements in GS(CE)/PS on Contractors' staff (PAH 7.4.2).
B.6 Correspondence and files	An overall check on records and correspondence of matters arising under the Contract (PAH 7.5.11), including compliance with Appendix 7.73 on Filing Practice.
B.7 Minutes of meeting	Records maintained in accordance with PAH 7.5.11 and 7.9.4.
B.8 Site instructions	Site instructions should be issued by the Engineer or ER on the standard form shown in PAH Appendix 7.5 (PAH 7.5.8) (check also letter of delegation of power to ER).
B.9 Works programme chart	Requirements under GS(CE) 1.08. Programme of Works prepared and updated in accordance with PAH 7.6.1 and 7.6.2, and GCC(CE) 16.
B.10 Works progress chart	Actual progress marked on Works programme, to comply with PAH 7.5.6.
B.11 Programme and progress of work on utilities	Check compliance with GS(CE) 1.08(4) and 1.24.
B.12 Monthly progress report	Compliance with PAH 7.6.3.

<u>ITEMS</u>	<u>REQUIREMENTS</u>
B.13 Site cleanliness	Compliance with requirements on general site cleanliness, prevention of mosquito breeding, prevention of dust (GS(CE) 1.32 to 1.34)/PS and WBTC No. 6/2002 and ETWB TCW No. 6/2002A.
B.14 Lighting, signing and guarding of road works	Compliance with procedures on temporary traffic arrangements and control (GS(CE) 1.14 and 1.15)/PS.
B.15 Conditions of Excavation Permits	Compliance with the conditions stipulated in the Excavation Permits.
B.16 Claims for extension of time	(a) Check whether notice in writing had been served by the contractor on the Engineer (GCC(CE) 50(1)(a)). (b) Check whether general principles in assessment of claim are followed (PAH 7.8.1.1). (c) Follow the requirements in WBTC No. 20/2000 or Clause 25 of the “General Conditions of Employment of Engineering and Associated Consultants for a Design and Construction Assignment”, where applicable, on Independence of the Engineer and Referral of Variations and Other Commitments.
B.17 Liquidated Damages	In the event of the Works has not been completed on the completion date or extended completion date check whether the Liquidated Damages has been imposed or the reason for not imposing the Liquidated Damages. Refer to GCC(CE)52. Check whether the procedure for imposing Liquidated Damages has been carried out in accordance with PAH 8.2.

<u>ITEMS</u>	<u>REQUIREMENTS</u>
B.18 Report on Contractor's performance	<p>Compliance with Contractor Management Handbook (CMH):</p> <ol style="list-style-type: none">i) Preparation and submission of the Report on Contractor's Performance complied with the procedures outlined in the CMH.ii) Preparation of the Contractor's performance ratings has considered the guidance notes for individual aspects of performance (based on records of Evaluation Standard Checklists* completed by the Reporting Officer for Sections 1 and 2 (i.e. workmanship and progress of the Aspects of Performance, Appendix 4B, CMH). <p>[Note: * The Evaluation Standard Checklists should be prepared with reference to Part D, Guidance Notes for Completion of Reports, Appendix 4B of the latest version of the CMH available at DEVB's website.</p> <p>For more details on the completion of this part of the audit and a sample of the Evaluation Standard Checklist, please refer to SDEV's memo ref. () in ETWB(W) 545/83/02 Pt. 2 dated 17.8.2007.]</p>
B.19 Completion Certificate	<ol style="list-style-type: none">(a) Follow standard forms given in PAH Appendix 7.34.(b) Check release of security deposit or surety bond (GCC(CE) 12). Standard form for release of surety bond given in PAH Appendix 7.35 (PAH 7.18.2.4).(c) Compliance with GCC(CE) 53.
B.20 Retention money and maintenance certificate	<ol style="list-style-type: none">(a) Standard form given in PAH Appendix 7.36 (PAH 7.18.3.3).(b) Compliance with GCC(CE) 79.(c) Compliance with GCC(CE) 80.
B.21 Report on completion of contract	<p>To be issued within one month of the issue of the final payment certificate. Standard form given in PAH Appendix 7.38 (PAH 7.18.3.5).</p>
B.22 Quality Site Supervision Plan (QSSP)	<p>Implementation of QSSP (including compliance of guidelines of inspection outside Hong Kong, if applicable).</p>

<u>ITEMS</u>	<u>REQUIREMENTS</u>
B.23 Independent Inspection Agents	Inclusion of measures and their compliance as required in PAH.
C. GENERAL RECORDS	
<u>ITEMS</u>	<u>REQUIREMENTS</u>
C.1 Surety bond	Compliance with GCC(CE) 12.
C.2 Insurance Policies - Care of the Works - Third Party - Professional Indemnity Insurance	Compliance with relevant Special Condition of Contract and ETWB TCW No. 9/2007, as appropriate.
C.3 Sub-contracting	Compliance with the requirement to employ listed specialist contractor for specified works and the requirements in SETW's memo dated 22 August 2002.
C.4 Possession of site records	Relevant details of the handing over of the Site should be confirmed in writing to the Contractor (PAH 7.3.1).
C.5 Site survey before the commencement of the Works	The survey results should be agreed by the Engineer and the Contractor, and recorded in the form of drawings (PAH 7.3.2).
C.6 Setting out records	The Dimensioned Plan, with records on control points and bench marks, should be issued as a contract drawing to the Contractor (PAH 7.3.2).
C.7 Sets of contract documents	One certified true copy of the signed contract documents including one set of original contract drawings should be kept in the site office. Standard documents forming part of the contract but are not bound in the signed documents should also be kept in the site office (PAH 7.5.2).
C.8 Supplementary agreement	Compliance with PAH 7.13.4.

<u>ITEMS</u>	<u>REQUIREMENTS</u>
C.9 Labour returns and wages	<ul style="list-style-type: none"> (a) The Contractor should provide a daily return of labour on standard form GF 527, of which the wage columns should be completed by the Contractor at the end of each month. Three copies of the form should be prepared. (b) Carry out spot checks on actual numbers of labourers employed by cross-reference to the site diary. (c) Records should be kept up-to-date. (d) Compliance with GS(CE) 1.28/PS, PAH 7.5.16 and GCC(CE) 32(3).
C.10 Labour strength chart	Daily record, in graphical form, of the total number of Contractor's workforce on site (PAH 7.5.18(l)).
C.11 Qualified tradesman and intermediate tradesman	Compliance with WBTC No. 13/2002.
C.12 Site safety records and safety plans	<ul style="list-style-type: none"> (a) Check whether the Contractor had employed a safety officer or safety supervisor (PAH 7.11.2). (b) Check safety reports, if any. (c) Compliance with GCC(CE) 20 - adequate lighting, fencing, etc. (d) Compliance with Construction Site Safety Manual. (e) Check submission and updating of safety plans, if any.
C.13 Accident records	<ul style="list-style-type: none"> (a) Check and record the number of accidents since last visit and since commencement of Works. (b) Accident records prepared in accordance with PAH 7.11.5 and GCC(CE) 27.
C.14 Noise control, Construction Noise Permit and prevention of air and water pollution	Compliance with PAH 7.12.

<u>ITEMS</u>	<u>REQUIREMENTS</u>
C.15 Blasting records	(a) Compliance with PAH 7.21.6 and GS(CE)6.11. (b) Standard form for Shotfirers Charging Details given in PAH Appendix 7.42.
C.16 Diver's report, marine work quantity record	Compliance with PAH 7.5.18.
C.17 Checking of Temporary Works	(a) The ER is to carry out all necessary checks to ensure that the proposed temporary works do not have a detrimental effect on the permanent works, if necessary in consultation with the project engineer (PAH 7.11.4 and WBTC No. 3/97). (b) The ER is to ensure that those temporary works subject to an independent checking are so checked by a qualified person and the requisite certificates obtained (WBTC No. 3/97).
C.18 Designs by Contractor	Check strict compliance with procedures laid down in PAH 7.20, DEVB TCW Nos. 9/2007 and 3/2014.
C.19 Trip ticket system	Compliance with procedures for disposal of public fill and C&D waste detailed in WBTC No. 21/2002, ETWB TCW No. 31/2004 or DEVB TCW No. 6/2010, where applicable, including implementation of follow-up actions for non-compliance.
C.20 Waste management plan	Submission and monitoring of waste management plan and related records in accordance with ETWB TCW No.19/2005.

<u>ITEMS</u>	<u>REQUIREMENTS</u>
C.21 Record drawings	<ul style="list-style-type: none"><li data-bbox="655 264 1358 409">(a) A set of drawings comprising the contract drawings, all revised drawings and additional drawings issued to the Contractor should be designated for record purposes (PAH 7.5.3).<li data-bbox="655 450 1358 555">(b) As-constructed details deviated from the drawings should be marked in red ink on the above set of drawings (PAH 7.5.3).<li data-bbox="655 595 1358 701">(c) Record survey on finished works should be incorporated into the above set of drawings (PAH 7.5.3).<li data-bbox="655 741 1358 882">(d) On completion of the Works, the set of record drawings checked and endorsed by ER and passed to the drawing office for production of 'as-constructed' drawings (PAH 7.5.3).
C.22 Site diary	<ul style="list-style-type: none"><li data-bbox="655 922 1398 1140">(a) Standard form GF 536, which is bound in a book, shall be used. For contracts which are exceptionally large or complex in nature, a special diary format may be devised for use after consultation with the Contract Adviser (PAH 7.5.4).<li data-bbox="655 1180 1398 1321">(b) The site diary shall contain an accurate and concise record of the progress of Works, plant and labour employed, etc, all in accordance with PAH 7.5.4.<li data-bbox="655 1361 1398 1541">(c) The Inspector of Works and the Contractor's authorised agent or representative should sign the site diary daily. The ER should check and initial the site diary at least once a week (PAH 7.5.4 and GCC(CE) 32(2)).
C.23 Inclement weather daily report	Inclement weather daily report completed by a member of the site staff of rank of Assistant Inspector of Works (AIOW) or above, and countersigned by the ER. Standard form in PAH Appendix 7.4 to be used. Records should be kept up-to-date (PAH 7.5.7).
C.24 Inventory of furniture and equipment records	Standard form in PAH Appendix 7.8 should be used (PAH 7.5.10).

<u>ITEMS</u>	<u>REQUIREMENTS</u>
C.25 Record photographs	<p>(a) Requirements under GS(CE) 1.55.</p> <p>(b) Photographs should be taken before commencement of the works and regularly during the course of the Contract (PAH 7.5.12).</p> <p>(c) The back of each photograph should contain information on the date the photograph was taken, exact location and description of the subject photographed and purpose of the photograph. (PAH 7.5.12).</p> <p>(d) Select prints shall be authenticated by the Contractor and the ER by signing and dating on the back of the prints (PAH 7.5.12).</p> <p>(e) Where CCTV or video records are required in the Contract, such records should be properly kept.</p>
C.26 Log books for contract transport	Standard log book GF 100 should be properly maintained (PAH 7.5.17) and regularly checked in accordance with LWBTC No. 11/84.
C.27 Request for inspection and survey check (RISC)	<p>Standard form in PAH Appendix 7.82A (for GCC contracts) or Appendix 7.82B (for NEC contracts) should be used. (PAH 7.5.13 and GCC(CE) 44).</p> <p>Random checking of the RISC forms - Depending on the number of RISC forms submitted in the audit period which has not yet been covered by technical audit before, the auditor should determine the sampling size. The RISC forms to be checked should be selected by the auditor.</p>
C.28 Earthwork quantity record	Compliance with PAH 7.5.18.
C.29 Records of vesting, removal and hiring and hire-purchase of constructional plant	Documented records should be available for checking compliance with GCC(CE) 71, 73 & 74.

<u>ITEMS</u>	<u>REQUIREMENTS</u>
C.30 Sub-contractor Management Plan	<p>Check compliance with the SCC for the Management of Sub-contractors:</p> <ul style="list-style-type: none"> i) Contractor's compliance with the requirements as stipulated in SCCs has been checked. In particular, the SMP submitted contains the information stipulated in the Guidelines on Scope and Contents of SMP at Appendix. ii) Whether the SMP submitted by the Contractor tallies with the actual sub-contracting arrangement on site has been checked (based on records of the relevant items in the Standard Checklist for monitoring of the SMP completed by the Architect/Engineer). iii) Proper records of the Standard Checklists and documentary proof requested by the Architect/Engineer for demonstrating the Contractor's compliance with the provisions in the SMP are maintained.
C.30A Engagement of sub-contractors registered under the Registered Specialist Trade Contractors Scheme (RSTCS)	Contractor's compliance with SCC on the engagement of sub-contractors who are registered under the respective trades available in the Primary Register of the RSTCS has been checked.

D. MATERIAL AND TESTING RECORDS

<u>ITEMS</u>	<u>REQUIREMENTS</u>
D.1 Use of Public Works Laboratories	Compliance with WBTC No. 14/2000 including that any independent laboratory engaged must have no affiliation as a legal entity to the Contractor and its sub-contractors.
D.2 Metallic site hoardings and signboards	Compliance with WBTC No. 19/2001.
D.3 Record of material and equipment provided by Government	Standard record book GF 537 should be used (PAH 7.5.14).

<u>ITEMS</u>		<u>REQUIREMENTS</u>
D.4	Material on site records	<p>(a) Check whether the materials on site records are up-to-date by reference to the delivery notes/records (PAH 7.5.18(k)).</p> <p>(b) Check whether the materials on site are properly certified in interim payment taking into account of the wastage factor (PAH 7.5.18(k)) and GCC(CE) 79(1)(c).</p>
D.5	Piling records and pile test records	Examples of forms for pile driving records and pile loading test records are given in GS(CE) Appendix 8 (PAH 7.5.18(a)). Compliance with particular specifications and relevant technical circular, if any, issued by the department of the project office.
D.6	Soil and rock conditions records	Full records on such should be kept as Works progress (PAH 7.5.18(b))
D.7	Soil compaction test record and summary	Standard form in PAH Appendices 7.11 and 7.12 should be used (PAH 7.5.15(d)).
D.8	Settlement and movement records	Compliance with PAH 7.5.18(c).
D.9	Quality assurance for structural concrete	Compliance with ETWB TCW No. 57/2002.
D.10	Concrete casting records	Record maintained in accordance with PAH 7.5.18(d).
D.11	Concrete test cube register	One register should be kept for each grade of concrete with the same mix design used in the Contract. Standard form in PAH Appendix 7.10 to be used (PAH 7.5.15(b)).
D.12	Concrete compression test requests and certificates	Request forms for the test should be checked by the IOW and delivered to the Public Works Laboratory with the concrete cubes to be tested (PAH 7.5.15(a)).
D.13	Site crushers monthly return	Compliance with paragraph 21.25 of Chapter 7 of the PAH.
D.14	Bar bending schedules	<p>(a) Prepared on standard form shown in PAH Appendix 7.13.</p> <p>(b) Updated in same manner as record drawings (PAH 7.5.18(e)).</p>

<u>ITEMS</u>		<u>REQUIREMENTS</u>
D.15	Reinforcement test records	Compliance with PAH 7.5.15.
D.16	Tensioning record for pre-stressed concrete	Suggested format given in PAH Appendix 7.14 (PAH 7.5.18(f)).
D.17	Bearing and expansion joint records	A clear record of the performance of the bearings and expansion joints should be kept using the form shown at PAH Appendix 7.17 (PAH 7.5.18(j)).
D.18	Record of bituminous materials delivered to Site	Compliance with PAH 7.5.18(g). Suggested format given in PAH Appendix 7.15.
D.19	Test records of bituminous materials	Proper test records are kept.
D.20	Water and drainage pipeline test records	Compliance with PAH 7.5.18 (h) and (i).

E. FINANCIAL ADMINISTRATION

<u>ITEM</u>	<u>REQUIREMENTS</u>	
E.1	Site measurement book	The standard site measurement book to be used is GF 534. Entries should be made by the site supervisory staff or Survey Officer (Quantity) and signed by authorized representatives of both the Contractor and the Engineer (PAH 7.5.5).
E.2	Curves of expected expenditure and actual expenditure	Prepared and updated in accordance with PAH 7.6.5.

<u>ITEM</u>	<u>REQUIREMENTS</u>
E.3 Interim payment record book; payment certificate; interim payment abstract sheets	<ul style="list-style-type: none">(a) The date of certifying interim payments and the due date for payment to the Contractor should be in accordance with GCC(CE) 79(1).(b) the format of Contractor's statement should be clear and well organised (e.g. payment on-account should be clearly indicated showing rates/prices).(c) The ER should check and sign the Contractor's submitted accounts (PAH 7.7.2.2).(d) The percentage of certified value retained, the limit of retention money and the minimum amount of interim certificate stated in the Appendix to Form of Tender should be correctly applied (GCC(CE) 79(1) & (2)).(e) The calculation of contract price fluctuations should be in order (DEVB TCW No. 4/2021 and GCC(CE) 89).(f) Check whether liquidated damages should be deducted from the payment certificate by making reference to the extended completion date. (PAH 7.8.2 and GCC(CE) 52).(g) Standard forms for Engineer's interim payment and final payment certificates and contract price fluctuations shown at PAH Appendices 7.19 and 7.20 should be used (PAH 7.7.2.2 and 7.7.3).(h) the number of items paid on-account is recorded. The Engineer should assess the rates for these items as soon as practicable.(i) Payment on preliminaries items should be properly certified and substantiated. (e.g. insurances, etc.)(j) Payment for measured items should be supported by measured quantities or if not possible, at least by rough measurement.(k) Issue of certificate for the payment of retention money should be in accordance with GCC(CE) 79(3). Standard form in PAH Appendices 7.37.1 and 7.37.2 should be used.(l) Issue of final payment certificate should be in

<u>ITEM</u>	<u>REQUIREMENTS</u>
	accordance with GCC(CE) 79(6).
E.4 Variations	<p>(a) Prior approval from directorate officer should be sought for variations estimated to exceed the value stated in WBTC No. 20/2000. For values less than that stated, no prior approval is required provided that no increase in contract sum is resulted (PAH 7.13.1).</p> <p>(b) Variations ordered in accordance with GCC(CE) 60. Standard form in PAH Appendix 7.21 should be used (PAH 7.13.2).</p> <p>(c) For approval for increase in contract sum, requirements laid down in SPRs shall be followed (PAH 7.13.1.).</p>
E.5 Valuation of variations ordered	<p>(a) Valuation of variations should be in accordance with GCC(CE) 61 in a timely manner.</p> <p>(b) Administrative procedures under PAH 7.13.3 shall be followed. Standard forms for valuation of variations and current financial statement as shown at PAH Appendices 7.22 and 7.23 respectively should be used (PAH 7.13.3).</p> <p>(c) Check letter of delegation for issue of variation orders and their valuation.</p>
E.6 Daywork	<p>(a) Site instructions standard form or variation order standard form should be used for ordering work paid on daywork basis (PAH 7.5.8, 7.13.1 and 7.13.2).</p> <p>(b) Standard forms on Dayworks Daily Record and Dayworks Monthly Summary should be used. (PAH 7.5.9 and Appendices 7.6 and 7.7 and GCC(CE) 62(5)).</p> <p>(c) Dayworks Daily Records should be agreed, or rejected with stated reasons and signed by the ER (GCC(CE) 62(4)).</p>

<u>ITEM</u>	<u>REQUIREMENTS</u>
E.7 Monetary claims records	<p>(a) Check whether notice in writing had been served on the Engineer (GCC(CE) 64(1) and (2)).</p> <p>(b) First interim account and further up-to-date accounts should be submitted by the Contractor (GCC(CE) 64(4)).</p> <p>(c) Check whether major principles in assessment of claims are in order (PAH 7.14.2).</p> <p>(d) Authority to settle claims (SPRs and PAH 7.14.3).</p> <p>(e) Follow reporting system in WBTC No. 20/2000 or Clause 25 of the “General Conditions of Employment of Engineering and Associated Consultants for a Design and Construction Assignment”, where applicable.</p> <p>(f) Standard letter in PAH Appendix 7.25 for certifying claims should be used, as far as practicable.</p>
E.8 Request for mediation	Compliance with GCC(CE) 86(1), WBTC No. 4/99 and PAH 7.21.4.
E.9 Request for arbitration	Compliance with GCC(CE) 86(2) and PAH 7.21.4.

Annex C - Proforma Audit Report for Architectural Services Department contracts**TECHNICAL AUDIT REPORT No. xx/200y
Architectural Services Department****PART I - CONTRACT DETAILS**

1. Programme No.	:	_____		
2. Contract No.	:	_____		
3. Contract Title	:	_____		
4. Nature of Work	:	Capital/maintenance work*		
5. Branch managing contract	:	Architectural/Building Services/Structural Engineering/Quantity Surveying/Property Services*		
6. Consultants, if any (please specify role)	:	_____		
7. Architect for the Contract	:	_____		
8. Surveyor for the Contract	:	_____		
9. Architect's Representative(s)	:	_____		
10. Surveyor's Representative(s)	:	_____		
11. Contractor	:	_____		
12. Brief description of the Works	:	_____		
13. Date for commencement of the Works	:	_____		
			<u>Section 1</u>	<u>Section 2**</u>
				<u>Whole</u>
14. Original date of completion of the Works	:			
15. Extended date for completion of the Works	:			
16. Extension of time granted				
- for inclement weather	:			
- for variations	:			
- others (please specify)	:			
		Total	(days)	(days)
			(days)	(days)

* *Delete whichever is inappropriate*** *Add additional Sections where applicable*

	<u>Section 1</u>	<u>Section 2**</u>	<u>Whole</u>
17. Anticipated date for completion of the Works :			
18. Certified date of completion :			
19. Original Contract Sum : \$ _____	\$ _____	\$ _____	\$ _____
20. Approved Revised Contract Sum (if any) : \$ _____	\$ _____	\$ _____	\$ _____
21. Estimated Final Contract Sum : \$ _____	\$ _____	\$ _____	\$ _____
22. Gross amount certified in last payment certificate (Certificate No. _____***) : \$ _____	\$ _____	\$ _____	\$ _____

** Use separate sheet if more than two sections

*** Insert Certificate No.

PART II - SITE VISITS AND PROJECT OFFICERS INTERVIEWED

23. This is the 1st/ 2nd/ 3rd/ 4th/.....**** audit on the Contract.
Site visits for this audit were made on _____ (dates).
24. Site visits of the last audit were made on _____ (dates).
25. Project officers interviewed for this audit:

<u>Name</u>	<u>Grade</u>
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**** Delete or insert as appropriate

PART III - AUDIT FINDINGS

26. The following work stages were audited:
- a) tender documents preparation []
 - b) tendering []
 - c) tender assessment []
 - d) construction []
 - e) final account including claims settlement []

Item	Compliance with Requirements			Remarks
	Yes	No	N/A	
PRE-CONTRACT				
27. Contract documents				
28. Project estimates				
29. Tender procedure				
30. Execution of contract				
SITE AUDIT				
31. Statutory notifications				
32. Original programme chart				
33. Schedule of :				
a) contract drawings				
b) approved contractor's drawings				
34. Site instructions				
35. Additional information, drawings or documents issued to Contractor				
36. Store requisition and delivery notes; allocated and combined requisition vouchers				
37. Samples				
38. Materials :				
a) general				
b) concrete				
c) cement				
d) sand				
e) reinforcement				
f) structural				
g) electrical				
h) air-conditioning				

Item	Compliance with Requirements			Remarks
	Yes	No	N/A	
i) fire services				
j) lifts				
k) other BS installations				
39. Concreting				
40. Use of Public Works Laboratories				
41. Test results, reports and certificates				
a) concrete cubes				
b) concrete cores				
c) steel reinforcement				
d) structural steel				
e) drains & stacks				
f) asphalt & membrane				
g) density in compact fill				
h) electrical				
i) air-conditioning				
j) fire services				
k) lifts				
l) other BS installations				
42. Explosive				
43. Contractor's labour return and weather records				
44. Qualified tradesman and intermediate tradesman				
45. Trip ticket system				
46. Contractor's plant				
47. Site diary				
48. Site visitor's records				

Item	Compliance with Requirements			Remarks
	Yes	No	N/A	
49. Works Orders records				
50. Sundry records, handover/test certificates				
51. Site meetings				
52. Revised programme charts				
53. Site measurement book				
54. Site safety diary				
55. Possession of Site records				
56. Setting out records				
57. Existing services records				
58. Piling records and pile test records				
59. Progress of the Works and payment situation				
60. Record photographs				
61. Security on site, record of theft, break-in, etc.				
62. Sub-contracting				
62A. Sub-contractor Management Plan a) Submission b) Site Compliance				
62B. Engagement of sub-contractors registered under the Registered Specialist Trade Contractors Scheme				
63. Site cleanliness				
64. Violation of statutory acts				
65. Records of work carried out by other departments				
66. Extension of time				
67. Liquidated damages				
68. Claims				

Item	Compliance with Requirements			Remarks
	Yes	No	N/A	
<p>69. Report on Contractor's performance</p> <p>a) Procedures compliance</p> <p>b) Guidance notes for individual aspects of performance considered (based on records of Sections 1 and 2 (i.e. workmanship and progress) of the Aspects of Performance, Appendix 4B, Contractor Management Handbook)</p> <p>ASSESSMENT OF CLAIMS AND VALUATION OF VARIATIONS</p> <p>70. Extension of time</p> <p>71. Measurement of the variations</p> <p>72. The authority for ordering the variations</p> <p>73. Valuation of variations</p> <p>74. Daywork</p> <p>75. Contractual claims</p> <p>76. Ex-contractual claims</p> <p>CONTRACT FINAL ACCOUNTS</p> <p>77. Variations</p> <p>78. Remeasurement of provisional quantities</p> <p>79. Nominated sub-contractor's accounts</p> <p>80. Claims</p> <p>81. Contract price fluctuations</p> <p>82. Adjustment of P.C. & Provisional Sums</p> <p>83. Retention money and maintenance certificate</p> <p>84. Liquidated damages</p>				

Item	Compliance with Requirements			Remarks
	Yes	No	N/A	
85. Reconciliation of store items				
86. Other deductions e.g. charges for remedial works				
87. Authority to increase contract sum				
Others (please specify)				

PART IV - COMMENTS ON CORRECTIVE ACTIONS TAKEN SINCE THE LAST AUDIT

**ANNEX D - Proforma Audit Report for contracts of works departments except
Architectural Services Department**

**TECHNICAL AUDIT REPORT No. xx/200y
_____ Department**

Note: For maintenance contracts or contracts not using the Chapter 7 of Project Administration Handbook for Civil Engineering Works, the items in Part III may be revised appropriately to tie in with the laid down procedures/requirements of the department. The Contract Adviser should be consulted in case of doubt.

PART I - CONTRACT DETAILS

1. Contract No.	:	_____		
2. Contract Title	:	_____		
3. Nature of Work	:	Capital / maintenance work*		
4. Division managing contract	:	_____		
5. Engineer for the Contract	:	_____		
6. Engineer's Representative	:	_____		
7. Consultants (to be completed if different from 5 above/please specify role)	:	_____		
8. Contractor	:	_____		
9. Brief description of the Works	:	_____		

10. Date for commencement of the Works	:	_____		
		<u>Section 1</u>	<u>Section 2**</u>	<u>Whole</u>
11. Original date of completion of the Works	:			
12. Extended date for completion of the Works	:			
13. Extension of time granted				
- for inclement weather	:			
- for variations	:			
- others (please specify)	:			
Total	:	_____ (days)	_____ (days)	_____ (days)

* *Delete whichever is inappropriate (Note that term contracts are not included here as they can be for capital or maintenance works)*

** *Add additional Sections where applicable*

	<u>Section 1</u>	<u>Section 2**</u>	<u>Whole</u>
14. Anticipated date for completion of the Works :			
15. Certified date of completion of the Works :			
16. Original Contract Sum : \$	_____	\$ _____	\$ _____
17. Approved Revised Contract Sum (if any) : \$	_____	\$ _____	\$ _____
18. Estimated Final Contract Sum : \$	_____	\$ _____	\$ _____
19. Gross amount certified in last payment certificate (Certificate No. ____ ***) :	\$ _____	\$ _____	\$ _____

** Use separate sheet if more than two Sections

*** Insert Certificate No.

PART II - SITE VISITS AND PROJECT OFFICERS INTERVIEWED

20. This is the 1st/ 2nd/ 3rd/ 4th/.....**** audit on the Contract.
Site visits for this audit were made on _____ (dates).
21. Site visits of the last audit were made on _____ (dates).
22. Project staff interviewed for this audit:

<u>Name</u>	<u>Grade</u>
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**** Delete or insert as appropriate

PART III - AUDIT FINDINGS

23. The following work stages were audited:
- | | |
|--|-----|
| a) tender documents preparation | [] |
| b) tendering | [] |
| c) tender assessment | [] |
| d) construction | [] |
| e) final account including claims settlement | [] |

Item	Compliance with Requirements			Remarks
	Yes	No	N/A	
PRE-CONTRACT				
24. Contract documents				
25. Tender procedures including pre-qualification, press release, gazette notice, restricted tendering and tender reports				
CONTRACT DOCUMENTS				
26. Statutory notifications				
27. Joint venture				
28. Engineer's site staff organization				
29. Letter of delegation of Engineer's power to ER				
30. Contractor's superintendence				
31. Correspondence and files				
32. Minutes of meeting				
33. Site instructions				
34. Works programme chart				
35. Works progress chart				
36. Programme and progress of work on utilities				
37. Monthly progress report				
38. Site cleanliness				
39. Lighting, signing & guarding of roadworks				
40. Conditions of excavation permits				
41. Claims for extension of time				
42. Liquidated Damages				
43. Report on Contractor's performance				
a) Procedures compliance				

Item	Compliance with Requirements			Remarks
	Yes	No	N/A	
<p>b) Guidance notes for individual aspects of performance considered (based on records of Sections 1 and 2 (i.e. workmanship and progress) of the Aspects of Performance, Appendix 4B, Contractor Management Handbook)</p> <p>44. Completion certificate</p> <p>45. Retention Money and maintenance certificate</p> <p>46. Report on completion of Contract</p> <p>GENERAL RECORDS</p> <p>47. Surety bond</p> <p>48. Insurance Policies</p> <ul style="list-style-type: none"> - Care of the Works - Third Party - Professional Indemnity Insurance <p>49. Sub-contracting</p> <p>49A. Sub-contractor Management Plan</p> <ul style="list-style-type: none"> a) Submission b) Site Compliance <p>49B. Engagement of sub-contractors registered under the Registered Specialist Trade Contractors Scheme</p> <p>50. Possession of site records</p> <p>51. Site survey before the commencement of the Works</p> <p>52. Setting out records</p> <p>53. Sets of contract documents</p> <p>54. Supplementary agreement</p> <p>55. Labour returns and wages</p> <p>56. Labour strength chart</p>				

Item	Compliance with Requirements			Remarks
	Yes	No	N/A	
57. Qualified tradesman and intermediate tradesman				
58. Site safety records and safety plans				
59. Accident records				
60. Noise control, Construction Noise Permit and prevention of air and water pollution				
61. Blasting records				
62. Diver's report, marine work quantity record				
63. Checking of Temporary Works				
64. Designs by Contractor				
65. Trip ticket system				
66. Waste management plan				
67. Record drawings				
68. Site diary				
69. Inclement weather daily report				
70. Inventory of furniture and equipment records				
71. Record photographs, CCTV and video record				
72. Log books for contract transport				
73. Requests for inspection and survey check				
74. Earthwork quantity record				
75. Records of vesting, removal and hiring and hire-purchase of Constructional Plant				
MATERIAL AND TESTING RECORDS				
76. Use of Public Works Laboratories				

Item	Compliance with Requirements			Remarks
	Yes	No	N/A	
77. Metallic site hoardings and signboards				
78. Record of material and equipment provided by the Employer				
79. Material on site records				
80. Piling records and pile test records				
81. Soil and rock conditions records				
82. Soil compaction test record and summary				
83. Settlement and movement records				
84. Quality assurance for structural concrete				
85. Concrete casting records				
86. Concrete test cube register				
87. Concrete compression test requests/certificates				
88. Site crushers monthly return				
89. Bar bending schedules				
90. Reinforcement test records				
91. Tensioning record for prestressed concrete				
92. Bearing and expansion joint records				
93. Record of bituminous materials delivered to Site				
94. Test records of bituminous materials				
95. Water and drainage pipeline test records				
FINANCIAL ADMINISTRATION				
96. Site measurement book				

Item	Compliance with Requirements			Remarks
	Yes	No	N/A	
97. Curves of expected expenditure and actual expenditure				
98. Interim payment record book; payment certificate; interim payment abstract sheets				
99. Variations				
100. Valuation of variations ordered				
101. Daywork				
102. Monetary claims records				
103. Request for mediation				
104. Request for arbitration				
Others (please specify)				

PART IV - COMMENTS ON CORRECTIVE ACTIONS TAKEN SINCE THE LAST AUDIT

**APPENDIX 7.40 TECHNICAL AUDIT MANUAL FOR CONSULTANCY
AGREEMENTS
(Subsumed from WBTC No. 9/2002)**

**Technical Audit Manual
for
Consultancy Agreements**

Technical Audit

1. For consultancy agreements, a technical audit essentially examines whether laid down procedures and requirements are observed, and ascertains the need for corrective and preventive actions. This is a compliance audit. The findings should be reviewed regularly and appropriate follow-up actions should be taken.

Objectives

2. The following objectives should be borne in mind when carrying out technical audits on consultancy agreements:
 - (a) to check whether laid down procedures and requirements are strictly complied with, and if not, the reasons for non-compliance. If any laid down procedures are found out-dated or no longer practicable during the course of the audit, such procedures should be brought to the attention of the respective consultants selection board; and
 - (b) where laid down procedures and requirements are not followed by project officers, to recommend measures which may be necessary to correct the irregularities and prevent future repetition.

Auditing Officers

3. The auditing officers should be assigned by the Head or Deputy Head of Department, or equivalent. They should be at senior professional rank.

Consultancy Agreements to be Audited

4. The auditing officers shall, unless otherwise directed by the Head or Deputy Head of Department, or equivalent, determine which consultancy agreements are to be audited based on the following criteria:
 - (a) consultancy agreements should be chosen in proportion to the number of agreements currently undertaken by each Division/Unit as far as practicable;
 - (b) consultancy agreements of which the nature of service is new to Government or very complex;
 - (c) consultancy agreements for strategic projects of significance; and
 - (d) consultancy agreements under which the consultants have been given unsatisfactory performance reports. Priority should be given to the consultancies having the worst performance report.

Programme of Audits

5. The auditing officers should prepare regular Consultancy Agreement Audit Activity Reports to the Head or Deputy Head of Department, or equivalent, copied to Works Bureau. These reports should be prepared quarterly or half-yearly depending on the number of audits carried out and planned. They should show the audits carried out against the original programme during the last reporting period and the programme for the next.

Planning and Preparation for Audits

6. Before conducting the audit, the auditing officer shall:
 - (a) review the last audit report, if any, on the consultancy agreement, and note the areas of non-compliance and any follow up actions required to be taken;
 - (b) define the scope of the audit;
 - (c) prepare a time schedule indicating the dates on which the audit will take place and the length of the audit. Preliminary contacts with the project officers concerned may be helpful in fixing mutually convenient dates; and
 - (d) notify in writing the project officer of the consultancy agreement to be audited. Such notification shall include the time schedule of the audit, the name of the auditing officer and the relevant documents (e.g. project files, agreement documents, payment record, programme, reports etc.) required to be made available for pre-audit and post-audit reading by the auditing officer.

Opening Meeting

7. The audit shall start with an opening meeting, which serves as an introduction between the auditing officer and the project officer of the consultancy agreement to be audited.
8. At the opening meeting, the auditing officer shall:
 - (a) introduce himself and other auditing officers, if any;
 - (b) briefly describe the scope and time schedule of the audit, the relevant standards to be used as the basis of the audit, the meaning of a non-compliance and the method of reporting;
 - (c) ascertain which project officer is responsible for which parts/aspects of the consultancy agreement to be audited;
 - (d) explain that before the preparation of the audit report, the project officer

will be informed at the Closing Meeting of any major non-compliance found during the audit, and will be asked to give their views and/or explanations for such non-compliance; and

- (e) invite and answer any questions the project officers may have about the audit.

Scope of Audits

9. The Architectural and Associated Consultants Selection Board (AACSB) and the Engineering and Associated Consultants Selection Board (EACSB) are appointed by the Secretary for the Treasury for the selection and appointment of the relevant consultants. The procedures are set out in the relevant Handbooks. Auditing officers should not attempt to duplicate the checks and controls already exercised by the two Boards. Effort should be concentrated on the items which are normally not included in the submissions to the Boards and which will not be checked by the Boards. For consultancy agreements which are not necessary to be submitted to the Boards for approval, the audits should cover those items which correspond to the submission to the Boards. It should be noted that the scope of audit would heavily depend on the Brief of the consultancy agreement, which varies from one agreement to another. Auditing officers should exercise his professional judgement to determine the scope of audit on a case-by-case basis. Some common items are shown in the following paragraphs but they should not be regarded as an exhaustive list.

The Brief

10. The Brief shall define clearly the scope, nature and timing of the services to be provided by the consultants, and the responsibilities to be assumed. It shall describe exactly what is to be achieved and what the output is. Other requirements, constraints, assumptions and methodology must be clearly defined.
11. The Brief shall be prepared in consultation with all interested offices and consistent with the requirements of the project as approved by the Public Works Sub-Committee or other authority. For EACSB consultancy, it shall be finalised only after the pre-submission meeting with the shortlisted consultants are held.

Execution of Consultancy Agreement

12. The persons nominated to sign the agreement shall have the authority to do so. The legal status of the consultants should be clarified. Reference should be made to the Stores and Procurement Regulations 505 regarding the execution of the agreement.

Delegation of Powers

13. The powers of the Director's Representative (DR) are defined in the consultancy agreement. It is expected that some of these powers will be delegated to the project officers responsible for the day-to-day management of the consultants. Such delegation should be made known to the consultants.

Programme

14. The consultant shall submit a draft programme for DR's approval in accordance with the General Conditions of Employment (GCE). This Programme shall form the basis for controlling and monitoring the progress, and shall not be revised without the approval of the DR.

Progress Report

15. The consultant should generally be required to submit progress reports at regular intervals in a format to be agreed by the DR. This report should indicate the progress of the reporting period against the agreed Programme.

Design Checking Report

16. In accordance with PAH Chapter 4 paragraph 3.5.5, for consultancy agreements involving design by consultants or contractors employed by the Government, to which the design checking approach in PAH Chapter 4 paragraph 3.5.4(b) or (c) is applicable, the Checking Engineer should prepare a design checking report providing details of the design checking and submit directly to DR, not via the Designer.

Payment of Fees

17. Fees shall be paid to the consultants in accordance with the Schedules of Fees and within the time frame stated in the GCE. The payment may include some or all of the following items, and should be assessed and made in accordance with the terms of the consultancy agreement.
 - (a) Interim payment
 - (b) Final payment
 - (c) Adjustment in lump sum fees
 - (d) Expenses
 - (e) Payment for additional services
 - (f) Reduction for lump sum fees
 - (g) Payment for delays
 - (h) Fees on time basis

Ordering and Execution of Additional Service

18. There are provisions in the GCE for the ordering of additional services for which the consultants are entitled to additional payment. The ordering of such service should be properly made by an officer with the necessary authority.

Modification to Consultancy Agreement

19. Modifications to the terms of the consultancy agreements may be necessitated by changes in circumstances. Such modifications shall be covered by supplemental agreements. Legal Advisory Unit/Works Bureau should be consulted, if necessary, and the relevant approval should be sought. It should be noted that such modifications shall be consistent with the scope of the project as approved and within the limits set out in the Stores and Procurement Regulations.

Conclusion of Consultancy Agreement

20. When the consultants have substantially completed the duties, they should be so informed together with a list of outstanding items and any other ongoing responsibilities. The account should be finalised within a reasonable period.
21. The following are common outstanding items encountered during the completion of a consultancy agreement:
 - (a) Return of documents provided by the Employer
 - (b) Settlement of contractual claims
 - (c) Production of as-built drawings
 - (d) Production of maintenance manuals
 - (e) Submission of design calculations
 - (f) Submission of design certificates
 - (g) Record of handing over of works.

Conducting Audits

22. It is usually necessary to carry out file perusals and staff interviews during the course of the audit. These works shall be so arranged as to minimise disruption to the project officers.
23. Personal checklists and notes are useful tools to auditing officers. However, care must be taken to ensure that they do not restrict enquiry. Auditing officers shall always be prepared to follow up other lines of enquiry which could lead to information discovery.
24. All checklists and notes together with other information found during the audit should be properly filed for future reference when necessary.
25. The following are some useful auditing skills:
 - (a) let project officers talk freely. Unless the talk diverts from the topic, auditing officers should avoid interrupting as more information may be gathered from the talk;
 - (b) do not argue with the project officers or criticise their work. This will only cause ill feelings and could be obstructive to later auditing work;

- (c) do not initiate to tell project officers how to do their work as this may cause ill feeling. However, auditing officers, when requested by the project officers, should advise the correct procedures to be followed when carrying out their duties;
- (d) be polite in delivering questions. A rude or suspicious attitude will not generate co-operation from project officers;
- (e) avoid asking leading questions (i.e. questions in the form of a statement and will only require a simple answer of 'yes' or 'no'). The project officer who answers such questions may give answers he thinks will best protect him, whether or not they are true answers. Instead, auditing officers should ask open questions wherever possible. Open questions normally being with the words: "where; what; when; how; why; who; please show me";
- (f) distinguish between facts and opinion in statements expressed or answers provided by project officers;
- (g) be cautious of inefficient use of time by following false trails or attention on the 'minor and unimportant many';
- (h) carefully monitor progress of the audit so that the entire scope of the audit is covered as scheduled. Unless new issues with significant implications or non-compliance are found, departure from the original schedule should be avoided; and
- (i) try to programme interviews to fit the project officers' working hours.

Closing Meeting

- 26. At the end of the audit but prior to the preparation of the audit report, the auditing officer shall arrange a Closing Meeting with the project officers. The Meeting should involve the same people who attended the Opening Meeting.
- 27. Before holding the Closing Meeting, the auditing officer should carefully review the findings of the audit to ensure that the entire scope of the audit is covered and that all non-compliance found are based on sound and objective evidence.
- 28. At the Closing Meeting, the auditing officer shall:
 - (a) recapitulate the scope of the audit, the relevant standards used as the basis of the audit and the meaning of a non-compliance;
 - (b) state that although many things were found to be in compliance with the standards, only non-compliance and findings of significance will be reported;
 - (c) give a disclaimer that it is possible that not all non-compliance is identified during the audit;

- (d) describe the major non-compliance and/or other findings of special interest, and ask project officers to give their views and/or explanations on such non-compliance and/or findings;
- (e) state that all audit findings will be submitted to the Head or Deputy Head of Department, or equivalent, in the form of an audit report; and that appropriate recommendations will be included in the report; and
- (f) invite and answer any questions the project officers may have.

Audit Report

- 29. After the Closing Meeting, the auditing officer shall prepare and submit the audit report using the standard pro-forma contents at Annex as soon as practicable to the Head or Deputy Head of Department, or equivalent, with copies to Works Bureau. Audit reports may also be copied to the Chairman of the AACSB or EACSB, if considered necessary.
- 30. In preparing the audit report, care should be taken to avoid minor non-compliance being reported out of proportion.

Follow Up Actions

- 31. Upon perusal of the audit report, the Head or Deputy Head of Department, or equivalent, shall determine the follow up actions required (including corrective measures to procedural or other non-compliance) and direct the auditing officer or project officers accordingly.

Annex

Pro-forma Contents of Technical Audit Reports on Consultancies

Summary

Brief Description of the Consultancy Assignment

Date of Audits

Documents Perused

Audit Findings

- (list various headings in the scope of the audit)

Recommendations

Appendices

APPENDIX 7.41 MANDATORY PROVIDENT FUND NOTIFICATION FORM

To: General Manager Member Protection and Services Division
Mandatory Provident Fund Schemes Authority
(Email: contactMPSD@MPFA.org.hk)

Notification of Commencement of Contract

Contract No.:	
Contract Title:	
Contract Sum:	
Date for the commencement of Contract:	
Construction Period:	
Location of Site:	
Type of Works: *	
Name of Contractor:	
Company address of Contractor:	
Telephone Number:	
Facsimile Number:	
Name of contact person:	
Estimated number of workers:	under direct employment _____ employed by sub-contractors _____ estimated total number _____
Name of Nominated Sub-contractor(s) (if any):	
Name of Domestic Sub-contractor(s) (if any):	
Remarks:	

Information provided by the Contractor to:

Name: _____
Post: _____
Office/Department/Consultant _____
Telephone No. _____
Date _____

* Types of work:

- | | |
|--|---|
| A Foundation works | F Fire services, mechanical and electrical works |
| B Civil engineering works | G Gas, plumbing and drainage works |
| C Demolition and structural alternation works | H Interior fitting out works |
| D Refurbishment and maintenance works | I Others |
| E General building construction works | |

APPENDIX 7.42 SHOTFIRER’S CHARGING DETAILS

[REGULATION 56(1) OF DANGEROUS GOODS
(GENERAL) REGULATIONS, CAP 295]

Name of Contractor: _____ Date: _____
 Name of Shotfirers: _____ Site Code: _____
 1. _____ MBC NO.: _____ 2. _____ MBC NO.: _____
 3. _____ MBC NO.: _____ 4. _____ MBC NO.: _____
 Time of Blasting: (1) _____ (2) _____ (3) _____

	Type	Qty Received	Qty Consumed	Qty Destroyed
Cartridged Explosives				
Bulk Explosives				
Detonators				
Accessories				

Shotfirer i/c : _____ (Name) _____ Signature
 Countersigned by Resident Explosives Supervisor : _____ (Name) _____ Signature

The following details of the above blast(s) are shown on the attached plans:

- (1) the site code and date;
- (2) the location of the blast(s);
- (3) the layout of the blast holes, including the burden and spacing;
- (4) the diameter, depth, inclination and subgrade drilling of the blast holes;
- (5) the amount and type of explosives loaded into each hole;
- (6) the initiation system, including full details of the delay sequence; and
- (7) the charge weight/delay period.

These plans should be certified correct by the shotfirer i/c.

**香港法例第 295 章危險品（一般）規例第 56(1) 條
燃爆人員安裝炸藥詳報表**

日期：_____

承建商姓名：_____ 地盤密碼：_____

燃爆員姓名：_____

1. _____ 場燃爆證書編號：_____ 2. _____ 場燃爆證書編號：_____

3. _____ 場燃爆證書編號：_____ 4. _____ 場燃爆證書編號：_____

爆石時間： (1) _____ (2) _____ (3) _____

	種類	接收數量	耗用數量	銷毀數量
炸藥條				
散裝爆炸品				
雷管				
炸藥配件				

負責燃爆人員 : _____ (姓名) _____ (簽署)

負責加簽的
駐地盤爆炸品督導員 : _____ (姓名) _____ (簽署)

關於上述爆石的下列詳情在附圖中顯示：

- (1) 地盤密碼及日期；
- (2) 爆石地點；
- (3) 炮孔的排位，包括負荷及間距；
- (4) 炮孔的直徑、深度、斜度及加深；
- (5) 裝進每個炮孔的爆炸品數量及種類；
- (6) 起爆系統，包括延時次序的詳情；及
- (7) 炸藥份量 / 延時段數。

這些圖則須由負責的燃爆人員證實正確無誤。

APPENDIX 7.43 PROFORMA FOR REPORTING CASE OF SUSPECTED NON-PAYMENT OF WAGES TO WORKERS

MEMO	
<i>From</i>	<i>To</i> Commissioner for Labour
<i>Ref.</i> <i>in</i>	<i>(Attn.:</i> Labour Relations Division <i>)</i>
<i>Tel. No.</i>	<i>Your</i> <i>in</i>
<i>Fax. No.</i>	<i>dated</i>
<i>Date.</i>	<i>Fax. No.</i> 2545 2959
	<i>Total Pages</i>

Case of Suspected Non-payment of Wages to Employees in the Construction Industry

The following case of suspected non-payment of wages to employees in the construction industry is referred to your attention:

- (a) Address of construction site:
- (b) Particulars of employee(s) being owed wages:
 - Name:
 - Address:
 - Tel. No.:
 - Work involved at the Site:
 - Amount and duration of wages being owed:
- (c) **Particulars of direct employer who is suspected of failing to pay wages to his employees:**
 - Name:
 - Address:
 - Tel. No.:
 - Work involved at the Site:
 - Contact Person (if known):
- (d) **Particulars of principal contractor of the Site:**
 - Name:
 - Address:
 - Tel. No.:
 - Contact Person:
- (e) Other relevant information:

(Designation of Chief Engineer/Engineer Representative)

APPENDIX 7.44 SAMPLE PLAQUESType A (for structures formally opened)

<p>This * _____ was opened by The Honourable [Name & Title] [Post] on [Date]</p> <p>_____</p> <p>Designed by [Name of Office and Department] (or Designed by Messrs. [Name of Consultant] in association with [Name of Office and Department])</p> <p>Constructed by [Name of Contractor]</p>	<p>[Chinese version of the inscription to be shown here.</p> <p>Chinese characters should read vertically from top to bottom and the columns right to left.</p> <p>If it is necessary to arrange the Chinese characters horizontally, they should read from left to right and the row from top to bottom.]</p>
---	--

Type B (for structures not formally opened)

<p>This * _____ was designed by [Name of Office and Department]</p> <p>Constructed by [Name of Contractor]</p> <p>Completed on [Date]</p>	
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<p>This * _____ was handed over by [Name of Consultant] to [Name of Office and Department] on [Date]</p> <p>_____</p> <p>Designed by Messrs. [Name of Consultant] in association with [Name of Office and Department]</p> <p>Constructed by [Name of Contractor]</p>	
--	--

* Insert identity of the structure

APPENDIX 7.45 SAMPLE INVITATION CARD FOR OPENING CEREMONY

<p>THE DIRECTOR OF _____</p> <p>REQUESTS THE PLEASURE OF THE COMPANY OF</p> <p>_____</p> <p>AT THE OPENING OF</p> <p>[The name of the project]</p> <p>BY</p> <p>THE HONOURABLE [Name of the guest], [The guest's title]</p> <p>ON [Date] AT [Time]</p> <p>R.S.V.P. CHIEF ENGINEER, [Division], [Department], [Address]. [Tel. No.]</p> <p style="text-align: right;">REFRESHMENTS WILL BE SERVED (GUESTS SHOULD BE SEATED BY [Time])</p> <p>PLEASE BRING ALONG THIS CARD WITH YOU</p> <p style="text-align: right;">P.T.O.</p>
--

Note: A map showing the location of the ceremony, traffic routing, car park etc. should be printed at the back of the invitation card

APPENDIX 7.46 GUIDANCE NOTES FOR POST-COMPLETION REVIEW (Subsumed from ETWB TCW No. 26/2003)

1. Introduction

A post-completion review is a means of recording experience, both success and failure, from past projects, so it can be used where appropriate to improve future projects by avoiding past mistakes and allowing good practices to be better understood by project staff. In general terms, the review should consider -

- (a) project objectives in terms of cost, time and quality;
- (b) management;
- (c) organization;
- (d) systems and procedures;
- (e) suitability of the design, contract types and contract packaging; and
- (f) public reaction during construction and operation.

Departments may consider conducting a single post-completion review examining aspects in both the consultancy agreement and works contracts together.

2. On what type of projects should a Post-Completion Review be conducted

It is considered that the post-completion review (being a new initiative and there is also a need to optimize the benefits against resources to be deployed) need not be conducted for consultancy agreements and works contracts of a project which has a total cost less than \$500 million or of a project which does not involve complicated technical and management issues. Indicators that a project involves complicated issues may include the following:

- (a) project involving a variation item costing substantial amount, say over \$1 million;
- (b) project involving a claim of a substantial sum, say over \$1 million;
- (c) project involving design or construction method not commonly used in Hong Kong; and
- (d) project involving incidents that attract public attention.

3. Who and what should be involved in a Post-Completion Review

A post-completion review should be led by the officer in charge of the project (normally at senior professional level or above) and he or she should solicit input from the client and other project participants (such as the consultants, contractors and subcontractors) as appropriate. The department should also determine the depth of the review, taking into account the issues to be examined, and consider if assistance from legal advisor or technical specialists should be sought. Consideration should also be given to inviting project officers who have left the project team to provide input.

A post-completion review may involve both a document review and discussion sessions with the presence of different project participants. Due to the different concerns of different project participants, it may be necessary to have more than one

discussion session with different party in order to facilitate better collection of views and exchange of ideas.

4. When should the Post-Completion Review be carried out

A post-completion review should be carried out within a reasonable period, say 6 months, after the substantial completion of a consultancy agreement or a works contract. However, in case there are on-going disputes with the service providers, it may be more appropriate to defer the review until the disputes are settled or the review may have to be carried out without the participation of the service provider concerned. For a project that comprises a number of contracts/consultancy agreements, the project office may elect, in view of the benefit of an overall review, to conduct a single review upon the substantial completion of the last contract.

5. The review

The project office could determine issues to be examined in a post-completion and some suggestions are given below:

- (a) pre-contract arrangements/procedures;
- (b) contract administration system/arrangements;
- (c) adequacy and suitability of specifications/brief;
- (d) programme/cost/variation control measures;
- (e) management of consultant's/contractor's performance;
- (f) management and control in relation to subcontractors/subconsultants;
- (g) procedures in relation to the management of quality, safety and environmental aspects and traffic management issues;
- (h) contract documents;
- (i) acceptance, testing and commissioning system/procedures;
- (j) quality/performance of service providers;
- (k) organization of consultants/contractors/other service providers;
- (l) management/handling of public complaints;
- (m) adequacy of contract period/study period.

Departments are also suggested to develop performance indicators to facilitate the review and develop after reviewing the projects, suitable benchmarks of project performance. The relevant indicators and benchmarks for the following aspects of performance or any other appropriate one should be developed:

- (a) Cost performance - say by comparing the final out-turn prices as against the initial estimates and tender prices;
- (b) programme performance - say by comparing the actual project delivery as against the planned programme; and
- (c) staffing performance - say by comparing the adequacy of the level of staffing assigned to the project against any established departmental guidelines.

Established benchmarks should also be subject to review from time to time.

Although the post-completion review is essentially for exploring areas where improvement could be made, it is not expected that consensual views among the client and service providers on all issues examined could be made nor solutions to all problems revealed could be formulated. Nonetheless, the review itself is part of a process of enhancing awareness among the participants in the problematic areas thus would actuate improvement as a natural outcome in the long-term.

6. Views of the users may be included

If the timing of the post-completion review allows, the view of the users, and management/maintenance parties in the following areas or any others proposed by the users may be included in the review -

- (a) an assessment of whether user requirements have been met, such that they would be better ascertained and conveyed to designers in future;
- (b) an assessment of the costs in use as against the planned operating cost, and how the planned efficiency and effectiveness of the equipment and facilities compare with those as built; and
- (c) any recommendations that the users may wish to make to improve value for money performance of future projects, e.g. facilities which are in fact unnecessary for most users can be omitted from future projects.

The department may also consider, if resources is available, conducting a separate review with the users and management/maintenance parties at a later time, say one year, after they take over the project.

APPENDIX 7.47 GUIDANCE ON GEOTECHNICAL SUPERVISION REQUIREMENTS

1 CATEGORIES OF GEOTECHNICAL SUPERVISION

1.1 Category I - periodic inspections by a geotechnical engineer from the project office/consultant which prepared the geotechnical design

This category of qualified supervision applies to sites where the buildability or the design (e.g. results of stability analyses or ground movement calculations, etc.) is sensitive to variations in the geotechnical design assumptions. Personnel acceptable for Category I supervision are Registered Professional Engineer (RPE) (Geotechnical) or equivalent.

1.2 Category II - periodic inspections by a senior geotechnical engineer from the project office/consultant which prepared the geotechnical design

This category of geotechnical supervision applies to sites of high sensitivity (e.g. steep slopes adjoining buildings, busy roads or tunnel works construction that could pose significant risk to life or property). Personnel acceptable for Category II supervision are senior engineers of RPE (Geotechnical) or equivalent.

1.3 Category III - full time supervision by a suitably experienced person

This category of qualified supervision applies to sites where day-to-day inspections and checks on compliance with drawings, specifications or working procedures are necessary. It is used for works which depend for their success and safety on a high standard of workmanship and materials. The personnel acceptable for Category III supervision depend on the sensitivity and complexity of the project.

2 SUPERVISION PACKAGE

A geotechnical supervision package consisting of a combination of Categories I, II and III may be adopted. Typical examples of the minimum recommended requirements are given in Table 7.2.1.

The recommended typical contents of the regular site inspection/design review report by the Category I/II supervisor are given in Table 7.2.2. The regular reports should be kept on site and made available for audit by GEO staff. The Category I/II supervisor should make a design amendment submission to the GEO prior to commencement of the works through the project office or its consultants, should there be any significant changes in the geotechnical design and/or working procedures.

Table 7.2.1 - Recommended Minimum Geotechnical Supervision Requirements for Public Works Projects

CATEGORIES	GEOTECHNICAL WORKS	REMARKS
I + II + III I + III I + III	Foundations : deep foundations for buildings in Scheduled Area Nos. 2 & 4 and the Designated Area of Northshore Lantau, sensitive sites deep foundations for buildings in Scheduled Area Nos. 2 & 4 and the Designated Area of Northshore Lantau caisson foundations	See requirements of ETWB TCW No. 4/2004
I + II + III I + III	Deep Excavation : depth > 7.5m, sensitive sites depth > 4.5m	-
I + II + III I + III	Blasting Works: blasting for rock excavation, sensitive sites blasting for rock excavation	See requirements of PAH Chapter 7 paragraph 21.6
I + II + III I + III I + III I + III III I + III I + III III I + III	Slope Works and Landslide Hazard Mitigation Works : prestressed ground anchors, sensitive sites prestressed ground anchors soil nails cut slopes (in rock or soil) (height > 3m) cut slopes (in rock or soil) (height ≤ 3m) rock slope stabilisation works fill slope (height > 5m) fill slope (height ≤ 5m) landslide hazard mitigation works	-
I + III I + II + III I + III I + III III I + II + III I + III	Retaining Structures : caisson wall reinforced fill structure (height > 15m) or sensitive sites reinforced fill structure cantilever/gravity retaining wall (height > 5m) cantilever/gravity retaining wall (height ≤ 5m) soldier pile wall, bored-pile wall or diaphragm wall, sensitive sites soldier pile wall, bored-pile wall or diaphragm wall	-
I + II + III I + III	Tunnel Works : tunnel works, with significant risk to public life or property tunnel works	See PAH Chapter 7 paragraph 4.3 regarding the additional requirements on geologist.
I + III I + III	Ground Treatment : vertical drains, horizontal drains grouting and dewatering for deep excavations	-
I + III	Ground Investigation : Land and marine ground investigation	See requirements of ETWB TCW Nos. 29/2002A and 4/2004 regarding ground investigation works in Scheduled and Designated

		Areas
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Notes:

1. Sensitive sites include sites where works could affect old buildings with shallow foundations, old tunnel/caverns, major roads, railways, water mains, gas mains, slopes, retaining walls or sites with history of instability.
2. The project office may refine the above site supervision requirements to suit the objectives of the projects after consideration of individual needs. The required number of site supervision personnel would depend on the nature, size, complexity and spatial distribution of the works being carried out on site concurrently.
3. A full time Category I supervisor can take up the duty of a Category III supervisor.

Table 7.2.2 Typical Contents of the Regular Site Inspection/Review Reports

Typical contents of the regular reports to be prepared by the Category I and/or Category II personnel on site supervision should include the following as appropriate. The Category I/II supervisor should make a design amendment submission to the GEO prior to commencement of the works through the project office or its consultants, should there be any significant changes in the design after the design review.

1. Progress of the Works
 - (a) Records (e.g. drawings, photographs and geological plans and sections, monitoring data and field data from excavation faces) on progress of the works, including retaining structures, grouting, foundations, shoring, anchors, soil nails, excavation, basement structures and tunnel works. Among others, the depths and extent of excavation and temporary support measures, including the levels of struts installed and the location of rock bolts, dowels, ground anchors and areas of sprayed concrete, should be given.
2. Results of Monitoring During Construction
 - (a) Description of the monitoring system, including frequency of monitoring and the “designed alert levels” and “ceased works levels” for settlements, lateral movements, heave, deflections, distortions, vibrations, crack widths, water inflow limits, groundwater levels/pressure changes, etc., and details of all surrounding sensitive geotechnical features, structures and utilities.
 - (b) Plans and photographs showing the locations of all monitoring points (e.g. including settlement points, movement markers, seismographs, flow measurement devices, piezometers, inclinometers, load cells and strain gauges).
 - (c) Results of all monitoring points with graphs and tables showing the alert levels, the cease works levels and the variation of the results with time.
 - (d) Discussions and interpretations of the results of all monitoring work, including proposals for any changes of measuring devices and for investigation of observed anomalies.
3. Site Observations
 - (a) Reports of initial defect survey (including photographs) of all surrounding structures and utilities (only required in the first report).
 - (b) Reports of any significant movements or sign of distress observed including signs of movement of geotechnical features, differential settlements, cracks on pavements, cracks on adjacent buildings and structures, damages to watermains or other utilities.
 - (c) Reports of any excessive displacements and collapses (including photographs), survey plans/sections of affected areas, time & date of the incident, probable reasons and any proposed remedial actions.

- (d) Reports of any significant deviations from approved plans, method statements and particular specifications, such as missing members or deficiencies in the shoring system, over-excavation prior to installation of the struts or laggings, and violation of contract acceptance criteria.
 - (e) Records of geological/hydrogeology mapping and reports of any significant deviations of geology and groundwater conditions, relative to the data and assumptions made in formulating the ground model, for the geotechnical design and geotechnical risk assessment, (e.g. unexpected ground conditions, geological features, seepage, water inflow, etc.).
 - (f) Reports of any critical activities in the vicinity of the site which may adversely affect its stability.
 - (g) Photographs, drawings and figures accompanying the reports as appropriate.
 - (h) Major construction problems encountered and any remedial action carried out.
4. Inspection Records
- (a) Dates and times of site visits by Category I/II personnel.
 - (b) Remarks and comments made by Category I/II personnel during the inspections.
 - (c) Actions taken by Category III personnel in response to comments made by Category I/II personnel.
5. Review
- (a) A critical review based on all information collected in the preceding items to check whether the design assumptions are still valid.
 - (b) Anticipated geotechnical problems and contingency measures, including actions to be taken by specific parties when the monitoring results approach the “designed alert levels”.

**APPENDIX 7.48 STANDARD FORM OF THE DEED OF ASSIGNMENT OF
CONTRACTOR'S FINANCIAL BENEFITS
(Subsumed from ETWB TCW No. 13/2000)**

This Deed made this day of 20.....

Between (“the Assignor”)

And (“the Assignee”)

Facts

- (A) By Agreement dated day of 20..... and referred to as Contract No. (“the Contract”) the Assignor agreed with the Government of the Hong Kong Special Administrative Region (“the Employer”) to execute and complete certain Works (“the Works”).
- (B) To finance inter alia the execution and completion of the Works the Assignee has agreed to make available to the Assignor a general banking facility in an aggregate amount not exceeding HK\$ or such greater amount as may be agreed from time to time (“the Facility”).
- (C) The Facility is to be secured inter alia by this Deed of Assignment.
- (D) The Assignee has agreed with the Assignor subject to the Assignor complying with the terms of the Facility and the execution of this Deed, to keep the Facility open for the duration of the Contract.

The Parties Agree as Follows :

1. The Assignor ASSIGNS to the Assignee all monies payable or which may become payable by the Employer to the Assignor under the Contract.
2. The Assignor shall provide the Assignee all reasonable assistance to recover any monies due under the Contract.
3. The Assignor shall hold all monies paid to it under the Contract on trust for the Assignee and shall account to the Assignee for such monies as the Assignee may direct.
4. Upon repayment of all monies due to the Assignee under the Facility, the

Assignee shall REASSIGN to the Assignor all rights and interests granted under this Deed of Assignment.

5. THE ASSIGNOR COVENANTS WITH THE ASSIGNEE as follows -

5.1 The Contract is valid and subsisting and fully enforceable and in no way void or voidable and the whole benefit of the Contract is now vested in the Assignor free from all liens, charges, mortgages options, third party interests or other encumbrances.

5.2 All obligations to be performed and complied with by the Assignor pursuant to the Contract have been performed and complied with up to the date of execution of this Deed of Assignment.

5.3 The Assignor will in strict compliance with the Contract as to time, quality of the work and materials and otherwise in every respect execute and complete the Works and do all other things and observe all conditions necessary to be done or observed in order to entitle it to the Contract Sum referred to in the Contract and will not permit or suffer any act, omission or thing which may in any way preclude or hinder it from demanding the same free from all deductions, abatements or withholding whatsoever.

5.4 The Assignor will expend all sums to be advanced to it pursuant to the Facility in the execution and completion of the Works and other works referred to in the Facility and pay all outgoings in connection with the Works and any extra or additional works including penalties and other payments provided for by the Contract.

5.5 So long as any monies remain due to the Assignee under the Facility the Assignor will as and when it receives any monies payable to it under the Contract immediately payover the same to the Assignee.

5.6 (a) The Assignor will not :

(i) commit any act such that a petition for bankruptcy may be presented against it or present a petition for its own bankruptcy; or

(ii) commit any act or be in a state such that application for winding up may be presented against it or such that it may be wound up voluntarily; or

(iii) fail to satisfy any judgment against it before the expiry of seven (7) days following the date of such judgment.

(b) For the purposes of this Clause 5.6, “act” includes “omission”.

5.7 The Assignor will not during the subsistence of this Deed of Assignment without the written consent of the Assignee and the Employer first obtained assign, mortgage, charge or otherwise dispose of the whole or any substantial part of the undertaking and assets of the Assignor’s business.

5.8 The Assignor will carry on and conduct its said business in a proper and efficient manner and will not make any substantial alteration to the nature of its business.

5.9 The Assignor will give the Assignee such information relating to its affairs, business and assets as the Assignee may from time to time require.

5.10 Further Assurance

The Assignor shall execute and do all such assurances, acts and things as the Assignee may reasonably require for perfecting or protecting the security created by this Deed of Assignment or for facilitating the recovery of any monies due under the Contract and the exercise of all powers, authorities and discretions vested in the Assignee and shall in particular execute all transfers, assignments and assurances of the security whether to the Assignee or to its nominees and give all notices, orders and directions which the Assignee may consider expedient.

5.11 Power of Attorney

(a) The Assignor hereby irrevocably appoints by way of security the Assignee or its nominees as the attorney of the Assignor and in the name and on behalf of the Assignor as its act and deed or otherwise to sign, seal, deliver and otherwise perfect any such legal or other assignments or any deed, assurance, instrument or act which may be required or may be deemed proper or expedient for the purpose of exercising fully and effectively all or any of the powers hereby conferred on the Assignee whether under Clause 5.10 or otherwise under this Deed of Assignment and also for the purpose of enforcement and realisation of the security hereby created; the appointment shall operate as a general power of attorney made under the Powers of Attorney Ordinance (Cap. 31).

(b) The Assignor hereby undertakes to ratify and confirm all deeds, instruments and documents lawfully executed by virtue of the authority and powers hereby conferred.

5.12 Additional/Continuing Security

(a) The security created by this Deed of Assignment is a continuing security and shall secure the balance of the liabilities outstanding from time to time notwithstanding the bankruptcy, insolvency, liquidation, winding-up or incapacity or any change in the constitution of the Assignor or any other person or any settlement of account or other matter whatsoever until the balance of the liabilities outstanding from time to time has been paid and discharged in full.

(b) The security created by this Deed of Assignment shall be in addition to and shall not in any way prejudice or be prejudiced by any other security, remedy and lien which the Assignee may now or at any time hereafter hold for all or any part of the moneys and liabilities covenanted to be paid or discharged under this Deed of Assignment.

5.13 Indulgence

This Deed of Assignment and the rights of the Assignee under it shall not be discharged or in any way affected by -

- (a) any time, indulgence, waiver or consent at any time given to the Assignor or any other person;**
- (b) any amendment to this Deed of Assignment or to any other security or any guarantee or indemnity;**
- (c) the making or the absence of any demand on the Assignor or any other person for payment;**
- (d) the enforcement or absence of enforcement of or release of this Deed of Assignment or of any other security, guarantee or indemnity;**
- (e) the dissolution, amalgamation, reconstruction or reorganisation of the Assignor or any other person; and**
- (f) the illegality, invalidity or unenforceability of or any defect in any provision of this Deed of Assignment or any of the obligations of the Assignor or any other person under any such provision.**

5.14 Indemnity

Without prejudice to the right to indemnity by law given to agents and trustees (and subject to the provisions of any applicable ordinance), the Assignor shall indemnify the Assignee or its nominees or its attorney out of the secured payments and the income thereof in respect of all liabilities and expenses certified in reasonable detail as properly incurred by them or any of them in the execution of the terms and conditions of this Deed of Assignment and against all actions, proceedings, claims and demands in respect of any matter or thing done or omitted in any way relating to the security.

- 6. The Assignee Covenants with the Assignor that so long as the Assignor complies with the terms of the Facility, then the Assignee shall not withdraw the Facility or reduce the Facility except if expressly provided for in the terms agreed in the Facility set at the date of this Deed of Assignment.**
- 7. It is Agreed by the Parties as follows -**
 - 7.1 All monies payable by the Employer to the Assignor pursuant to the Contract shall, during the subsistence of this Deed of Assignment be paid by the Employer direct to the Assignee.**
 - 7.2 The Assignee shall not be under any obligation to take any steps or institute any proceedings to recover any monies payable or to become payable by the Employer under the Contract nor shall the Assignee be answerable for any loss**

arising from its having neglected to take any such steps or institute any such proceedings.

- 7.3** The Assignee shall be entitled on behalf of the Assignor to settle all accounts in relation to the Contract and if the Assignor fails to perform any of its obligations under the Contract the Assignee may enter into any agreement with the Employer to deal with that failure to perform and any such settlement or arrangement shall be binding on the Assignor.
- 7.4** Nothing contained or implied herein shall in any way whatsoever affect, alter or amend terms of the Contract between the Employer and the Assignor, and in particular and without derogating from the generality of this clause, the right of the Employer to make payment other than to the Assignee and to exercise the right of set off pursuant to the terms of the Contract.
- 7.5** Neither the consent of the Employer to this Deed, the settling of an account by the Assignee with the Employer nor the entering into of any agreement by the Assignee with the Employer pursuant to Clause 7.3 or otherwise shall give rise to any contractual relationship between the Employer and the Assignee other than the obligation of the Employer to make payments to the Assignee pursuant to this Deed. The Assignor shall remain liable to perform all the obligations assumed by it under the Contract and neither the Assignee nor any agent or employee of the Assignee shall be under any obligation of any kind under the Contract or be under any liability whatsoever in the event of any failure by the Assignor to perform its obligations thereunder.

This Deed is executed the Year and Day above mentioned.

Sealed with the Common Seal of)
[Assignor])
and Signed by)
))
in the presence of :)
Sealed with the Common Seal of)
[Assignee])
and Signed by)
))
in the presence of :)
))

The Government of the Hong Kong Special Administrative Region as the Employer acting by and through on the day of 20..... consents to the assignment of the Contract on the above terms and conditions.

Signed for and on behalf of the)
Government of the)
Hong Kong Special Administrative Region by)
))
in the presence of :)
))

APPENDIX 7.49 STANDARD CHECKLIST FOR MONITORING OF THE SUB-CONTRACTOR MANAGEMENT PLAN
(Ref.: SDEV's memo ref. DEVB(W) 109/11/01 Pt. 9 dated 19.12.2008, SDEV's memo ref. DEVB(PS) 109/11/01 Pt. 9 dated 15.5.2013, SDEV's memo ref. DEVB(W) 510/94/02 dated 5.3.2021 and SDEV's memo ref. (03E8T) in DEVB(W)516/80/03 dated 3.8.2022)

Standard Checklist for monitoring of the Sub-contractor Management Plan							
DEPARTMENT/OFFICE :							
A Contractor's Details							
Contractor's Ref. :							
Contractor's Name :							
Contract No. :				PWP No. :			
Contract Title :							
Type of Contract : Civil / Building / Term / Specialist / Maintenance *							
Predominant Category of Work :							
B Contract Duration and Submission Schedule							
Contract Commencement Date :							
Anticipated Contract Completion Date :							
Anticipated Contract Period : months							
	Submission/Checklist Schedule				Checked By		
Submission	Anticipated date	Actual date	Submission Ref:	Checklist Ref:	Name & Post	initial	Date

* Delete as appropriate
All dates to be shown as dd/mm/yyyy e.g. 01/03/2021

Standard Checklist for monitoring of the Sub-contractor Management Plan					
PART A - Submission			Checklist Ref:		
			Date:		
ITEM		Yes	No	N/A	Remarks
Section 1					
Time Requirements					
1.1	Complies with contract requirements on timely submission				
1.2	Complies with immediate notification requirement for major changes				
<u>Guidance Notes for Part A Section 1:</u>					
(a) First submission within 30 days of Letter of Acceptance					
(b) Quarterly update-within 1 month from the start day of the quarterly period					
(c) Major changes update (including change of subcontracting structure such as addition/removal of subcontractors and/or alteration of subcontracting tiers) - interim notification					
(d) Revision/Updating within 14 days of the date of notification					
ITEM		Yes	No	N/A	Remarks
Section 2					
Content Requirements					
2.1	Compliance with contract requirements/SMP guidelines on limiting the tiers of Sub-contracting and prohibition on wholly sub-contracting of works (refer to guidance notes (a) to (c))				
2.2	Reasonable measures for monitoring and assessing sub-contractors' performance on: works programme, works quality, safety and environmental issues for individual subcontracts				
2.3	Compliance with contract requirements/SMP guidelines on Subcontract conditions (refer to guidance notes (d) and (e))				
2.4	Compliance with contract requirements/SMP guidelines on Organization chart/Contractor's Management Team (refer to guidance notes (f))				
2.5	Compliance with contract requirements/SMP guidelines on Payment of Wages of Site Personnel (refer to guidance notes (g) to (i))				
2.6	Reasonable measures for ensuring timely payment to the first-tier subcontractors and downstream sub-contractors including payments by sub-contractors to sub-contractors of lower tiers				
2.7	Compliance with the contract requirement for incorporating the vesting provisions on materials and/or constructional plant into the sub-contracts with its sub-contractors				
2.8	Compliance with contract requirement on proof of ownership of Constructional Plant or undertakings from the owner of the relevant item(s) of Constructional Plant for assignment of benefit to the Employer				
2.9	Reasonable measures for monitoring the performance of the subcontractors in complying with the requirements in the Contract in reporting site accidents				
2.10	Reasonable measures to ensure all subcontractors, irrespective of tiers, to incorporate the Mandatory Subcontract Conditions for Prohibition of Imposing Administrative Charges for Reporting of Site Accidents and Elimination of Under-reporting of Site Accidents				

<u>Guidance Notes for Part A Section 2:</u>	
(a) Clear and sufficient information on scope of works to be sub-contracted	
(b) Clear measures to ensure that sub-contractors shall not sub-contract the whole of the works sub-contracted to them	
(c) Clear measures to ensure sub-contractors to report upwards their sub-contracting arrangements and any subsequent changes	
(d) Clear requirement to demand sub-contractors to submit written declarations of no "hidden" sub-contracting works	
(e) Clear arrangement to ensure sub-contractors to adopt written contracts in their further sub-contracting and all the sub-contracts complied with the requirements as stipulated in the Contract	
(f) Organization chart with names and responsibilities to show that the Contractor employs his own staff to manage and supervise his sub-contractors, with declaration that members of staff on the Contractor's Management Team are prohibited to be given a subcontract to any part of the works or to have a vested interest in any of the subcontractors irrespective of tiers	
(g) Reasonable approach for early monitoring of industrial dispute	
(h) Reasonable approach for handling complaints from workers on site regarding wages arrears disputes	
(i) Reasonable mechanism to keep the A/E/SO informed of the latest situation regarding wages arrears or industrial dispute	
<u>Guidance Notes on follow up action for Part A:</u>	
(a) Reminder/Warning to be issued for non-compliance on A1.1 to 1.2, A2.1 to 2.6, 2.9 and 2.10 above	
(b) Warning/notifying mechanism to be triggered	
(c) Reflect the non-compliance in the Report on Contractor's Performance	
(d) Payment for SMP is made in accordance with requirements in the Contract	

Standard Checklist for monitoring of the Sub-contractor Management Plan					
PART B - Site Compliance Check				Checklist Ref: Date:	
ITEM		Yes	No	N/A	Remarks
Section 1					
Documentary Proof					
1.1	Evidence of compliance with contract requirements/SMP guidelines on limiting the tiers of Sub-contracting (refer to guidance notes (a) to (c))				
1.2	Evidence of measures being implemented for monitoring and assessing sub-contractors' performance on: works programme, works quality, safety and environmental issues for individual subcontracts				
1.3	Evidence of compliance with contract requirements/SMP guidelines on Subcontract conditions (refer to guidance notes (d) and (e))				
1.4	Evidence of compliance with contract requirements (if applicable) on Contractor's Management Team				
1.5	Evidence of compliance with contract requirements/SMP guidelines on Payment of Wages of Site Personnel (refer to guidance notes (f) and (g))				
1.6	Evidence of measures for ensuring timely payment to the first-tier subcontractors and downstream sub-contractors including payments by sub-contractors to sub-contractors of lower tiers				
1.7	Evidence of compliance with the contract requirement for incorporating the vesting provisions on materials and/or constructional plant into the sub-contracts with its sub-contractors				
1.8	Evidence of compliance with contract requirement on proof of ownership of Constructional Plant or undertakings from the owner of the relevant item(s) of Constructional Plant for assignment of benefit to the Employer				
Guidance Notes for Part B Section 1:					
(a) Evidence of sub-contract arrangement tally with SMP					
(b) Evidence of measures being implemented that sub-contractors shall not sub-contract the whole of the works sub-contracted to them					
(c) Evidence of measures being implemented to ensure sub-contractors to report upwards their sub-contracting arrangements and any subsequent changes					
(d) Evidence of requirement to demand sub-contractors to submit written declarations of no "hidden" sub-contracting works					
(e) Evidence of sub-contractors to adopt written contracts in their further sub-contracting and all the sub-contracts complied with the requirements as stipulated in the Contract					
(f) Evidence of early monitoring of industrial dispute (if applicable)					
(g) Evidence of handling complaints from workers on site regarding wages arrears disputes (if applicable)					
(h) Either record or keep a copy of the documents examined for future audit purposes					
ITEM		Yes	No	N/A	Remarks
Section 2					
Site Observations					
2.1	Frontline RSSs are facilitated to have easy access to the submitted SMPs				
2.2	Observations indicate that the site arrangement reasonably tally with the submitted Organization chart				
2.3	Observations indicate that the site arrangement reasonably tally with the submitted information on scope of works to be sub-contracted				
2.4	If applicable, observations indicate that complaints from workers on site regarding wages arrears disputes were being handled, industrial dispute were being monitored at an early stage and A/E/SO were informed of the latest situation				
Guidance Notes for Part B Section 2:					
(a) Labour Relations Officer (LRO) has to undertake regular physical checks to verify the accuracy and reliability of the workers attendance records to identify irregularities, such as hidden sub-contractors. LRO has to check regularly on the information of workers' employers recorded in the attendance recording system against the latest SMP, and properly document such checks, and alert the project officer if the sub-contractor's name is not contained in the SMP. Observations should include random check on LRO's proper discharge of this duty.					
Guidance Notes on follow up action for Part B:					
(a) Reminder/Warning to be issued for non-compliance on B1.1 to 1.6, B2.1 to 2.4 above					
(b) Reflect the non-compliance in the Report on Contractor's Performance					

**APPENDIX 7.50 ASSESSMENT TABLE FOR AT-GRADE ROAD SECTION
WHICH IS 6M OR MORE ABOVE GROUND
(for example, those on embankment steeper than 1 (vert.) : 4 (hori.)
or retaining structure) or adjacent to a water body**

Maintenance office of HyD	:	_____
Road name	:	_____
Date of assessment	:	_____
Date of opening of the road	:	_____
Location of road section (please quote chainages, nearby road intersections or buildings, etc.)	:	_____
Traffic direction adjacent to barrier in question (e.g. NT bound, southbound, both bounds, etc)	:	_____
Length of barrier	:	_____
Type of barrier (Note 1)	:	_____
Speed Limit equals to 70kph or more (Yes/No)	:	_____
Height equals to or exceeding 20m (Note 2)(Yes/No)	:	_____
Sensitive features below road (Note 3)(Yes/No) (If “Yes”, please also note down the features in “Remark” below)	:	_____
Undesirable road geometry (Note 4)(Yes/No)	:	_____
No. of barrier impact related traffic accidents in the past 5-year (Note 5) (No. of accident / NA)	:	_____
Remark	:	_____

Notes

1. UB: Untensioned corrugated beam barrier TB: Thrie beam barrier
PB: Concrete profile barrier MW: Masonry wall
TBAR: Thrie beam barrier with additional rail (TPDM Vol. 2 Diagram 3.9.3.1)
Others (to be specified)
2. Please enter “Yes” if the height of the road equals or exceeds 20m. For roads on embankment, if the embankment slope is steeper than 1 (vertical) : 4 (horizontal), the level difference between the road surface and bottom of slope should be measured. If the level difference is equal to 20m or more, please enter “Yes”.
3. Please enter “Yes” if there is resident, school, hospital or other similar occupant, or a water body, or expressway / trunk road / railway in close proximity.
4. Please enter “Yes” for road section with horizontal radius < 250m for speed ≥ 70 km/h (or horizontal radius < 88m for speed < 70km/h), or gradient > 8%, or road section at or within 20m from junction / interchanges.
5. Applicable to projects on existing roads only. Please enter “NA” for a completely new road. For roads to be handed over before 1 Jan 2011, the related works office shall obtain the accident data from the Road Safety and Standards Division of TD and compare it with the total number of accidents recorded in the “Parapet and Barrier Damage Reports System” to be obtained from the respective regional office of HyD. The number of accidents whichever higher should be recorded in this entry.

For roads to be handed over on or after 1 Jan 2011, that data should be completed by the respective regional office of HyD based on the information in the “Parapet and Barrier Damage Reports System”.

APPENDIX 7.51 NOT USED

APPENDIX 7.52 RETURN ON CONSTRUCTION SITE EMPLOYMENT (Ref.: ETWB TCW No. 4/2005)

Original - C&SD (within 2 weeks)	Duplicate - Project Office/Authorized Person	Triplicate - filed as Site Record	Quadruplicate - kept by Contractor
Reference no. in Buildings Department / Contract no.: _____			
Contract title / Contract description: _____			
Name of contractor: _____ (Tel. : _____)			
<input type="checkbox"/> Nominated sub-contractor (Tick if applicable)			
Site / Contract address: _____			
Name of authorized person / Company of site representative: _____ (Tel. : _____)			
Name of real estate developer / responsible government department: _____ (Tel. : _____)			
Work code for government site only ^j (If applicable) : _____			
Broad stage of work: _____ (% of completion : _____)			

Current status of the site (Please select one of the following and tick as appropriate box) :

- | | |
|---|---|
| 1 <input type="checkbox"/> Active | 4 <input type="checkbox"/> Under maintenance period (Expiry date (e.g. 31/01/2007): _____) |
| 2 <input type="checkbox"/> Work suspended | 5 <input type="checkbox"/> Work completed with maintenance period over / without maintenance period |
| 3 <input type="checkbox"/> Vacant | |

Reporting month/year (e.g. 03/2006) : _____ Last day of the reporting month^k : _____

Please insert either the data or '0'. Do not leave any cell blank.

I. Number of persons engaged and vacancies on the last day of the reporting month.

<u>Number of persons engaged at site</u>	Total	Of which: female
(i) Manual workers		
(ii) Professional / technologist		
(iii) Technician		
(iv) Other site personnel (e.g. amah and security guards)		
(A) Total number of persons engaged at site		
(B) Number of employers / self-employed persons in (A)		
(C) Number of vacancies for manual workers (i.e. excluding items (ii), (iii) and (iv) above) at site		

II. If there are vacancies in I (C) above, please provide the job title and the number of vacancies.
(Use a separate sheet if necessary)

Job title (e.g. leveller, truck driver, bricklayer and electrical fitter)	Number of vacancies
1.	
2.	
3.	
4.	
5.	

For official use only

Site No. _____ (33-47)

IND _____ (48-53)

Area _____ (54-56) Status _____ (57)

DCM _____ (58) EN _____ (59-62)

JV7 _____ (63-64)

JV8 _____ (65-66)

JV9 _____ (67-68)

Completed by contractor/
contractor's agent^l : _____
(Name)
(Signature)
(Telephone)
(Date)

Notes : j Please refer to work code in the GF 527 for the same site / contract.
 k Please exclude Saturdays, Sundays, public holidays and days of inclement weather, and advance the reporting day accordingly (i.e. in the order of 31st, 30th, 29th ...).
 l Delete as appropriate.

**APPENDIX 7.53 GUIDELINES FOR COMPLETION AND SUBMISSION OF
GF 527A
(Ref.: ETWB TCW No. 4/2005)**

A. Instructions

Form Completion

- (a) For government sites, one GF 527A shall be completed for each and every contract monthly. The contractor shall complete and submit both the GF 527A and GF 527 together for a contract.
- (b) For non-government sites, the contractor shall complete the GF 527A on site/contract basis for the month of March, June, September and December.
- (c) The data for the entries of the number of persons engaged in each category of site personnel, vacancies and employers/self-employed persons in the GF 527A will be made based on the last full working day of the reporting month, which will exclude Saturdays, Sundays, public holidays or days of inclement weather such as strong winds, heavy rains or typhoons when the construction activities may be affected. For example, if the last day of a month is 30th and is a Saturday, then the last full working day of the month will be 29th (Friday) as Saturday is considered not a full working day. In case the weather on 29th is adverse, then the last full working day of the month will be advanced to 28th (Thursday), and so on and so forth.
- (d) Only persons who have worked or engaged at the site (including in the site office) for three hours or more on the reporting day will be included in the entries for the number of persons of the respective category in the GF 527A. The data will cover all the persons employed by the contractor and his sub-contractors, except for those employed by the nominated sub-contractors of government sites, who will complete a separate GF 527A and submit to the principal contractor for consolidation.
- (e) If there are vacancies on the reporting day, the contractor shall enter the job title and the number of vacancies for each of the trades.
- (f) For government sites, a work code will be entered in the form for each contract, which is assigned by the project office and will be adopted throughout the contract period. If a contract involves more than one major work type, then the work code for the dominant work type will be adopted. The work code for both the GF 527A and GF 527 should be the same for a contract.
- (g) The contractor shall check and sign the GF 527A before submission.

Form Submission

- (h) The GF 527A shall be completed in quadruplicate for submission to the relevant parties: the original sent to the Census and Statistics Department (C&SD), the duplicate kept by the project office or authorized person, the

triplicate filed as site record and the quadruplicate kept by the contractor.

For Government Sites

- (i) The completed GF 527A shall be submitted to the client's most senior representative on site (the client's site representative) within the first four working days of the month following the reporting month.
- (j) The client's site representative will check that the data provided in the forms are in order, except for the numbers of vacancies and employers/self-employed persons, which are the contractor's responsibility to ensure their accuracy. If necessary, the client's site representative may request the contractor to substantiate the data provided in the forms. Any discrepancy found will be notified to the contractor immediately for rectification.
- (k) The client's site representative will complete the checking of the forms for submission to the relevant parties specified in (h) above within the first two weeks of the month following the reporting month.

For Non-Government Sites

- (l) The completed GF 527A will be submitted to the relevant parties specified in (h) above within the first two weeks of the month following the reporting month.

B. Explanatory Notes

- (1) Manual workers include all persons engaged in manual work at the construction site, who are either directly employed by the main contractor or called upon by sub-contractors or gang leaders. They include skilled, semi-skilled and general workers.
- (2) A professional/technologist is a person who applies his professional skills to a wide range of technical activities and is able to use his knowledge and experience to initiate practical developments. He is expected to accept a high degree of responsibility and, in many cases, to push forward the boundaries of knowledge in his particular field. A professional/technologist should normally have received education and training equivalent to that required for corporate membership of a professional institution, e.g. architects, engineers and surveyors.
- (3) A technician is one who occupies a position between a professional/technologist and a skilled worker. His education, training and practical experience should enable him to apply proven techniques to solve technical problems. He is expected to carry a measure of technical responsibility, normally under the guidance of a professional/technologist, e.g. clerk of works, site agent and site foremen.
- (4) Other site personnel are persons other than those in (1), (2) and (3) above stationed/worked at the site, e.g. general clerical staff, amah and security

guards.

- (5) An employer/a self-employed person is a person who works for profit or fees in his own business. He is not employed by anyone. However, he may employ one or more persons to work for him.**
- (6) Vacancies refer to unfilled job openings which are immediately available, and for which active recruitment steps are being taken on the reporting date.**

APPENDIX 7.54 DEVB WB INTERNAL CIRCULAR NO. 9/2007

**Works Branch
Development Bureau
Government Secretariat**

22 August 2007

**Development Bureau
Works Branch Internal Circular No. 9/2007**

**Compliance with the
Personal Data (Privacy) Ordinance**

**(This circular should be read by all staff of Works Branch,
DEVB and re-circulated for
staff's information at half-yearly intervals)**

This circular serves to remind staff of the need to handle personal data in compliance with the Personal Data (Privacy) Ordinance and the relevant Data Protection Principles. It supercedes the Environment, Transport and Works Bureau, Works Branch Internal Circular No. 6/2005.

General

2. The Personal Data (Privacy) Ordinance (PDPO) protects the privacy interests of individuals in relation to personal data. It covers any data relating directly or indirectly to a living individual (data subject) and applies to any person, organization or government department that controls the collection, holding, processing or use of personal data (data user).

3. The PDPO requires data users to comply with the six Data Protection Principles, which allow data subjects to have certain rights, including the right to be informed of whether a data user holds their personal data, to be supplied with a copy of such data and to request correction of any data they consider to be inaccurate.

Privacy Policy

4. A statement of WB's policy and practices in relation to data privacy, showing the main types of personal data held and main purposes for which they are used, is at Annex. If there are any changes to the "Types of Personal Data Held" or "Main Purposes of Keeping Personal Data", please inform the Personal Data Controlling Officer (paragraph 9 refers) in writing.

Practices on Handling Personal Data

5. When handling personal data, colleagues should bear in mind that the interests of the individuals who are the subject of the data should be a primary concern. We should take special care to safeguard against unauthorized use or disclosure (deliberate or accidental) of personal data. Colleagues should undertake to –

- (a) collect, when necessary, adequate but not excessive personal data relating to the functions or activities of WB;
- (b) provide a Personal Information Collection Statement on each means of collection, covering the following –
 - ◆ purposes for which the data are to be used;
 - ◆ whether it is obligatory or voluntary for individuals to supply the data and, if obligatory, the consequences of not doing so;
 - ◆ classes of person to whom the data may be transferred;
 - ◆ rights of individuals to request access and correction of the personal data; and
 - ◆ name and address of the colleague to whom personal data access and correction requests may be made;
- (c) restrict the use (including disclosure and transfer) of personal data to the purposes for which they were to be used at the time of collection. Personal data may be used for other purposes only if the individual concerned voluntarily gives express consent;
- (d) take all reasonably practicable steps to ensure that the personal data collected/held are accurate having regard to the purpose for which they are to be used, and are updated on a regular basis where appropriate;
- (e) regularly review the retention periods for different types of personal data. Personal data must not be kept longer than necessary for the fulfillment of the purposes. Where it is considered useful or necessary to retain records, for example, for statistical or precedent purposes, consideration should be given to erasing any information which directly or indirectly identifies an individual or from which the identity of an individual can be deduced; and
- (f) take all reasonably practicable steps to restrict access to and processing of personal data on a “need-to-know” and “need-to-use” basis and to ensure that personal data are protected against unauthorized or accidental access, disclosure, processing, erasure or other use.

Access to or Correction of Personal Data

6. The PDPO provides for an individual making a data access request –

- (a) to be informed whether the data user holds personal data of which the individual is the data subject;
 - (b) if the data user holds such data, to be supplied by the data user with a copy of such data.
7. The PDPO also provides for an individual to request correction of any personal data of which the individual has been provided with a copy after making a data access request and if the individual considers that the data to be inaccurate.
8. A data access request or a data correction request must be complied with within 40 days of receiving the request.

Personal Data Controlling Officer/Personal Data Privacy Officer

9. The Chief Executive Officer (Works) Administration [CEO(W)A] is the Personal Data Controlling Officer as well as the Personal Data Privacy Officer, responsible for monitoring and ensuring compliance with the provisions of the PDPO in respect of all personal data held by WB. The Senior Executive Officer (Works) Personnel [SEO(W)P] is responsible for all employment-related data access and correction requests while the Senior Executive Officer (Works) General [SEO(W)G] is responsible for access/correction requests of other personal data held by the WB.

Employment-related Data

10. Besides access to or correction of routine human resource management function, all requests should be made in writing as required at paragraph 11(a). For example, officers can still make oral enquiries about their leave balances and particulars. We will not treat these routine requests as data access/correction requests under the Ordinance and will continue to deal with them as usual. However, such requests will be handled with all necessary care, including establishing the identity of the requestors, to avoid unauthorized disclosure or amendment of colleagues' personal data. Colleagues who wish to make a request for access to or correction of employment-related personal data are welcome to contact SEO(W)P at 2848 6134.
11. If a request is made by members of the public, colleagues should undertake to –
- (a) advise a requestor to make the data access request on the Data Access Request Form (PCO Form No. OPS 003), which is obtainable from the General Unit or could be downloaded from the website of the Privacy Commissioner's Office (PCO) at <http://www.pco.org.hk>; and submit the request to the Personal Data Controlling Officer, DEVB, 10/F, Murray Building, Garden Road, Hong Kong;
 - (b) forward any data access/correction request, when received, immediately to the General Unit on 10/F for processing. The data access/correction requests from members of the public will be centrally handled by SEO(W)G, in consultation with the unit heads who hold the personal data of the concerned individual.

Reference materials

12. The six Data Protection Principles, relevant advice given by the Secretary for Home Affairs and other reference materials issued by the PCO, are available from the DEVB Bulletin Board.

Charges

13. We will make a charge to cover the cost of photocopying personal data requested under the Ordinance at the standard rate prescribed by the Director of Accounting Services. The Finance Section is responsible for the issue of demand notes for the payment.

Enquiries

14. For enquiries on the Circular, please contact CEO(W)A, the Personal Data Controlling Officer, at 2848 2132.

Signed
(Patrick Lau)
Principal Executive Officer (Works)

Annex to DEVB WB Internal Circular No. 9/2007

**Statement of Privacy Policy,
Types and Main Purposes of Keeping Personal Data Held
in the Works Branch, DEVB**

Privacy Policy

The protection of privacy in relation to personal data is the concern of every member of staff in the Works Branch, DEVB. We respect personal data and are committed to fully implementing and complying with the data protection principles and all relevant provisions of the Personal Data (Privacy) Ordinance.

Types and Purposes of keeping the Personal Data held

Works Branch, DEVB holds the following types of personal data –

- (1) ***Employment related Personal Data*** – personal data held on serving officers and former employees include personal and family particulars, education and qualifications, employment history, salary and allowances, terms and conditions of service, housing, medical records, leave and passages, training, investments, outside employment, appraisal reports, promotion board assessments, conduct and discipline, and retirement and pension. Recruitment and appointment data are also held on applicants for appointment and seeking temporary employment.

[Purpose : for a range of employment-related purposes, including appointments, integrity checking, posting and transfers, grant of allowances and employment benefits, offer/renewal/extension of agreement, incremental credit, training and career development, revision of terms of conditions of service, promotion, discipline, continuation in or removal from office, pensions and provision of testimonials.]

- (2) ***Members of Boards, Committees and Tribunals*** – these personal data include the personal particulars of candidates nominated for appointment/re-appointment to the various committees, boards and tribunals provided by the nominating parties and candidates, and assessments on the suitability of the candidates for appointment/ re-appointment (including personal information, past performance as a board/committee/tribunal member, attendance rate, relevant experience and expertise).

[Purpose : for activities relating to the appointment of members to various boards and committees, and to facilitate communication between members and the secretariat.]

- (3) ***Appeal Boards or Tribunals*** – personal data held include name, address and contact number of appellants, authorized representatives, witnesses of various appeal boards or tribunals.

[Purpose : to facilitate the appeal proceedings.]

- (4) *Contractors* – personal data held include personal particulars or curricula vitae (CV) of key personnel or technical staff employed by contractors.

[Purpose : to facilitate the consideration of contractors for inclusion in the List of Approved Contractors for Public Works and the List of Approved Suppliers of Materials and Specialist Contracts for Public Works.]

- (5) *Consultants* – these personal data include personal particulars and CV of individual consultants providing services to WB.

[Purpose : to facilitate the award of consultancies.]

- (6) *Registered Safety Officers employed under public works contracts* – data held in WB include name and letter of registration issued by the Labour Department.

[Purpose : to prevent registered safety officers from being employed full-time in more than one contracts or part-time in more than 3 contracts, which would affect their level and quality of services.]

- (7) *Construction Workers claiming token allowances for attending Safety Certificate for Specified Trade Workers Course* – data held in WB include name, trade and serial number of the Specified Trade Safety Certificate issued by CITA.

[Purpose : to prevent over-payment to contractors under the contract for attending the safety course.]

- (8) *Other records* – including administration records and personal particulars of members of the public who make requests under the Code on Access to Information and the Personal Data (Privacy) Ordinance or make enquiries or complaints, or put forward their views and comments, to WB.

[Purpose : for various purposes which vary according to the nature of the record, such as dealing with enquiries or complaints or collecting views and comments from members of the public.]

**Works Branch
Development Bureau
August 2007**

**APPENDIX 7.55 REVISED SPECIAL CONDITIONS OF CONTRACT FOR
CAPITAL WORKS CONTRACTS ADOPTING VOLUNTARY
ADJUDICATION
(Ref.: SDEV's memo ref. DEVB(W) 510/10/01 dated 4.12.2014)**

**[To be adopted for capital works contracts adopting voluntary adjudication to be
tendered on or after 1 January 2015]**

SCC[X] Definition of Disputes

**General Condition of Contract Clause 1(1) is amended by adding the following
definition:**

**“Dispute” means any dispute or difference of any kind whatsoever between the
Employer and the Contractor arising out of or in connection with the Contract or the
carrying out of the Works including without limitation any dispute as to any decision,
instruction, order, direction, certificate or valuation by the Engineer whether during the
progress of the Works or after their completion and whether before or after the
termination, abandonment or breach of the Contract by either the Employer or the
Contractor.**

SCC[Y] Settlement of Disputes

**General Conditions of Contract Clause 86 is hereby deleted and replaced by the
following :**

**“86 (1) If any Dispute shall arise, it shall be referred to and settled by the Engineer who
shall state his decision in writing and give notice of the same to the Employer and the
Contractor. Unless the Contract shall have been already terminated or abandoned the
Contractor shall in every case continue to proceed with the Works with all due diligence
and he shall give effect forthwith to every such decision of the Engineer. Such decision
of the Engineer shall be final and binding upon the Contractor and the Employer unless
either of them shall require that the matter be referred to mediation, adjudication or
arbitration as hereinafter provided and unless and until the decision shall be revised in
the said mediation, adjudication or arbitration. If the Engineer shall fail to give such
decision for a period of 28 days after being requested to do so or if either the Employer
or the Contractor be dissatisfied with any such decision of the Engineer then either the
Employer or the Contractor may within 28 days after receiving notice of such decision,
or within 28 days after the expiry of the said decision period of 28 days, as the case may
be, request that the Dispute be referred to mediation or adjudication in accordance with
and subject to The Government of the Hong Kong Special Administrative Region
Construction Mediation Rules (the Mediation Rules) or any modification thereof being
in force at the date of such request or The Government of the Hong Kong Special
Administrative Region Construction Adjudication Rules (the Adjudication Rules)**

appended herewith as appropriate unless the Employer and the Contractor agree otherwise.

(1A) A decision of an adjudicator shall be final and binding upon the parties and enforceable as such unless and until either the Dispute -

- (i)** has been settled; or
- (i)** has been referred to arbitration as provided in this Clause and an arbitral award has been made or a settlement reached.

(1B) Despite the initiation of the mediation process under the Mediation Rules, if a party refuses to participate in the mediation or if the parties agree to participate in the mediation but they cannot reach a settlement agreement acceptable to both in respect of the Dispute, either party may within 14 days after the refusal to mediate or the termination of the mediation process request that the Dispute be referred to adjudication in accordance with and subject to the Adjudication Rules. The provisions in this sub-clause **(1B)** shall not be applicable to mediation initiated under sub-clause **(1C)** below.

(1C) Despite the initiation of the adjudication process under the Adjudication Rules, if a party refuses to participate in the adjudication or at any time after the commencement of the adjudication but before the date of the adjudicator's decision on the Dispute, the parties may by agreement refer the Dispute to mediation in accordance with and subject to the Mediation Rules. Upon the agreement of the parties to refer the Dispute to mediation under this sub-clause, the adjudication process shall be deemed terminated for purpose of Rule 11 of the Adjudication Rules on the same day. The provisions in this sub-clause **(1C)** shall not be applicable to adjudication initiated under sub-clause **(1B)** above.

- (2)** If the Dispute cannot be resolved-
- (i)** by mediation and/or adjudication; or
 - (ii)** as a result of a failure of a recipient of a request for mediation or adjudication to respond; or
 - (iii)** because of a refusal to mediate or adjudicate by either the Employer or the Contractor

as provided in the foregoing sub-clauses of this Clause, or if neither party wishes the Dispute to be referred to mediation or adjudication, and either the Employer or the Contractor wishes to pursue the Dispute further, then the Dispute shall be referred to and finally settled by arbitration in accordance with and subject to the provisions of the Arbitration Ordinance and any such reference shall be deemed to be a submission to arbitration within the meaning

of such Ordinance. Any reference to arbitration shall be made by the Employer or the Contractor within 90 days of :

- (a) the receipt of a request for mediation or adjudication and subsequently the recipient of such request having failed to respond, or
- (b) the refusal to mediate or adjudicate, or
- (c) the failure of the mediation proceedings to produce a settlement acceptable to the Employer and the Contractor, or
- (d) the abandonment of the mediation or adjudication, or
- (e) where the Engineer has failed to give a decision within the 28 days allowed under sub-clause (1) of this Clause after being requested to do so, the expiry of the subsequent period of 28 days for the Employer or the Contractor to request that the Dispute be referred to mediation or adjudication, and neither the Employer nor the Contractor having requested mediation or adjudication within that subsequent period of 28 days, or
- (f) where the Engineer has given a decision within the 28 days allowed under sub-clause (1) of this Clause, the expiry of the period of 28 days after receipt of the notice of the Engineer's decision for the Employer or the Contractor to request that the Dispute be referred to mediation or adjudication, and neither the Employer nor the Contractor having requested mediation or adjudication within that period of 28 days, or
- (g) the date of the adjudication decision of the Dispute.

Provided that where the provisions under sub-clauses (1B) or (1C) above have been invoked by the parties, the 90-day period for making a reference to arbitration shall be counted from the relevant event(s) as specified in paragraphs (a) to (g) above, where applicable, in the subsequent adjudication process or, as the case may be, mediation process.

(3) The adjudicator or arbitrator appointed shall have full power to open up, review and revise any decision (other than a decision under Clause 46(3) not to vary the Works), instruction, order, direction, certificate or valuation by the Engineer and neither party shall be limited in the proceedings before such adjudicator or arbitrator as the case may be to the evidence or arguments put before the Engineer for the purpose of obtaining the Engineer's decision above referred to. No decision opinion instruction direction certificate or valuation given by the Engineer shall disqualify him from being called as a witness and giving evidence before an adjudicator or arbitrator on any

matter whatsoever relevant to the Dispute so referred to the adjudicator or arbitrator as aforesaid.

(3A) Save as provided for in sub-clauses (4) and (4A) of this Clause no further steps shall be taken in the reference to arbitration until after the completion or alleged completion of the Works unless with the written consent of the Employer and the Contractor.

Provided that the giving of a certificate of completion in accordance with Clause 53 shall not be a condition precedent to the taking of any step in such reference.

(4) In the case of any Dispute as to the exercise of the Engineer's powers under Clause 81(1) the reference to arbitration may proceed notwithstanding that the Works shall not then be or be alleged to be complete.

(4A) In the case where the Contract has been terminated or abandoned, the reference to arbitration may proceed notwithstanding that the Works shall not then be or be alleged to be complete.

(5) (a) Subject to paragraphs (b) and (c) of this sub-clause, the Domestic Arbitration Rules (2014) of the Hong Kong International Arbitration Centre (the Arbitration Rules) shall apply to any arbitration instituted in accordance with this Clause.

(b) Notwithstanding any provision of the Arbitration Rules, the place of meetings and hearings in the arbitration shall be Hong Kong unless the parties otherwise agree.

(c) Article 20.1 of the Arbitration Rules shall be deleted and replaced by:

'20.1(a) The arbitration proceedings are private and confidential between the parties and the arbitrator. Subject to the provisions of Section 18 of the Ordinance and these Rules, no information relating to the arbitration shall be disclosed by any person without the written consent of each and every party to the arbitration. Disclosures are permissible where disclosures –

(a) are necessary for implementation or enforcement;

(b) are required by the parties' auditors or for some other legitimate business reason;

(c) are required by any order of the courts of Hong Kong or other judicial tribunal;

(d) which are necessary for the making of claims against any third party or to defend a claim brought by any third party.

20.1(b) Notwithstanding Article 20.1(a) and subject to the following provisions, the party comprising the Government of the Hong Kong Special Administrative Region (the Government party) may disclose the outline of any dispute with the other party and the outcome of the arbitration to the Public Accounts Committee of the Legislative Council upon its request.

Before disclosures are made to the said Committee, the Government party shall inform the other party. Disclosures shall not be made to the said Committee before expiry of the first 6 months from the date of the outcome of the arbitration without the written consent of the other party but such consent shall not be unreasonably withheld. The other party shall be deemed to have given his consent to disclosures on the expiry of the first 6 months from the date of the outcome of the arbitration. The other party may, if he considers necessary to protect the sensitive nature of certain information relating to him, request the Government party to disclose such specified information to the said Committee strictly on a confidential basis. If the Government party considers that there are legitimate grounds to accede to the other party's request, the Government party shall convey the request to the said Committee for its consideration.'

(6) All the provisions in Schedule 2 to the Arbitration Ordinance shall apply to any arbitration instituted in accordance with this Clause.

(7) For the purposes of this Clause, "Arbitration Ordinance" means the Arbitration Ordinance (Cap. 609) or any statutory modification thereof for the time being in force."

Note: Reference to 'Engineer' should be suitably amended to refer to Architect/Surveyor/Maintenance Surveyor where appropriate. References to "General Conditions of Contract Clause 86", references to "the Works" and certain internal cross-references may need to be modified in the case of term contracts.

Project Offices should take account of any other amendment to Cl 86 being in force at the time of preparing the contract documents.

APPENDIX 7.56 REVISED SPECIAL CONDITIONS OF CONTRACT FOR NON-D&B CAPITAL WORKS CONTRACTS
(Ref.: SDEV's memo ref. DEVB(W) 510/10/01 dated 4.12.2014)

[To be adopted for non-D&B capital works contracts to be tendered on or after 1 January 2015]

General Conditions of Contract Clause 86 is deleted and replaced by the following:

“86(1) If any dispute or difference of any kind whatsoever shall arise between the Employer and the Contractor in connection with or arising out of the Contract or the carrying out of the Works including any dispute as to any decision, instruction, order, direction, certificate or valuation by the *Architect / Engineer whether during the progress of the Works or after their completion and whether before or after the termination, abandonment or breach of the Contract, it shall be referred to and settled by the *Architect / Engineer who shall state his decision in writing and give notice of the same to the Employer and the Contractor. Unless the Contract shall have been already terminated or abandoned the Contractor shall in every case continue to proceed with the Works with all due diligence and he shall give effect forthwith to every such decision of the *Architect / Engineer unless and until the same shall be revised in mediation or arbitration as hereinafter provided. Such decision shall be final and binding upon the Contractor and the Employer unless either of them shall require that the matter be referred to mediation or arbitration as hereinafter provided. If the *Architect / Engineer shall fail to give such decision for a period of 28 days after being requested to do so or if either the Employer or the Contractor be dissatisfied with any such decision of the *Architect / Engineer then either the Employer or the Contractor may within 28 days after receiving notice of such decision, or within 28 days after the expiry of the said decision period of 28 days, as the case may be, request that the matter be referred to mediation in accordance with and subject to The Government of the Hong Kong Special Administrative Region Construction Mediation Rules or any modification thereof being in force at the date of such request.

(2) If the matter cannot be resolved by mediation, or if either the Employer or the Contractor do not wish the matter to be referred to mediation then either the Employer or the Contractor may within the time specified herein require that the matter shall be referred to arbitration in accordance with and subject to the provisions of the Arbitration Ordinance and any such reference shall be deemed to be a submission to arbitration within the meaning of such Ordinance.

(3) Any reference to arbitration shall be made within 90 days of:

- (a) the receipt of a request for mediation and subsequently the recipient of such request having failed to respond, or
- (b) the refusal to mediate, or

- (c) the failure of the mediation proceedings to produce a settlement acceptable to the Employer and the Contractor, or
- (d) the abandonment of the mediation, or
- (e) where the *Architect / Engineer has failed to give a decision within the 28 days allowed under sub-clause (1) of this Clause after being requested to do so, the expiry of the subsequent period of 28 days for the Employer or the Contractor to request that the matter be referred to mediation, and neither the Employer nor the Contractor having requested mediation within that subsequent period of 28 days, or
- (f) where the *Architect / Engineer has given a decision within the 28 days allowed under sub-clause (1) of this Clause, the expiry of the period of 28 days after receipt of the notice of the *Architect's / Engineer's decision for the Employer or the Contractor to request that the matter be referred to mediation, and neither the Employer nor the Contractor having requested mediation within that period of 28 days.

(4) The arbitrator appointed shall have full power to open up, review and revise any decision (other than a decision under Clause 46(3) not to vary the Works), instruction, order, direction, certificate or valuation by the *Architect / Engineer and neither party shall be limited in the proceedings before such arbitrator to the evidence or arguments put before the *Architect / Engineer for the purpose of obtaining his decision above referred to. Save as provided for in sub-clauses (5) and (6) of this Clause no steps shall be taken in the reference to the arbitrator until after the completion or alleged completion of the Works unless with the written consent of the Employer and the Contractor.

Provided that:

- (a) the giving of a certificate of completion in accordance with Clause 53 shall not be a condition precedent to the taking of any step in such reference;
- (b) no decision given by the *Architect / Engineer in accordance with the foregoing provisions shall disqualify him from being called as a witness and giving evidence before the arbitrator on any matter whatsoever relevant to the dispute or difference so referred to the arbitrator as aforesaid.

(5) In the case of any disputes or difference as to the exercise of the *Architect's / Engineer's powers under Clause 81(1) the reference to the arbitrator may proceed notwithstanding that the Works shall not then be or be alleged to be complete.

(6) In the case where the Contract has been terminated or abandoned, the reference to the arbitrator may proceed notwithstanding that the Works shall not then be or be alleged to be complete.

- (7) (a) Subject to paragraphs (b) and (c) of this sub-clause, the Domestic Arbitration Rules (2014) of the Hong Kong International Arbitration Centre (the Arbitration Rules) shall apply to any arbitration instituted in accordance with this Clause.
- (b) Notwithstanding any provision of the Arbitration Rules, the place of meetings and hearings in the arbitration shall be Hong Kong unless the parties otherwise agree.
- (c) Article 20.1 of the Arbitration Rules shall be deleted and replaced by:
- ‘20.1(a) The arbitration proceedings are private and confidential between the parties and the arbitrator. Subject to the provisions of Section 18 of the Ordinance and these Rules, no information relating to the arbitration shall be disclosed by any person without the written consent of each and every party to the arbitration. Disclosures are permissible where disclosures –
- (a) are necessary for implementation or enforcement;
 - (b) are required by the parties’ auditors or for some other legitimate business reason;
 - (c) are required by any order of the courts of Hong Kong or other judicial tribunal;
 - (d) are necessary for the making of claims against any third party or to defend a claim brought by any third party.
- 20.1(b) Notwithstanding Article 20.1(a) and subject to the following provisions, the party comprising the Government of the Hong Kong Special Administrative Region (the Government party) may disclose the outline of any dispute with the other party and the outcome of the arbitration to the Public Accounts Committee of the Legislative Council upon its request. Before disclosures are made to the said Committee, the Government party shall inform the other party. Disclosures shall not be made to the said Committee before expiry of the first 6 months from the date of the outcome of the arbitration without the written consent of the other party but such consent shall not be unreasonably withheld. The other party shall be deemed to have given his consent to disclosures on the expiry of the first 6 months from the date of the outcome of the arbitration. The other party may, if he considers necessary to protect the sensitive nature of certain information relating to him, request the Government party to disclose such specified information to the said Committee strictly on a confidential basis. If the Government party considers that there are legitimate grounds to accede to the other party’s request, the Government party shall convey the request to the said Committee for its consideration.’

(8) All the provisions in Schedule 2 to the Arbitration Ordinance shall apply to any arbitration instituted in accordance with this Clause.

(9) For the purposes of this Clause, "Arbitration Ordinance" means the Arbitration Ordinance (Cap. 609) or any statutory modification thereof for the time being in force."

**Delete as appropriate*

APPENDIX 7.56A REVISED SPECIAL CONDITIONS OF CONTRACT FOR TERM CONTRACTS**(Ref.: SDEV's memo ref. DEVB(W) 510/10/01 dated 4.12.2014)****[To be adopted for term contracts to be tendered on or after 1 January 2015]****General Conditions of Contract Clause *89/92 is deleted and replaced by the following:**

“*89/92. (1) If any dispute or difference of any kind whatsoever shall arise between the Employer and the Contractor in connection with or arising out of the Contract or the carrying out of the Works including any dispute as to any decision, instruction, order, direction, certificate or valuation by the *Engineer/Maintenance Surveyor whether during the progress of the Whole of the Works or after their completion and whether before or after the termination, abandonment or breach of the Contract, it shall be referred to and settled by the *Engineer/Maintenance Surveyor who shall state his decision in writing and give notice of the same to the Employer and the Contractor. Unless the Contract shall have been already terminated or abandoned the Contractor shall in every case continue to proceed with the Whole of the Works with all due diligence and he shall give effect forthwith to every such decision of the *Engineer/Maintenance Surveyor unless and until the same shall be revised in mediation or arbitration as hereinafter provided. Such decision shall be final and binding upon the Contractor and the Employer unless either of them shall require that the matter be referred to mediation or arbitration as hereinafter provided. If the *Engineer/Maintenance Surveyor shall fail to give such decision for a period of 28 days after being requested to do so or if either the Employer or the Contractor be dissatisfied with any such decision of the *Engineer/Maintenance Surveyor then either the Employer or the Contractor may within 28 days after receiving notice of such decision, or within 28 days after the expiry of the said decision period of 28 days, as the case may be, request that the matter be referred to mediation in accordance with and subject to The Government of the Hong Kong Special Administrative Region Construction Mediation Rules or any modification thereof being in force at the date of such request.

(2) If the matter cannot be resolved by mediation, or if either the Employer or the Contractor do not wish the matter to be referred to mediation then either the Employer or the Contractor may within the time specified herein require that the matter shall be referred to arbitration in accordance with and subject to the provisions of the Arbitration Ordinance and any such reference shall be deemed to be a submission to arbitration within the meaning of such Ordinance.

(3) Any reference to arbitration shall be made within 90 days of:

- (a) the receipt of a request for mediation and subsequently the recipient of such request having failed to respond, or**
- (b) the refusal to mediate, or**

- (c) the failure of the mediation proceedings to produce a settlement acceptable to the Employer and the Contractor, or
- (d) the abandonment of the mediation, or
- (e) where the *Engineer/Maintenance Surveyor has failed to give a decision within the 28 days allowed under sub-clause (1) of this Clause after being requested to do so, the expiry of the subsequent period of 28 days for the Employer or the Contractor to request that the matter be referred to mediation, and neither the Employer nor the Contractor having requested mediation within that subsequent period of 28 days, or
- (f) where the *Engineer/Maintenance Surveyor has given a decision within the 28 days allowed under sub-clause (1) of this Clause, the expiry of the period of 28 days after receipt of the notice of the *Engineer's/Maintenance Surveyor's decision for the Employer or the Contractor to request that the matter be referred to mediation, and neither the Employer nor the Contractor having requested mediation within that period of 28 days.

(4) The arbitrator appointed shall have full power to open up, review and revise any decision (other than a decision under Clause 48(3) not to vary any Works), instruction, order, direction, certificate or valuation by the *Engineer/Maintenance Surveyor and neither party shall be limited in the proceedings before such arbitrator to the evidence or arguments put before the *Engineer/Maintenance Surveyor for the purpose of obtaining his decision above referred to. Save as provided for in sub-clauses (5) and (6) of this Clause no steps shall be taken in the reference to the arbitrator until after the completion or alleged completion of the Whole of the Works unless with the written consent of the Employer and the Contractor.

Provided that:

- (a) the giving of the last certificate of completion in accordance with Clause *53/55 shall not be a condition precedent to the taking of any step in such reference;
- (b) no decision given by the *Engineer / Maintenance Surveyor in accordance with the foregoing provisions shall disqualify him from being called as a witness and giving evidence before the arbitrator on any matter whatsoever relevant to the dispute or difference so referred to the arbitrator as aforesaid.

(5) In the case of any disputes or difference as to the exercise of the *Engineer's/Maintenance Surveyor's powers under Clause *84(1)/87(1) the reference to the arbitrator may proceed notwithstanding that the Whole of the Works shall not then be or be alleged to be complete.

(6) In the case where the Contract has been terminated or abandoned, the reference to the arbitrator may proceed notwithstanding that the Whole of the Works shall not then be or be alleged to be complete.

- (7) (a) Subject to paragraphs (b) and (c) of this sub-clause, the Domestic Arbitration Rules (2014) of the Hong Kong International Arbitration Centre (the Arbitration Rules) shall apply to any arbitration instituted in accordance with this Clause.
- (b) Notwithstanding any provision of the Arbitration Rules, the place of meetings and hearings in the arbitration shall be Hong Kong unless the parties otherwise agree.
- (c) Article 20.1 of the Arbitration Rules shall be deleted and replaced by:
- “20.1(a) The arbitration proceedings are private and confidential between the parties and the arbitrator. Subject to the provisions of Section 18 of the Ordinance and these Rules, no information relating to the arbitration shall be disclosed by any person without the written consent of each and every party to the arbitration. Disclosures are permissible where disclosures -
- (a) are necessary for implementation or enforcement;
 - (b) are required by the parties’ auditors or for some other legitimate business reason;
 - (c) are required by any order of the courts of Hong Kong or other judicial tribunal;
 - (d) are necessary for the making of claims against any third party or to defend a claim brought by any third party.
- 20.1(b) Notwithstanding Article 20.1(a) and subject to the following provisions, the party comprising the Government of the Hong Kong Special Administrative Region (the Government party) may disclose the outline of any dispute with the other party and the outcome of the arbitration to the Public Accounts Committee of the Legislative Council upon its request. Before disclosures are made to the said Committee, the Government party shall inform the other party. Disclosures shall not be made to the said Committee before expiry of the first 6 months from the date of the outcome of the arbitration without the written consent of the other party but such consent shall not be unreasonably withheld. The other party shall be deemed to have given his consent to disclosures on the expiry of the first 6 months from the date of the outcome of the arbitration. The other party may, if he considers necessary to protect the sensitive nature of certain information relating to him, request the Government party to disclose such specified information to the said Committee strictly on a confidential basis. If the Government party considers that

there are legitimate grounds to accede to the other party's request, the Government party shall convey the request to the said Committee for its consideration.”

(8) All the provisions in Schedule 2 to the Arbitration Ordinance shall apply to any arbitration instituted in accordance with this Clause.

(9) For the purposes of this Clause, “Arbitration Ordinance” means the Arbitration Ordinance (Cap. 609) or any statutory modification thereof for the time being in force.”

**** Delete as appropriate***

APPENDIX 7.57 REVISED SPECIAL CONDITIONS OF CONTRACT FOR D&B CONTRACTS**(Ref.: SDEV's memo ref. DEVB(W) 510/10/01 dated 4.12.2014)****[To be adopted for D&B contracts to be tendered on or after 1 January 2015]****General Conditions of Contract Clause 86 is deleted and replaced by the following:****“86.(1) Any and all disputes shall be settled in accordance with the provisions of this Clause 86.**

(2) For the purpose of this Clause, dispute means any dispute or difference of any kind whatsoever between the Employer and the Contractor arising under, out of or in connection with the Contract or the carrying out of the Works including any dispute as to any decision, instruction, opinion, order, direction, certificate or valuation by the Supervising Officer whether during the progress of the Works or after their completion and whether before or after the termination, abandonment or breach of the Contract.

(3) For the purpose of this Clause 86 and notwithstanding sub-clause (2) of this Clause, a dispute shall be deemed to arise when either the Contractor or the Employer serves on the Supervising Officer and the other party a notice in writing stating the nature of the dispute.

(4) The Supervising Officer shall within 28 days of receipt of the notice referred to in sub-clause (3) of this Clause decide the dispute and notify the Employer and the Contractor in writing of his decision. Such decision shall be final and binding upon the Employer and the Contractor unless and until the same shall be revised in mediation or arbitration as hereinafter provided.

(5) Unless the Contract shall have been already terminated or abandoned the Contractor shall in every case continue to proceed with the Works with all due diligence and he shall give effect forthwith to every such decision of the Supervising Officer unless and until the same shall be revised in mediation or arbitration as hereinafter provided.

(6) If the Supervising Officer shall fail to give such decision in accordance with sub-clause (4) of this Clause or if either the Employer or the Contractor is dissatisfied with such decision then either the Employer or the Contractor may within 28 days after receiving notice of such decision, or within 28 days after the expiration of the said decision period of 28 days, as the case may be, request that the dispute be referred to mediation in accordance with and subject to The Government of the Hong Kong Special Administrative Region Construction Mediation Rules or any modification thereof being in force at the date of such request.

(7) If the dispute cannot be resolved by mediation, or if either the Employer or the Contractor do not wish the dispute to be referred to mediation then either the Employer or the Contractor may within the time specified herein require that the dispute shall be referred to arbitration in accordance with and subject to the provisions of the Arbitration Ordinance and any such reference shall be deemed to be a submission to arbitration within the meaning of such Ordinance. Any reference to arbitration shall be made within 90 days of:

- (a) the receipt of a request for mediation and subsequently the recipient of such request having failed to respond, or
- (b) the refusal to mediate, or
- (c) the failure of the mediation proceedings to produce a settlement acceptable to the Employer and the Contractor, or
- (d) the abandonment of the mediation, or
- (e) where the Supervising Officer has failed to give a decision within the 28 days allowed under sub-clause (4) of this Clause after being requested to do so, the expiry of the subsequent period of 28 days for the Employer or the Contractor to request that the matter be referred to mediation, and neither the Employer nor the Contractor having requested mediation within that subsequent period of 28 days, or
- (f) where the Supervising Officer has given a decision within the 28 days allowed under sub-clause (4) of this Clause, the expiry of the period of 28 days after receipt of the notice of the Supervising Officer's decision for the Employer or the Contractor to request that the matter be referred to mediation, and neither the Employer nor the Contractor having requested mediation within that period of 28 days.

(8) The arbitrator appointed shall have full power to open up, review and revise any decision (other than a decision under Clause 46(3) not to order a Variation), instruction, opinion, order, direction, certificate or valuation by the Supervising Officer and neither party shall be limited in the proceedings before such arbitrator to the evidence or arguments put before the Supervising Officer for the purpose of obtaining his decision referred to above. Save as provided for in sub-clauses (9) and (9A) of this Clause no steps shall be taken in the reference to the arbitrator until after the completion or alleged completion of the Works unless with the written consent of the Employer and the Contractor.

Provided that:

- (a) the giving of a certificate of completion in accordance with Clause 53 shall not be a condition precedent to the taking of any step in such reference;
- (b) no decision given by the Supervising Officer in accordance with the foregoing provisions shall disqualify him from being called as a witness

and giving evidence before the arbitrator on any matter whatsoever relevant to the dispute so referred to the arbitrator as aforesaid.

(9) In the case of any dispute as to the exercise of the Supervising Officer's powers under Clause 81(1) the reference to the arbitrator may proceed notwithstanding that the Works shall not then be or be alleged to be complete.

(9A) In the case where the Contract has been terminated or abandoned, the reference to the arbitrator may proceed notwithstanding that the Works shall not then be or be alleged to be complete.

(10)(a) Subject to paragraphs (b) and (c) of this sub-clause, the Domestic Arbitration Rules (2014) of the Hong Kong International Arbitration Centre (the Arbitration Rules) shall apply to any arbitration instituted in accordance with this Clause.

(b) Notwithstanding Article 8.2 and Article 13 of the Arbitration Rules, the place of meetings and hearings in the arbitration shall be Hong Kong unless the parties otherwise agree.

(c) Article 20.1 of the Arbitration Rules shall be deleted and replaced by:

‘20.1(a) The arbitration proceedings are private and confidential between the parties and the arbitrator. Subject to the provisions of Section 18 of the Ordinance and these Rules, no information relating to the arbitration shall be disclosed by any person without the written consent of each and every party to the arbitration. Disclosures are permissible where disclosures –

(a) are necessary for implementation or enforcement;

(b) are required by the parties’ auditors or for some other legitimate business reason;

(c) are required by any order of the courts of Hong Kong or other judicial tribunal;

(d) are necessary for the making of claims against any third party or to defend a claim brought by any third party.

20.1(b) Notwithstanding Article 20.1(a) and subject to the following provisions, the party comprising the Government of the Hong Kong Special Administrative Region (the Government party) may disclose the outline of any dispute with the other party and the outcome of the arbitration to the Public Accounts Committee of the Legislative Council upon its request. Before disclosures are made to the said Committee, the Government party shall inform the other party. Disclosures shall not be made to the said Committee before expiry of the first 6 months from the date of the outcome of the arbitration without the written consent of the other party but such consent shall not be unreasonably withheld. The other party shall be deemed to have given his consent to disclosures on the expiry of the first 6 months from the date of the outcome of the arbitration. The other party may, if he considers necessary to protect the sensitive nature of certain

information relating to him, request the Government party to disclose such specified information to the said Committee strictly on a confidential basis. If the Government party considers that there are legitimate grounds to accede to the other party's request, the Government party shall convey the request to the said Committee for its consideration.'

(11) All the provisions in Schedule 2 to the Arbitration Ordinance shall apply to any arbitration instituted in accordance with this Clause.

(12) For the purposes of this Clause, "Arbitration Ordinance" means the Arbitration Ordinance (Cap. 609) or any statutory modifications thereof for the time being in force."

** Delete as appropriate.*

APPENDIX 7.58 PRESCRIBED FORM FOR SUBMISSION OF INFORMATION OF REQUEST FOR ADJUDICATION IMMEDIATELY AFTER REJECTION OF AN ADJUDICATION REQUEST OR AFTER APPOINTMENT OF ADJUDICATOR

CONFIDENTIAL

To: LA(W) and PAS(W)3 of DEVB

Information of Request for Adjudication

CONTRACT DETAILS

Department:		
Contract no. and title:		Contract Sum: \$
Contract commencement date:	Original completion date:	Actual/Anticipated* completion date:
Name of Contractor:		
Is the contract administered by Consultants?		
<input type="checkbox"/> No, contact administered by in-house staff <input type="checkbox"/> Yes, name of Consultants: _____		

DISPUTE DETAILS

Nature of dispute:	
Sum in dispute: \$	Extension of time in dispute: days
The issues are <input type="checkbox"/> legal <input type="checkbox"/> technical <input type="checkbox"/> both	
Adjudication requested by <input type="checkbox"/> Contractor <input type="checkbox"/> Employer Date _____	
Adjudication request accepted by the other party?	
<input type="checkbox"/> Yes <input type="checkbox"/> No, comments/reasons for rejection: _____ _____ _____	
Has this dispute previously been referred to Mediation by either party?	
<input type="checkbox"/> No <input type="checkbox"/> Yes, but refused by the other party/the parties failed to reach a settlement agreement*	
Name of adjudicator appointed by the parties:	

Signed : _____
for Director

Date : _____

* Delete as appropriate

**APPENDIX 7.59 PRESCRIBED FORM FOR SUBMISSION OF ADJUDICATION
DETAILS IMMEDIATELY AFTER CONCLUSION OF
ADJUDICATION**

CONFIDENTIAL

To: LA(W) and PAS(W)3 of DEVB

Adjudication Details

Contract No. _____

1. Adjudication Rules used:

- The Government of the HKSAR Construction Adjudication Rules (2004)
 Others, please specify:

2. Were the Adjudication Rules strictly followed?

- Yes No, please

specify: _____

3. Was the adjudication abandoned, suspended or concluded, by agreement or otherwise, before the adjudicator made his decision?

No

Yes, please specify: _____
 (go to item 6) _____

4. Was decision made within 56 days of the Adjudication Commencement Date?

Yes

No, please specify the actual duration and reasons for extension: _____

5. Brief outline of adjudicator's decision and Department's view on the decision:

6. Which of the following were notified/consulted during and/or after the adjudication?

	Notified	Consulted
LAD(W), DevB	<input type="checkbox"/>	<input type="checkbox"/>
PAS(W)3, DevB	<input type="checkbox"/>	<input type="checkbox"/>
FSTB	<input type="checkbox"/>	<input type="checkbox"/>
The Engineer	<input type="checkbox"/>	<input type="checkbox"/>
Others, please specify	<input type="checkbox"/>	<input type="checkbox"/>

Signed : _____

for Director

Date : _____

APPENDIX 7.60 SPECIAL CONDITIONS OF CONTRACT ON ALTERNATIVE DESIGNS AT CONTRACT STAGE**SCC (A)**

General Conditions of Contract Clause 1(1) is amended

(a) by adding the following:

“Independent Checking Engineer” means the person, firm or company employed by the Contractor and responsible for the independent checking of the Contractor’s Design whose qualifications, skill and experience are deemed satisfactory by the Employer and who shall be independent of the Designer and the Contractor.

“Designer” means the person, firm or company responsible for the design of the Contractor’s Design whose qualifications, skill and experience are deemed satisfactory by the Employer.

“Contractor’s Design” means that part or those parts of the design of the permanent works for which the Contractor has elected or is required in accordance with the tender documents to #prepare design calculations and drawings and which has been accepted by the Employer, including, where applicable, any further design which the Contractor has to carry out as a result of any amendment to the design required under sub-clause (6) and (7) of SCC (B) and/or any variation to the works for the Contractor’s Design ordered by the Engineer/Architect/Maintenance Surveyor*.

“Check Certificate” means a certificate, in the form specified in Appendix (see Appendix C of DEVB TCW No. 3/2014) to these Special Conditions of Contract, issued by the Independent Checking Engineer certifying that the Contractor’s Design has been independently checked and complies in all respects with the terms and conditions of the Contract.

“Certified Working Drawing” means a drawing prepared by the Designer and endorsed as being checked and approved by the Independent Checking Engineer.

SCC (B)

- (1) (a) Further to General Conditions of Contract Clause 23/25*, the Contractor shall have in respect of any defect or insufficiency in the Contractor's Design the like liability to the Employer, whether under statute or otherwise, as would an appropriate professional designer holding himself out as competent to take on the Contractor's Design, provided always that:
- (i) where the Employer has relied upon the Contractor to select equipment, plant, materials and goods required by the Contractor's Design to be incorporated in the Works the Contractor shall ensure that all such equipment, plant, materials and goods are reasonably fit for the purpose for which they are intended and of good quality; and
 - (ii) subject to sub-clause (1)(a)(i) above and without prejudice to the generality of the warranty of the Contractor referred to in the second paragraph of this sub-clause (1)(a) in no circumstances shall the Contractor be obliged to ensure that the Contractor's Design is fit for the purpose for which it is intended. In addition, the Contractor shall warrant that the Contractor's Design and its resultant work conforms to any performance specification or requirement referred to in the Contract and, without prejudice to the generality of General Conditions of Contract Clause 30/32* in respect of the Works, the provisions of General Conditions of Contract Clause 30/32* are complied with in respect of the Contractor's Design and the resultant work.
- (b) The liability and warranty of the Contractor referred to in sub-clause (1)(a) above shall apply independent of any question of fault on the part of the Contractor or any sub-contractor and shall not be invalidated in any respect by any error made by the Contractor or sub-contractor in the Contractor's Design or any submission to the Engineer/Architect/Maintenance Surveyor* for checking and/or approval.
- (c) The Designer shall prepare all calculations and drawings relating to the Contractor's Design which shall be subject to a Check Certificate.
- (d) If at any time the Engineer/Architect/Maintenance Surveyor* has substantial cause for dissatisfaction with the conduct or performance of the Independent Checking Engineer, he shall notify the Employer accordingly. The Contractor shall, upon receiving written notice from the Employer, cease to employ such person, firm or company and shall immediately replace him by another whose qualifications, skill and experience are satisfactory to the Employer.
- (2) The Contractor's Design shall be compatible with the provisions of the Specification and the Drawings, provided that the Contractor may propose modifications to the Specification in respect of particular methods of construction or materials not included in the Specification or shown on the Drawings. In such cases, the Contractor shall immediately advise the Employer of such proposals through the Engineer/Architect/Maintenance Surveyor*. The Employer's decision shall be conveyed to the Contractor in writing by the Engineer/Architect/Maintenance Surveyor* within a reasonable period, and neither the acceptance nor rejection by the Employer of such proposals shall vitiate the Contract.

Acceptance or rejection by the Employer of such proposals shall not entitle the Contractor to extra payment arising from any additional cost of the Works or extension of time arising therefrom.

(3) Within a reasonable period prior to the commencement of that part of the Works to be constructed in accordance with the Contractor's Design, and from time to time as required by the Engineer/Architect/Maintenance Surveyor*, the Contractor shall submit to the Engineer/Architect/Maintenance Surveyor*:

- (a) two certified copies of the Contractor's Design,
- (b) Check Certificates,
- (c) Certified Working Drawings, and
- (d) satisfactory evidence of professional indemnity insurance as referred to in Special Conditions of Contract Clause SCC[#(i.e. the standard SCC(A) in DEVB TCW No. 9/2007 – Appendix E).

(4) The Engineer/Architect/Maintenance Surveyor* shall, within a reasonable period, notify the Contractor in writing whether or not the documents submitted meet the requirements of the Contract. The Contractor shall not commence the construction of such works until receipt of the confirmative notification in writing from the Engineer/Architect/Maintenance Surveyor*.

(5) Notwithstanding General Conditions of Contract Clause 7, and prior to the commencement of the part of the Works of the Contractor's Design, the Contractor shall supply to the Engineer/Architect/Maintenance Surveyor* ___ copies of the Certified Working Drawings together with one reproducible print of each drawing and, where specified in the Contract, the soft copy of the drawings prepared in accordance with the CAD standard so specified. All drawings shall be fully figured copies with black lines on a white background of a size specified in the Contract and shall be detailed in S.I. units.

(6) If at any time it becomes apparent to the Engineer/Architect/Maintenance Surveyor* that any drawing and/or document submitted by the Contractor does not comply with the Contract in any respect whatsoever, then all amendments deemed necessary by the Engineer/Architect/Maintenance Surveyor* shall be made therein by the Contractor, and such amended drawing and/or document shall be reviewed by the Designer and shall be subject to a further Check Certificate. The Contractor shall bear the full cost of complying with this sub-clause, and shall reimburse the Employer the cost of any work or design done by the Employer which has been rendered abortive by any such amendments.

(7) If at any time it becomes apparent to the Contractor that an amendment to the Contractor's Design is required for the proper completion of that part of the Works involved in such design, then he shall :

- (a) immediately advise the Engineer/Architect/Maintenance Surveyor* of the proposed amendment,
- (b) resubmit documents to the Engineer/Architect/Maintenance Surveyor* in accordance with sub-clause (3) of this Clause, provided that:
 - (i) the finished appearance of the Works shall remain substantially unaltered,
 - (ii) there shall be no additional payment made nor any extension of time

- granted to the Contractor, and
- (iii) the Contractor shall bear the full cost of complying with this sub-clause, and shall reimburse the Employer the cost of any work or design done by the Employer which has been rendered abortive by any such amendments.

(8) On completion of the work constructed in accordance with the Contractor's Design, the Contractor shall prepare and submit to the Engineer/Architect/Maintenance Surveyor* the 'as constructed' drawings of such work and shall supply to the Engineer/Architect/Maintenance Surveyor* two copies and one reproducible print of each of such drawings and, where specified in the Contract, the soft copy of the drawings prepared in accordance with the CAD standard so specified.

(9) Notwithstanding General Conditions of Contract Clause 59/61/62*, the work to be constructed in accordance with the Contractor's Design shall be a lump sum item accompanied by a fully priced and detailed Schedule of Rates. The lump sum item shall include :

- (a) the cost of producing the Contractor's Design,
- (b) the cost and fees for obtaining the Check Certificates,
- (c) the cost of providing the Engineer/Architect/Maintenance Surveyor* with all calculations, documents (including maintenance manuals), and drawings in connection with the Contractor's Design as required by the Contract,
- (d) the full value of the work (including without limitation, spare parts) constructed in accordance with the Contractor's Design and all the associated risks, liabilities and obligations of the Contractor under the Contract, and
- (e) the cost of all samples and testing thereof and testing of the work constructed in accordance with the Contractor's Design.

(10) For the avoidance of doubt, any change in the quantities in the Bills of Quantities (BQ) resulting from the acceptance by the Employer of the Cost Savings Design shall not entitle the Contractor to any adjustment of the rates in the said BQ notwithstanding any other provisions in the Contract.

(11) Variations to the works for the Contractor's Design ordered by the Engineer/Architect/Maintenance Surveyor* shall be measured and valued at the rates ascertained in accordance with the principles of General Conditions of Contract Clause 61/63/64*, at or based on the rates in the Schedule of Rates submitted with the Tender. For the avoidance of doubt, amendments under sub-clause (6) of this Clause shall not be considered as variations within the meaning of this sub-clause.

- (12) (a) Except in respect of those intellectual property rights referred to in sub-clause (12)(c) of this Clause, the Contractor hereby undertakes and warrants to the Employer that the Contractor is the sole legal and beneficial owner of all intellectual property rights subsisting in the Contractor's Design.
- (b) Upon the issue of the certificate of completion of the Works or after termination, abandonment or breach of Contract, the Contractor shall be deemed to have

granted to the Employer and the subsequent owners or occupiers of the Works free of all fee a transferable, non-exclusive and irrevocable licence (carrying the right to grant sub-licences) to utilize the Contractor's Design in connection with the execution of the Works and/or the subsequent alteration, extension and maintenance thereof and for no other purpose whatsoever without the prior written agreement of the Contractor. In the event of different certificates of completion having been issued for different Sections or parts of the Works pursuant to General Conditions of Contract Clause 53/55/56*, the expression "certificate of completion" shall, for the purpose of this sub-clause, mean the last of such certificates.

- (c) To the extent that beneficial ownership of any intellectual property rights in the Contractor's Design is vested in anyone other than the Contractor, the Contractor shall procure that the relevant beneficial owner shall grant a licence together with an indemnity to the Employer and the subsequent owners or occupiers of the Works upon the same terms mutatis mutandis as those set out in sub-clauses (12)(b) and (12)(f) of this Clause respectively.
- (d) For the avoidance of doubt, any licence and indemnity granted pursuant to this Clause shall not be determined if the Contractor shall for any reason cease to be employed in connection with the Works.
- (e) The Contractor shall at the request of the Employer, do such acts and execute all such deeds and documents (or procure that the same be done or executed) as the Employer or the subsequent owners or occupiers of the Works may require for vesting in the Employer and the subsequent owners or occupiers of the Works all or any of the rights referred to in this Clause. The Contractor shall bear its own costs and expenses in relation thereto.
- (f) The Contractor hereby indemnifies the Employer against all claims, proceedings, actions, damages and losses incurred or sustained by the Employer in respect of infringement of intellectual property rights arising from the use of the Contractor's Design (irrespective of whether the intellectual property rights therein are owned by the Contractor or other parties) by the Employer for purposes referred to in sub-clause (12)(b) of this Clause. For avoidance of doubt, the indemnity herein applies where the proceedings concerned are subsequently withdrawn or settled or in the event that the allegations of infringement are subsequently found to be unsubstantiated. The Contractor shall at its own cost grant a like indemnity to the subsequent owners or occupiers of the Works upon request of the Employer.

SCC (C)

(1) General Conditions of Contract Clause 1(1) is amended

(a) by adding the following :

“Independent Checking Engineer of Cost Savings Design” means the person, firm or company employed by the Contractor and responsible for the independent checking of the Cost Savings Design whose qualifications, skill and experience are deemed satisfactory by the Employer and who shall be independent of the Designer of Cost Savings Design and the Contractor.

“Designer of Cost Savings Design” means the person, firm or company responsible for the design of the Cost Savings Design whose qualifications, skill and experience are deemed satisfactory by the Employer.

“Cost Savings Design” means the design proposal to any part of the Works submitted by the Contractor under Special Condition of Contract Clause (D)(1)# and any amplification or amendment thereto and accepted by the Employer with or without amendments, including, where applicable, any further design which the Contractor has to carry out as a result of any amendment to the design required under sub-clause (6) or (7) of SCC (D) and/or any variation to the works for the Cost Savings Design ordered by the Engineer/ Architect/Maintenance Surveyor*.

“Check Certificate of Cost Savings Design” means a certificate, in the form specified in Appendix (*see Appendix C of DEVB TCW No. 3/2014*) to these Special Conditions of Contract, issued by the Independent Checking Engineer of Cost Savings Design certifying that the Cost Savings Design has been independently checked and complies in all respects with the terms and conditions of the Contract.

“Certified Working Drawing of Cost Savings Design” means a drawing prepared by the Designer of Cost Savings Design and endorsed as being checked and approved by the Independent Checking Engineer of Cost Savings Design.

(b) by adding the following at the end of the definition for “Works”: “and the resultant work of the Contractor’s Design and the Cost Savings Design”.

SCC (D)

Designs by the Contractor

- (1) (a) The Contractor may at any time during the continuance of the Works submit to the Engineer/Architect/Maintenance Surveyor* in writing a Cost Savings Design proposal in respect of a part of the Works with sufficient details and justifications to show:
- (i) the Contract Sum/Value of the Works* can be reduced by an amount of a lump sum, and/or
 - (ii) the time for completion of the Works or any Section thereof can be reduced, and/or
 - (iii) the future maintenance or operation cost of the Works can be reduced, and/or
 - (iv) the efficiency or value to the Employer of the completed Works can be improved, and/or
 - (v) the construction productivity can be enhanced and/or the requirement for manpower resources can be reduced, and/or
 - (vi) any other social benefits.

In any event, the Contractor's liability for the construction of the Works is not prejudiced and the proposal shall be of benefit to the Employer.

- (b) Any proposal shall clearly state that it is submitted for consideration under this sub-clause and shall include (i) an estimate for consideration by the Employer of the amount to which the cost of carrying out the Works, as determined in accordance with Clause 61/63/64* of the General Conditions of Contract, that may be saved and (ii) a fully priced and detailed Schedule of Rates as referred to in sub-clause (11) of this Clause. In assessing the overall cost savings, the Employer will take into account the additional cost incurred for considering the Contractor's proposal including the Engineer/Architect/Maintenance Surveyor*'s cost. The Cost Savings Design shall be subject to the Engineer/Architect/Maintenance Surveyor*'s confirmation that it is compatible with the provisions of the Specification and the Drawings. The Contractor may propose modifications to the Specification in respect of particular methods of construction or materials not included in the Specification or shown on the Drawings.
- (c) Subject to acceptance of the Cost Savings Design, (i) the overall cost savings as assessed by the Employer and (ii) any revision (on the basis of the change in value as assessed by the Employer and change in time for completion of the Works or, as the case may be, the relevant Section to which the Cost Savings Design belongs) to the daily rate of liquidated damages and/or minimum liquidated damages for the Works or, as the case may be, the relevant Section to which the Cost Savings Design belongs shall be agreed with the Contractor. Before acceptance of the Cost Savings Design, the Engineer/Architect/Maintenance Surveyor* shall obtain confirmation from the Employer that the proposal is acceptable to the Employer and confirmation from both the Contractor and the Employer that (i) the overall cost savings and (ii) any revision as aforesaid to the daily rate of liquidated damages and/or minimum liquidated damages arising from the proposal are agreed to by both parties.

- (d) The Employer's decision to accept or reject the Cost Savings Design shall be conveyed to the Contractor in writing by the Engineer/Architect/Maintenance Surveyor* within a reasonable period, and neither the acceptance nor rejection of such proposal shall vitiate the Contract.
 - (e) If the Cost Savings Design is accepted, the agreed overall cost savings in lump sum for the part of the Works shall be equally shared between the Employer and the Contractor. For the avoidance of doubt, the acceptance of the Cost Savings Design shall not entitle the Contractor to claim additional costs or extension of time. If the proposal is rejected, the Contractor shall not be entitled to any payment or extension of time arising from his submission to the Engineer/Architect/Maintenance Surveyor* of the proposal and the Employer shall bear his own cost for considering the proposal submitted by the Contractor under this sub-clause except that the Contractor shall reimburse the Employer for the Engineer/Architect/Maintenance Surveyor*'s cost in doing the same. The Employer shall be entitled to deduct such cost from any sums due to the Contractor under the Contract and/or to recover such cost as a debt from the Contractor.
- (2) (a) Further to General Conditions of Contract Clause 23/25*, the Contractor shall have in respect of any defect or insufficiency in the Cost Savings Design the like liability to the Employer, whether under statute or otherwise, as would an appropriate professional designer holding himself out as competent to take on the Cost Savings Design, provided always that:
- (i) where the Employer has relied upon the Contractor to select equipment, plant, materials and goods required by the Cost Savings Design to be incorporated in the Works the Contractor shall ensure that all such equipment, plant, materials and goods are reasonably fit for the purpose for which they are intended and of good quality; and
 - (ii) subject to sub-clause (2)(a)(i) above and without prejudice to the generality of the warranty of the Contractor referred to in the second paragraph of this sub-clause (2)(a) in no circumstances shall the Contractor be obliged to ensure that the Cost Savings Design is fit for the purpose for which it is intended.
- In addition, the Contractor shall warrant that the Cost Savings Design and its resultant work conforms to any performance specification or requirement referred to in the Contract and, without prejudice to the generality of General Conditions of Contract Clause 30/32* in respect of the Works, the provisions of General Conditions of Contract Clause 30/32* are complied with in respect of the Cost Savings Design and the resultant work.
- (b) The liability and warranty of the Contractor referred to in subclause (2)(a) above shall apply independent of any question of fault on the part of the Contractor or any sub-contractor and shall not be invalidated in any respect by any error made by the Contractor or sub-contractor in the Cost Savings Design or any submission to the Engineer/Architect/Maintenance Surveyor* for checking and/or approval.

- (c) The Designer of Cost Savings Design shall prepare all calculations and drawings relating to the Cost Savings Design which shall be subject to a Check Certificate of Cost Savings Design.
 - (d) If at any time the Engineer/Architect/Maintenance Surveyor* has substantial cause for dissatisfaction with the conduct or performance of the Independent Checking Engineer of Cost Savings Design, he shall notify the Employer accordingly. The Contractor shall, upon receiving written notice from the Employer, cease to employ such person, firm or company and shall immediately replace him by another whose qualifications, skill and experience are satisfactory to the Employer.
- (3) Within a reasonable period prior to the commencement of that part of the Works to be constructed in accordance with the Cost Savings Design, and from time to time as required by the Engineer/Architect/Maintenance Surveyor*, the Contractor shall submit to the Engineer/Architect/Maintenance Surveyor* :
- (a) two certified copies of the Cost Savings Design,
 - (b) Check Certificates of Cost Savings Design,
 - (c) Certified Working Drawings of Cost Savings Design, and
 - (d) satisfactory evidence of professional indemnity insurance as referred to in Special Conditions of Contract Clause SCC(F)(7)#.
- (4) The Engineer/Architect/Maintenance Surveyor* shall, within a reasonable period, notify the Contractor in writing whether or not the documents submitted meet the requirements of the Contract. The Contractor shall not commence the construction of such works until receipt of confirmative notification in writing from the Engineer/Architect/Maintenance Surveyor*.
- (5) Notwithstanding General Conditions of Contract Clause 7, and prior to the commencement of the part of the Works of the Cost Savings Design, the Contractor shall supply to the Engineer/Architect/Maintenance Surveyor* __ copies of the Certified Working Drawings of Cost Savings Design together with one reproducible print of each drawing and where specified in the Contract, the soft copy of the drawings prepared in accordance with the CAD standard so specified. All drawings shall be fully figured copies with black lines on a white background of a size specified in the Contract and shall be detailed in S.I. units.
- (6) If at any time it becomes apparent to the Engineer/Architect/Maintenance Surveyor* that any drawing and/or document submitted by the Contractor does not comply with the Contract in any respect whatsoever, then all amendments deemed necessary by the Engineer/Architect/Maintenance Surveyor* shall be made therein by the Contractor, and such amended drawing and/or document shall be reviewed by the Designer of Cost Savings Design and shall be subject to a further Check Certificate of Cost Savings Design. The Contractor shall bear the full cost of complying with this sub-clause, and shall reimburse the Employer the cost of any work or design done by the Employer which has been rendered abortive by any such amendments.
- (7) If at any time it becomes apparent to the Contractor that an amendment to the Cost Savings Design is required for the proper completion of that part of the Works involved in such design, then he shall :

- (a) immediately advise the Engineer/Architect/Maintenance Surveyor* of the proposed amendment,
 - (b) resubmit documents to the Engineer/Architect/Maintenance Surveyor* in accordance with sub-clause (3) of this Clause, provided that :
 - (i) the finished appearance of the Works shall remain substantially unaltered,
 - (ii) there shall be no additional payment made nor any extension of time granted to the Contractor, and
 - (iii) the Contractor shall bear the full cost of complying with this sub-clause, and shall reimburse the Employer the cost of any work or design done by the Employer which has been rendered abortive by any such amendments.
- (8) On completion of the work constructed in accordance with the Cost Savings Design, the Contractor shall prepare and submit to the Engineer/Architect/Maintenance Surveyor* the 'as constructed' drawings of such work and shall supply to the Engineer/Architect/Maintenance Surveyor* two copies and one reproducible print of each of such drawings and where specified in the Contract, the soft copy of the drawings prepared in accordance with the CAD standard so specified.
- (9) Notwithstanding General Conditions of Contract Clause 59/61/62*, the work to be constructed in accordance with the Cost Savings Design shall be a lump sum item accompanied by a fully priced and detailed Schedule of Rates. The lump sum item shall include :
- (a) the cost of producing the Cost Savings Design,
 - (b) the cost and fees for obtaining the Check Certificates of Cost Savings Design,
 - (c) the cost of providing the Engineer/Architect/Maintenance Surveyor* with all calculations, documents (including maintenance manuals), and drawings in connection with the Cost Savings Design,
 - (d) the full value of the work (including without limitation, spare parts) constructed in accordance with the Cost Savings Design and all the risks, liabilities and obligations of the Contractor under the Contract, and
 - (e) the cost of all samples and testing thereof and testing of the work constructed in accordance with the Cost Savings Design.
- (10) For the avoidance of doubt, any change in the quantities in the BQ resulting from the acceptance by the Employer of the Cost Savings Design shall not entitle the Contractor to any adjustment of the rates in the said BQ notwithstanding any other provisions in the Contract.
- (11) Variations to the works for the Cost Savings Design ordered by the Engineer/Architect/Maintenance Surveyor* shall be measured and valued at the rates ascertained in accordance with the principles of General Conditions of Contract Clause 61/63/64*, at or based on the rates in the Schedule of Rates submitted with the Contractor's Cost Savings Design proposal. For the avoidance of doubt, amendments under sub-clause (6) of this Clause shall not be considered as variations within the meaning of this sub-clause.
- (12) (a) Except in respect of those intellectual property rights referred to in sub-clause (12)(c) of this Clause, the Contractor hereby undertakes and warrants to the Employer that the Contractor is the sole legal and beneficial owner of all intellectual property rights subsisting in the Cost Savings Design.

- (b) Upon the issue of the certificate of completion of the Works or after termination, abandonment or breach of Contract, the Contractor shall be deemed to have granted to the Employer and the subsequent owners or occupiers of the Works free of all fee a transferable, non-exclusive and irrevocable licence (carrying the right to grant sub-licences) to utilize the Cost Savings Design in connection with the execution of the Works and/or the subsequent alteration, extension and maintenance thereof and for no other purpose whatsoever without the prior written agreement of the Contractor. In the event of different certificates of completion having been issued for different Sections or parts of the Works pursuant to General Conditions of Contract Clause 53/55/56*, the expression "certificate of completion" shall, for the purpose of this sub-clause, mean the last of such certificates.
- (c) To the extent that beneficial ownership of any intellectual property rights in the Cost Savings Design is vested in anyone other than the Contractor, the Contractor shall procure that the relevant beneficial owner shall grant a licence together with an indemnity to the Employer and the subsequent owners or occupiers of the Works upon the same terms mutatis mutandis as those set out in sub-clauses (12)(b) and (12)(f) of this Clause respectively.
- (d) For the avoidance of doubt, any licence and indemnity granted pursuant to this Clause shall not be determined if the Contractor shall for any reason cease to be employed in connection with the Works.
- (e) The Contractor shall at the request of the Employer, do such acts and execute all such deeds and documents (or procure that the same be done or executed) as the Employer or the subsequent owners or occupiers of the Works may require for vesting in the Employer and the subsequent owners or occupiers of the Works all or any of the rights referred to in this Clause. The Contractor shall bear his own costs and expenses in relation thereto.
- (f) The Contractor hereby indemnifies the Employer against all claims, proceedings, actions, damages and losses incurred or sustained by the Employer in respect of infringement of intellectual property rights arising from the use of the Cost Savings Design (irrespective of whether the intellectual property rights therein are owned by the Contractor or other parties) by the Employer for purposes referred to in sub-clause (12)(b) of this Clause. For avoidance of doubt, the indemnity herein applies where the proceedings concerned are subsequently withdrawn or settled or in the event that the allegations of infringement are subsequently found to be unsubstantiated. The Contractor shall at its own cost grant a like indemnity to the subsequent owners or occupiers of the Works upon request of the Employer.

SCC (E)

The following amendments to the General Conditions of Contract shall be made:-

(a) Clause 49(1) [For Capital works contracts]/Clause 51(1) [For E&M term contracts]*
Add “or such revised time for completion agreed under Special Conditions of Contract Clause SCC (D)#.” to the end of the sub-clause.

Clause 51(1) [for Civil term contracts]*

Delete the “full stop” at the end of Sub-clause (a) and replace with “, or” and add sub-clause (d) “Such revised time for completion agreed under Special Conditions of Contract Clause SCC (D)#.”

Clause 51(1) [for Building term contracts]*

Delete the “full stop” at the end of Sub-clause (b) and replace with “, or” and add sub-clause (c) “Such revised time for completion agreed under Special Conditions of Contract Clause SCC (D)#.”

(b) Clause 51(1)/53(1)/54(1)*

Replace “too slow to ensure completion by the [prescribed]* time or extended time for completion,” by “too slow to ensure completion by the time for completion prescribed by Clause 49/51* or extended or revised time for completion prescribed by Clause 50/52/53* and Special Conditions of Contract Clause SCC(D)# as the case may be,”.

(c) Clause 52(1)/54(1)/55(1)*

Add “or such revised time as may be agreed in accordance with Special Conditions of Contract Clause SCC (D)#” immediately after “Clause 50/52/53*” at the second line/third line* of this sub-clause.

(d) Clause 89 [For civil and building capital works only]*

Replace “(or extended date)” in sub-clause (3)(c)(i) by “(or, as the case may be, extended or revised date)” and to replace “(or extended date)” where it twice appears in the last paragraph of sub-clause (3) of this clause by “(or, as the case may be, extended or revised date)”.

SCC (F)

(1) Without limiting his obligations under the Contract, the Contractor shall effect and maintain, with well established insurers of repute, professional indemnity insurance for a minimum amount as notified by the Employer to the Contractor in respect of his obligations in relation to the Cost Savings Design to be carried out by or on behalf of the Contractor pursuant to the Contract for any one occurrence or series of occurrences arising out of any one event, or each and every claim, for a period from the date of notification of acceptance of the Cost Savings Design until [] years after the date of the certificate of completion.

(2) The Contractor shall procure that each of the Designer of Cost Savings Design and Independent Checking Engineer of Cost Savings Design appointed or engaged by the Contractor in connection with the design or checking of the Cost Savings Design, shall effect and maintain, with well established insurers of repute, professional indemnity insurance for a minimum amount as notified by the Employer to the Contractor in respect of his obligations in relation to the design or, as the case may be, checking of the Cost Savings Design, for any one occurrence or series of occurrences arising out of any one event, or each and every claim for a period from the respective dates of commencement of appointment or engagement of the Designer of Cost Savings Design and Independent Checking Engineer of Cost Savings Design until [] years after the date of the certificate of completion.

(3) The professional indemnity insurance referred to in sub-clause (1) or (2) of this Clause shall respectively be effected with an insurer or insurers acceptable to the Employer. The Contractor shall immediately inform the Employer in writing if such insurance ceases to be available or otherwise is not maintained in accordance with this Clause or for any reason becomes void or unenforceable.

(4) If the insurance policy effected pursuant to sub-clause (1) or (2) of this Clause is project specific, the maximum deductible/excess allowed under the insurance policy shall be limited to a maximum of 20% of the minimum amount required under sub-clause (1) or (2) of this Clause, as the case may be.

(5) (a) If (i) the insurance policy effected pursuant to sub-clause (1) or (2) of this Clause contains a limit of indemnity in the aggregate for all claims for the period of insurance under the insurance policy, and (ii) the period of insurance under the insurance policy is twelve months or less, then either:

(A) the limit of indemnity in the aggregate for all claims for the period of insurance under the insurance policy shall be reinstated in full upon exhaustion of the limit of indemnity by reason of indemnity payments made on account of any claim, loss, damage, liability, cost or expense paid or payable under the insurance policy until the total amount of indemnity payable by the insurer under the insurance policy reaches 2 times the minimum amount required under sub-clause (1) or (2) of this Clause, as the case may be; or

(B) the limit of indemnity in the aggregate for all claims for the period of insurance under the insurance policy shall not be less than 2 times the minimum amount required under sub-clause (1) or (2) of this Clause, as the case may be; or

- (C) the limit of indemnity for any one occurrence or series of occurrences arising out of any one event, or each and every claim under the insurance policy shall not be less than 2 times the minimum amount required under sub-clause (1) or (2) of this Clause, as the case may be.
- (b) If (i) the insurance policy effected pursuant to sub-clause (1) or (2) of this Clause contains a limit of indemnity in the aggregate for all claims for the period of insurance under the insurance policy, and (ii) the period of insurance under the insurance policy exceeds twelve months, then either:
 - (A) the limit of indemnity in the aggregate for all claims for the period of insurance under the insurance policy shall be reinstated in full upon exhaustion of the limit of indemnity by reason of indemnity payments made on account of any claim, loss, damage, liability, cost or expense paid or payable under the insurance policy until the total amount of indemnity payable by the insurer under the insurance policy reaches 3 times the minimum amount required under sub-clause (1) or (2) of this Clause, as the case may be; or
 - (B) the limit of indemnity in the aggregate for all claims for the period of insurance under the insurance policy shall not be less than 3 times the minimum amount required under sub-clause (1) or (2) of this Clause, as the case may be; or
 - (C) the limit of indemnity for any one occurrence or series of occurrences arising out of any one event, or each and every claim under the insurance policy shall not be less than 3 times the minimum amount required under sub-clause (1) or (2) of this Clause, as the case may be.
- (6) (a) The Contractor shall provide to the Employer within 60 days from the date of notification of acceptance of the Cost Savings Design and thereafter, in the case where the insurance policy effected pursuant to sub-clause (1) of this Clause does not cover the entire period of insurance required under that sub-clause, within 7 days of professional indemnity insurance being effected upon the expiry of the earlier insurance policy:
 - (A) an undertaking that the current insurance policy effected pursuant to sub-clause (1) of this Clause complies with the terms in this Clause in the form in Appendix [] to these Special Conditions of Contract; and
 - (B) a certified copy of the full insurance policy effected pursuant to sub-clause (1) of this Clause for the approval of the Employer unless the Contractor can demonstrate to the satisfaction of the Employer that it is not reasonably practicable to provide a certified copy of the full insurance policy in which event the Contractor shall provide a certificate in the form in Appendix [] to these Special Conditions of Contract issued by the insurer or insurance broker of the insurance policy and any information relating to the insurance policy that the Employer may reasonably require.
- (b) The Contractor shall provide to the Employer, within 60 days from the respective dates of appointment or engagement of his Designer of Cost Savings Design and

Independent Checking Engineer of Cost Savings Design, and thereafter, in the case where the insurance policy effected pursuant to sub-clause (2) of this Clause does not cover the entire period of insurance required under that sub-clause, within 7 days of professional indemnity insurance being effected upon the expiry of the earlier insurance policy:

- (A) an undertaking that the current insurance policy effected pursuant to sub-clause (2) of this Clause complies with the terms of this Clause in the form in Appendix [] to these Special Conditions of Contract;
- (B) a certified copy of the full insurance policy effected pursuant to sub-clause (2) of this Clause for the approval of the Employer unless the Contractor can demonstrate to the satisfaction of the Employer that it is not reasonably practicable to provide a certified copy of the full insurance policy in which event the Contractor shall provide a certificate in the form in Appendix [] to these Special Conditions of Contract issued by the insurer or insurance broker of the insurance policy and any information relating to the insurance policy that the Employer may reasonably require.

(7) If the Contractor shall fail upon request to produce to the Employer satisfactory evidence that there is in force professional indemnity insurance required under this Clause, the Employer may effect and keep in force any such insurance and pay such premium as may be necessary for that purpose. The Employer shall be entitled to deduct such premium, together with expenses incurred, in accordance with the provisions of General Conditions of Contract Clause 83/86/89 [see Note 1] and/or to recover such amount as a debt from the Contractor.

(8) In the event of different certificates of completion having been issued for [different Sections or parts of the Works/the Works under different Works Orders] [see Note 1] pursuant to General Conditions of Contract Clause 53/55/56 [see Note 1], the expression “certificate of completion” shall, for the purpose of this Clause, mean the last of such certificates [see Note 2].

(9) In determining the period of insurance under an insurance policy for the purpose of this Clause, any extension or renewal of the insurance policy shall be treated as a separate insurance policy and shall not have the effect of extending the period of insurance.

(10) The provisions of this Special Conditions of Contract Clause SCC [] shall be further to the provisions of Special Conditions of Contract Clause SCC []. (*i.e. the standard SCC(A) in DEVB TCW No. 9/2007 – Appendix E*)

Notes:

1. Delete as appropriate depending on the particular type of GCC to be used.
2. (a) For a works contract with a separate Section comprising only the Establishment Works, add at the end of sub-clause (8) “excluding the certificate of completion for the Establishment Works”.
- (b) For a works contract with a separate Section comprising only the Landscape Softworks and Establishment Works, add at the end of sub-clause (8) “excluding

the certificate of completion for the Landscape Softworks and Establishment Works”.

- (c) For term contracts with separate Works Orders for Landscape Softworks and/or Establishment Works, add at the end of sub-clause (8) “excluding the certificates of completion for Works Orders solely for Landscape Softworks and/or Establishment Works”. This note 2(c) does not apply to term contracts which deal with Landscape Softworks and/or Establishment Works only.

Amend to the appropriate SCC reference.

Insert the Appendix reference as appropriate.

* Delete as appropriate depending on the particular type of GCC to be used.

APPENDIX 7.61 DIRECT REPORT OF TREE FAILURE INCIDENTS TO THE TREE MANAGEMENT OFFICE OF THE DEVELOPMENT BUREAU

This note sets out the direct reporting mechanism of tree failure incidents to the Tree Management Office (TMO) of the Development Bureau (DEVB).

Arrangement

(A) *Loss of human lives or major injuries*

2. When a department receives the following cases arising from tree failure, they should notify the TMO of DEVB **immediately without any delay** –

- (a) loss of human life; or
- (b) major injury (where the injured is admitted or to be admitted to the hospital by ambulance).

3. The contact point of the TMO of DEVB is as follows –

Calling sequence	Officer	Number
1 st	Assistant Secretary (Tree Management) on call	9082-9596
2 nd	Head of Tree Management Office	9082-9597
3 rd	Principal Assistant Secretary (Greening, Landscape and Tree Management)	9093-5859

4. Such phone call should be made on a 24 x 7 basis. If an officer in the 1st or 2nd calling sequence cannot be reached, an officer in the 2nd or 3rd calling sequence should be called immediately.

(B) *Damage to property or blockage of access*

5. When a department receives the following cases arising from tree failure, they should aim to notify the TMO of DEVB **as soon as possible** by calling the TMO hotline number at 2848 2334 or e-mail to TMO at our e-mail address at gltns@devb.gov.hk.

- (a) Substantial damage to properties (e.g. substantial damage to building structure(s) or vehicle(s)); or
- (b) Serious/complete blockage to main pedestrian/vehicular access.

6. The hotline number 2848-2334 is only manned during the office hours. Colleagues may leave a voice message at the hotline number or send an e-mail after the office hours.

Effective Date

7. The above arrangement should be effective from 12:00 noon on Monday 28 June 2010.

**Tree Management Office
Greening, Landscape and Tree Management Section
28 June 2010**

APPENDIX 7.62 SAMPLE SCC ON INTERIM PAYMENT FOR OFF-SITE PREFABRICATION ITEMS

- S.C.C. xx
- (1) For purposes of the Contract, “[Major Prefabrication Items]” shall mean the following item(s) of works:
- Bond for Off-Site
Manufacture of
Major Prefabrication
Item(s)**
- (a) *[description]* identified in *[set out the relevant Drawing number(s) and the relevant clause/section number(s) of the Contract documents, e.g. Specification]*; and
- (b)
[set out details of any further item(s) of works],
which has/have been completed off-Site in accordance with the Contract but is/are yet to be delivered to the Site for inclusion in the Works.
- (2) Should the Contractor elect to apply for interim payment for the manufacturing and fabrication of any Major Prefabrication Item carried out off-Site before delivery to Site, the Contractor shall, as a condition precedent to his right to apply for any interim payment or to continue to apply for any interim payment pursuant to General Conditions of Contract Clause 79 in relation to the elected Major Prefabrication Item, provide the Employer with and maintain in existence a separate bond in the form annexed at Appendix [] to the Special Conditions of Contract covering the elected Major Prefabrication Item, in the amount therein described and subject to the terms more particularly described in the Contract, with only such amendments thereto as may previously have been agreed in writing by the Engineer. The bond shall be released in the manner described in the bond. The Contractor shall submit a separate bond in relation to each elected Major Prefabrication Item.
- (3) For the avoidance of doubt, if no bond as described in sub-clause (2) of this Clause covering the elected Major Prefabrication Item has been provided to the Employer and maintained in existence, no interim payment shall be made under the Contract for the Major Prefabrication Item and the payment for such Major Prefabrication Item shall continue to be processed and made in the normal manner upon delivery to Site under the provisions of the Contract.
- (4) Upon the Contractor having provided to the Employer a duly executed bond under sub-clause (2) of this Clause in relation to any Major Prefabrication Item, the following amendments, effective from the date of the receipt of such bond by the Employer, shall be deemed to have been made to the Contract:

Clause 21 of General Conditions of Contract shall be amended by:

- (A) Adding to the end of the first subparagraph of sub-clause (1) after “Specialist Works” but before the full stop:

“, and, in relation to the Major Prefabrication Item(s) for which the Contractor has provided to the Employer duly executed bond(s) under sub-clause (2) of Special Conditions of Contract Clause xx, for the care of the Major Prefabrication Item(s) whether stored off-Site or in the course of transportation.”

- (B) Adding after “on the Site,” in line 4 of sub-clause (2):

“or, in relation to the Major Prefabrication Item(s) for which the Contractor has provided to the Employer duly executed bond(s) under sub-clause (2) of Special Conditions of Contract Clause xx, to the Major Prefabrication Item(s) whether stored off-Site or in the course of transportation,”

Clause 72 of General Conditions of Contract shall be deleted and replaced by:

- (1) All materials owned by the Contractor for incorporation in the Works shall be and become the property of the Employer upon delivery to the Site, except to the extent that property in such materials shall have already been passed to the Employer in accordance with sub-clause (2) of this Clause.
- (2) In relation to the Major Prefabrication Item(s) for which the Contractor has provided to the Employer duly executed bond(s) under sub-clause (2) of Special Conditions of Contract Clause xx, such Major Prefabrication Item(s) located in the manufacture / fabrication / assembly yard(s) off-Site or in the course of transportation shall be and become the property of the Employer upon property in such Major Prefabrication Item(s) vesting in the Contractor or otherwise passing unconditionally to the Contractor under relevant sub-contract.
- (3) The materials under sub-clauses (1) and the Major Prefabrication Item(s) under sub-clause (2) of this Clause shall not be removed without an instruction or the prior written consent of the Engineer. Such materials and Major Prefabrication Item(s)

shall, subject to Clause 81, only re-vest in the Contractor to the extent that they may be found to be surplus to requirements upon or prior to completion of the Works. The operation of this Clause shall not be deemed to imply any approval by the Engineer of such materials or Major Prefabrication Item(s) or prevent the rejection by the Engineer of any material or Major Prefabrication Item at any time.

Clause 78 of General Conditions of Contract shall be amended by:

- (A) Adding after sub-clause (1)(b):
- “(c) a list of the Major Prefabrication Item(s) for which the Contractor has provided the duly executed bond(s) under sub-clause (2) of Special Conditions of Contract Clause xx and the estimated contract value of such Major Prefabrication Item(s)”; and”
- (B) Renumbering original sub-clause (1)(c) as sub-clause (1)(d).

Clause 79 of General Conditions of Contract shall be amended by:

- (A) Adding after sub-clause (1)(c):
- “(d) the estimated value of the Major Prefabrication Item(s) for which the Contractor has provided the duly executed bond(s) under sub-clause (2) of Special Conditions of Contract Clause xx; and”
- (B) Renumbering original sub-clause “(1)(d)” and “(1)(e)” as (1)(e)” and “(1)(f)” respectively.
- (C) Amending the further proviso at the end of sub-clause (1) to read:
- "Provided further that, for the purpose of interim payments:
- (i) the value of the materials as referred to in (c) above for use in connection with any item of permanent work priced in the Contract and the value of the Major Prefabrication Item(s) referred to in (d) above shall be determined on the basis of the rate set out in the Contract for such work; and
- (ii) in relation to the Major Prefabrication Item(s) referred to in (d) above, it shall be a condition precedent to valuation and certification by the

Engineer of such Major Prefabrication Item(s) under this sub-clause that the Contractor has complied with the provisions of sub-clause (5) of Special Conditions of Contract Clause xx."

For the avoidance of doubt, if the Contractor has not elected to apply for interim payment for any Major Prefabrication Item by not submitting the bond as required in sub-clause (2) of this Clause, this sub-clause (4) shall have no application to such Major Prefabrication Item.

- (5) If the Contractor exercises his right under this Clause to apply for interim payment in relation to any Major Prefabrication Item(s), he shall be responsible for the arrangement and for all the costs and expenditure incurred by the Engineer's Representative in connection with his visit(s) to any off-Site manufacture / fabrication / assembly yard(s) to verify the Contractor's entitlement to any interim payment for such Major Prefabrication Item(s). The aforesaid costs and expenditure shall be deemed to be included in the rates of the Bills of Quantities.

Furthermore, the Contractor shall furnish to the Engineer the following:

- (i) clear proof that the Major Prefabrication Item(s) has/have met all Contract requirements and especially geometric configurations, ready for shipment to the Site for erection;
- (ii) in the case the Major Prefabrication Item(s) is / are stored whether at the manufacture / fabrication / assembly yard(s) where the Major Prefabrication Item(s) has / have been manufactured / fabricated / assembled or at other place(s) of storage off-Site, evidence that there is in relation to such Major Prefabrication Item(s) clear identification of:
 - (1) the Employer as the person to whose order it is / they are held, and
 - (2) its / their destination as the Works and such Major Prefabrication Item(s) either is / are set apart or has / have been clearly and visibly marked, individually or insets, by letters or figures or by reference to a pre-determined code;
- (iii) in the case the Major Prefabrication Item(s) is / are under shipment by sea,

the relevant shipping documents;

- (iv) clear proof that the Major Prefabrication Item(s) is / are the property of the Contractor and that the conditions set out in paragraphs (i) to (iii) of this sub-clause, as applicable, have been complied with; and
- [(v) clear proof that such Major Prefabrication Item(s) is/are fully insured against loss or damage for their full value under a policy of insurance protecting the interests of the Employer and the Contractor, during the period commencing with the transfer of property in the Major Prefabrication Item(s) to the Contractor until they are delivered to the Works.]#

NOTE :

In implementation of the risk-based assessment for insurance procurement according to ETWB TCW No. 6/2005 and 7/2005, the project officer's attention is drawn to the risk of damage to the third party during the period commencing with the transfer of property in the Major Prefabrication Item(s) to the Employer until they are delivered to the Works.

Delete if OCIP arrangement has been adopted for the Contract.

Appendix [] to S.C.C. xx

Form of Contractor's Bond in respect of Off-Site Payment for a Major Prefabrication Item

BY THIS BOND dated the [] day of [] 201X

[] whose registered office is at []

("the Surety") is irrevocably and unconditionally bound to the Government of the Hong Kong Special Administrative Region (together with its successors and assigns, "the Employer") for payment of a sum ("the Bonded Sum") not exceeding [] ([])¹ for payment of which sum the Surety binds itself its successors and assigns in accordance with the provisions of this Bond.

WHEREAS

(A) By a contract dated [] ("the Contract") made between the Employer and [] ("the Contractor"), the Contractor has agreed to execute and complete certain works ("the Works") upon the terms and conditions contained in the Contract.

(B) Pursuant to the terms of the Contract, the Contractor agrees that if he elects to apply for interim payment for any Major Prefabrication Items ("the Off-Site Payment") pursuant to Special Conditions of Contract Clause xx, the Contractor shall, as a condition precedent to its right to apply for any such interim payment, provide this on-demand bond ("Bond").

(C) The Contractor has elected to apply for interim payment for the Major Prefabrication Item comprising [] pursuant to Special Conditions of Contract Clause xx ("Relevant Major Prefabrication Item")

NOW THE TERMS AND CONDITIONS of this Bond are:-

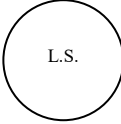
1. The Surety hereby irrevocably and unconditionally undertakes to pay to the Employer an amount not exceeding [] ([])¹ upon receipt from the Employer of a written demand therefor accompanied by a certificate signed on behalf of the Employer stating:
 - (a) that the Employer is entitled to terminate or has terminated the Contract or the employment of the Contractor under the Contract; and
 - (b) the amount due and payable under this Bond in accordance with Clause 3 below.
2. The Surety shall pay to the Employer the amount thus demanded without requiring further evidence or proof of:-
 - (a) the default of the Contractor or

¹ The value stated in the Appendix to Form of Tender which the Employer considers will be sufficient to cover him for maximum Off-Site Payment payable to the Contractor for the Relevant Major Prefabrication Item.

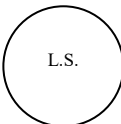
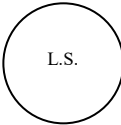
- (b) the Employer's entitlement to terminate the Contract or the employment of the Contractor under the Contract or
 - (c) any termination of the Contract or the employment of the Contractor under the Contract or
 - (d) of the amount due and payable under this Bond.
3. The amount payable under this Bond shall be the aggregate of the sum stated in the latest interim payment certificate representing the Off-Site Payment paid to the Contractor under the Contract prior to the date of the written demand referred to in Clause 1 above less the aggregate of any and all sums in respect of the Relevant Major Prefabrication Item delivered to the Site as certified by the Engineer (as defined in the Contract) in accordance with the terms of the Contract provided always that the liability of the Surety under this Bond shall not exceed [] ([])¹.
4. The liability of the Surety under this Bond shall remain in full force and effect and shall not be affected or discharged in any way by and the Surety hereby waives notice of:-
- (a) any suspension of the Works, variation to or amendment of the Contract (including without limitation extension of time for performance), or any concession or waiver by the Employer in respect of the Contractor's obligations under the Contract;
 - (b) the termination of the Contract or of the employment of the Contractor under the Contract solely as a result of default by the Contractor under the Contract;
 - (c) any forbearance or waiver of any right of action or remedy the Employer may have against the Contractor or negligence by the Employer in enforcing any such right of action or remedy;
 - (d) any other bond, security or guarantee held or obtained by the Employer for any of the obligations of the Contractor under the Contract or any release or waiver thereof;
 - (e) any act or omission of the Contractor pursuant to any other arrangement with the Surety.
5. The liability of the Surety under this Bond shall cease on whichever of the following events first occurs:-
- (a) payment by the Surety of the Bonded Sum in full to the Employer; or
 - (b) receipt of written notification from the Employer that all the components comprising the Relevant Major Prefabrication Item have been delivered to the Site; or
6. The Employer shall be entitled to assign the benefit of this Bond at any time without the consent of the Surety or the Contractor being required.
7. All documents arising out of or in connection with this bond shall be served:-

- (a) Upon the Employer, at [],
marked for the attention of [];
 - (b) Upon the Surety, at [] Hong Kong.
8. The Employer and the Surety may change their respective nominated addresses for service of documents to another address in Hong Kong but only by prior written notice to each other. All demands and notices must be in writing.
 9. This Bond shall be governed by and construed according to the laws for the time being in force in Hong Kong and the Surety agrees to submit to the non-exclusive jurisdiction of the courts of Hong Kong.
 10. In this Bond, ‘‘Hong Kong’’ means the Hong Kong Special Administrative Region. Where applicable, words and expressions used in this Bond shall have the meanings assigned to them in the Contract.

IN WITNESS whereof this Bond has been executed as a deed on the date first above written.

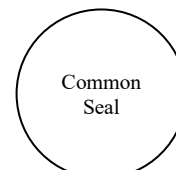
(a) SIGNED, SEALED and DELIVERED)
 by [name of sole proprietor])
 trading as [name of the Surety])
 in the presence of:)
) *[Signature of the*
) *sole proprietor]** 
)
 [Name])
 [Occupation])
 [Address])

Or

(b) SIGNED, SEALED and DELIVERED by)
 [name of partner] and)
 [name of partner]^) *[Signature of the*
 being the partners of [name of the Surety]) *individual*
 in the presence of:) *partner]** 
)
) *[Signature of the*
) *individual*
 [Name]) *partner]** 
 [Occupation])
 [Address])

Or

(c) Executed and delivered)
 as a deed and the COMMON SEAL)
 of [name of the Surety])
 was affixed in the presence of) *[Signature of the*
 [] its [director(s) or) *director(s) etc]**
 director and secretary or person(s))
 authorized to sign the bond by its)
 board of directors]**)
 in the presence of a witness:)
)
)
 [Name])
 [Occupation])
 [Address])

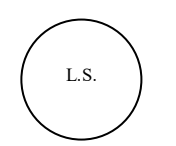


Or

(d) Executed and delivered as a deed)
 by [name of the Surety])
 acting through)
 [] (its sole director))
 or) *[Signature of the*
 [] and [] (its directors)) *director(s) etc]**
 or))
 [] (its director) and)
 [] (its company secretary)**)
 in the presence of a witness:)
)
)
)
 [Name])
 [Occupation])
 [Address])

Or

(e) SIGNED, SEALED and DELIVERED by)
 [name of the Surety] by [])
 his/her/its** attorney under power of attorney)
 dated [])
) *[Signature of the*
 in the presence of:) *attorney]**
)
)
)
 [Name])
 [Occupation])
 [Address])



Note :

- (a) For use where the surety is a sole proprietor.
- (b) For use where the surety is a partnership.
- (c) For use where the surety is a company incorporated in Hong Kong and executes the deed with a Common Seal.
- (d) For use where the surety is a company incorporated in Hong Kong and executes the deed without a Common Seal.
- (e) For use where the surety executes the deed under a power of attorney.
- * The italic parts are not part of the execution clause. They are for guidance or information only.
- ** Select the correct expression for use. If none is applicable, insert an appropriate expression.
- ^ The deed shall be executed by all the partners. Add more names if required.

APPENDIX 7.63 NOT USED

APPENDIX 7.64 NOT USED

APPENDIX 7.65 SPECIAL CONDITIONS OF CONTRACT (SCC) ON RELEASE OF RETENTION MONEY FOR USE IN CONJUNCTION WITH GCCS FOR BUILDING WORKS, CIVIL ENGINEERING WORKS, DESIGN AND BUILD CONTRACTS AND ELECTRICAL AND MECHANICAL ENGINEERING WORKS, 1999 EDITIONS (FOR CAPITAL WORKS CONTRACTS)

General Conditions of Contract Clause 79(3) is deleted and replaced by the following :

“(3) (a) The Engineer[/Surveyor]⁴ [/Supervising Officer]⁵ shall, within 14 days of the date of issue of the certificate of completion in respect of the Works in accordance with Clause 53(1) , issue a certificate for the payment of not more than 50 % of the Retention Money giving due account to the cost of the outstanding work referred to in Clause 53 and all work of [maintenance,]⁶ repair, rectification and making good of any defects[/Defects]⁷ [imperfection, shrinkage, settlement and other fault]⁸ referred to in Clause 56 which have been notified in writing to the Contractor (“Outstanding Work”) [, which certificate shall state any Retention Money due to any Nominated Sub-contractor]⁹ and, subject to Clause 83, the Employer shall pay such portion of Retention Money to the Contractor within 21 days of such certificate. In the event of different certificates of completion having been issued for different Sections or parts of the Works pursuant to Clause 53, the expression “certificate of completion” shall, for the purposes of this sub-clause, mean the last of such certificates.

(b) Further to paragraph (a) of this sub-clause and within 14 days after the date of the expiry of the Maintenance Period [/Defects Liability Period]¹⁰ for the Works or, where there is more than one such Period, the latest Period, the Engineer [/Surveyor]¹¹ [/Supervising Officer]¹² shall issue a certificate for the payment of a further portion of the Retention Money representing the remainder of the Retention Money less, where applicable, an amount (“Remaining Amount”) which, in the opinion of the Engineer [/Surveyor]¹³[/Supervising Officer]¹⁴, represents the cost of any Outstanding Work then remaining to be carried out [, which certificate shall state any

4 Only applicable to Building Works contracts

5 Only applicable to Design and Build contracts

6 Not applicable to E&M contracts

7 Only applicable to E&M contracts

8 Not applicable to E&M contracts

9 Only applicable to contracts with provision for Nominated Sub-contractor

10 Only applicable to E&M contracts

11 Only applicable to Building Works contracts

12 Only applicable to Design and Build contracts

13 Only applicable to Building Works contracts

14 Only applicable to Design and Build contracts

Retention Money due to any Nominated Subcontractor]¹⁵ and, subject to Clause 83, the Employer shall pay such further portion of the Retention Money to the Contractor within 21 days of the date of such certificate.

(c) Where a sum representing the Remaining Amount is withheld from certification under paragraph (b) of this sub-clause, the Engineer [/Surveyor]¹⁶ [/Supervising Officer]¹⁷ shall, within 14 days of the date of issue by the Engineer [/Architect]¹⁸ [/Supervising Officer]¹⁹ of the maintenance certificate [/defects liability certificate]²⁰ in accordance with Clause 80, issue a certificate for the payment of the sum representing the Remaining Amount [, which certificate shall state any Retention Money due to any Nominated Subcontractor]²¹ and, subject to Clause 83, the Employer shall pay such sum to the Contractor within 21 days of the date of such certificate.”

15 Only applicable to contracts with provision for Nominated Sub-contractor

16 Only applicable to Building Works contracts

17 Only applicable to Design and Build contracts

18 Only applicable to Building Works contracts

19 Only applicable to Design and Build contracts

20 Only applicable to E&M contracts

21 Only applicable to contracts with provision for Nominated Sub-contractor

APPENDIX 7.66 SPECIAL CONDITIONS OF CONTRACT (SCC) ON RELEASE OF RETENTION MONEY FOR USE IN CONJUNCTION WITH GCCS FOR BUILDING WORKS, CIVIL ENGINEERING WORKS, DESIGN AND BUILD CONTRACTS AND ELECTRICAL AND MECHANICAL ENGINEERING WORKS, 1999 EDITIONS (FOR CAPITAL WORKS CONTRACTS – FOR LANDSCAPE WORKS)

General Conditions of Contract Clause 79(3) is deleted and replaced by the following :

“(3) (a) The Engineer[/Surveyor]¹ [/Supervising Officer]² shall within 14 days of the date of issue of the certificate of completion in respect of the Works except Landscape Works in accordance with Clause 53(1), issue a certificate for the payment of not more than 50% of the Retention Money giving due account to, in respect of the Works except Landscape Works, the cost of the outstanding work referred to in Clause 53 and all work of [maintenance,]³ repair, rectification and making good any defects[/Defects]⁴ , [imperfection, shrinkage, settlement and other fault]⁵ referred to in Clause 56 which have been notified in writing to the Contractor [and , which certificate shall state any Retention Money due to any Nominated Sub-contractor]⁶ and, subject to Clause 83, the Employer shall pay such portion of Retention Money to the Contractor within 21 days of such certificate. In the event of different certificates of completion having been issued for different Sections or parts of the Works except Landscape Works pursuant to Clause 53, the expression “certificate of completion” shall, for the purposes of this sub-clause, mean the last of such certificates.

(b) Further to paragraph (a) of this sub-clause and upon the expiry of the Maintenance Period[/Defects Liability Period]⁷ for the Works except Landscape Works, or where there is more than one such Period, the latest Period, the Engineer[/Architect]⁸ [/Supervising Officer]⁹ shall notify the Contractor in writing the date of expiry of such Maintenance Period [/Defects Liability Period]¹⁰, and within 14 days of the date of notification by the

1 Only applicable to Building Works contracts

2 Only applicable to Design and Build contracts

3 Not applicable to E&M contracts

4 Only applicable to E&M contracts

5 Not applicable to E&M contracts

6 Only applicable to contracts with provision for Nominated Sub-contractor

7 Only applicable to E&M contracts

8 Only applicable to Building Works contracts

9 Only applicable to Design and Build contracts

10 Only applicable to E&M contracts

Engineer [/Architect]¹¹ [/Supervising Officer]¹², the Engineer [/Surveyor]¹³ [/Supervising Officer]¹⁴ shall issue a certificate for the payment of a further portion of the Retention Money and such further portion shall be equal to the Relevant Percentage of the Retention Money less an amount which, in the opinion of the Engineer [/Surveyor]¹⁵ [/Supervising Officer]¹⁶, represents the cost of the outstanding work referred to in Clause 53 and all work of [maintenance,]¹⁷ repair, rectification and making good any defects[/Defects]¹⁸, [imperfection, shrinkage, settlement and other fault]¹⁹ referred to in Clause 56 then remaining to be carried out) [, which certificate shall state any Retention Money due to any Nominated Sub-contractor]²⁰ and, subject to Clause 83, the Employer shall pay such further portion of Retention Money to the Contractor within 21 days of the date of such certificate. For the purposes of this sub-clause, “Relevant Percentage” means [98]²¹ % minus the percentage of the Retention Money certified under paragraph (a) of this sub-clause.

(c) The Engineer[/Surveyor]²² [/Supervising Officer]²³ shall, within 14 days of the date of issue by the Engineer[/Architect]²⁴ [/Supervising Officer]²⁵ of the maintenance certificate[/defects liability certificate]²⁶ in accordance with Clause 80, issue a certificate for the payment of the remaining portion of Retention Money [, which certificate shall state any Retention Money due to any Nominated Sub-contractor]²⁷ and, subject to Clause 83, the Employer shall pay such remaining portion of Retention Money to the Contractor within 21 days of the date of such certificate.”

11 Only applicable to Building Works contracts

12 Only applicable to Design and Build contracts

13 Only applicable to Building Works contracts

14 Only applicable to Design and Build contracts

15 Only applicable to Building Works contracts

16 Only applicable to Design and Build contracts

17 Not applicable to E&M contracts

18 Only applicable to E&M contracts

19 Not applicable to E&M contracts

20 Only applicable to contracts with provision for Nominated Sub-contractor

21 To insert a percentage appropriate to the Contract taking into account the proportion of Retention Money for Landscape Works

22 Only applicable to Building Works contracts

23 Only applicable to Design and Build contracts

24 Only applicable to Building Works contracts

25 Only applicable to Design and Build contracts

26 Only applicable to E&M contracts

27 Only applicable to contracts with provision for Nominated Sub-contractor

APPENDIX 7.67 NOT USED

APPENDIX 7.68 NOT USED

APPENDIX 7.69 NOT USED

APPENDIX 7.70 GUIDELINES ON ADOPTION OF SCC ON INTERIM PAYMENT FOR OFF-SITE PREFABRICATION ITEM

1. In order to enhance the cash flow of contractors, we promote wider adoption of the SCC in public works contracts. Project officers should pay attention to the requirements as stipulated in SCC. In gist, making interim payment(s) for major off-Site prefabrication item / equipment (“the item”) are subject to the following preconditions, including

- (i) maintenance of an effective bond by Contractor,
- (ii) Contractor’s undertaking of arrangement and all the costs and expenditure incurred by the Engineer’s Representative in connection with his visit to off-Site manufacture / fabrication / assembly yards for verification on Contractor’s entitlement on interim payment(s),
- (iii) clear proof that the item has met Contract requirements,
- (iv) clear identification of the item on whose order it is held and its destination,
- (v) shipping documents (if by sea),
- (vi) clear proof of Contractor’s ownership of the item, and
- (vii) if applicable, insurance against loss or damage for the full value of the item under a policy protecting the interests of Employer and Contractor during the period from transfer of property in the item to the Contractor until it is delivered to the Works.

2. Works Departments are required to incorporate the SCC into contracts satisfying the following criteria:-

- (i) Project officer anticipates that an item¹ under the Contract is likely to be prefabricated off-Site (e.g. bridge deck, steel truss and E&M equipment²); and
- (ii) The estimated total value of a single type of off-Site prefabrication item is not less than \$1.4 million or 0.3% of pre-tender estimate (PTE) of the Contract, whichever is the greater.

3. The above requirements in paragraph 2 may be waived for a particular contract, where justified, with the approval of an officer at D2 or above rank.

4. Notwithstanding the requirement in paragraph 2(ii), when it is desirable, the project officer may still incorporate the SCC for smaller value of the off-Site prefabrication item having regard to the PTE.

Development Bureau

1 Item should be completed in off-Site manufacture / fabrication / assembly yards and no considerable assembly work is required on Site. Item may not be considered if its identification cannot be easily proved (e.g. typical precast concrete kerbs, precast pipes, electrical cables, bus-ducts and other more generic items and manufactured products).

2 E&M equipment referred to may mean

(i) Heat Pump; (ii) Chiller; (iii) Air-handling units; (iv) Pumpset (including fire pump) ;
(v) Motor Control Centre (vi) Generator; (vii)Transformer; (viii) Switchboard; (ix) Centrifuge;
(x) Filter Press; (xi) Air Blower; (xii) Traffic Control and Surveillance System; and (xiii) Boiler.

July 2012

APPENDIX 7.71 IMPLEMENTATION GUIDELINES FOR PROVISION OF UNIFORM

Implementation Guidelines

Introduction

1. These guidelines provide information and guidance on implementing the site uniform requirements in public works projects. They should be read in conjunction with the prevailing policy and the associated contract provisions on site uniform requirements.

Uniform Items to be provided

2. The following uniform items are generally required to be provided to workers of the contractor and his sub-contractors of all tiers-

Capital Works Contracts and Term Contracts with Capital Works	Term Maintenance Contract
<ul style="list-style-type: none"> • Polo shirt (short-sleeve and long-sleeve to suit the weather conditions) • Trousers 	<ul style="list-style-type: none"> • Polo shirt (short-sleeve or long sleeve to suit the weather conditions) or vest/reflective jacket*

* Please delete or modify as appropriate to suit the needs of individual contract.

Design of Uniform

3. The Construction Industry Council (CIC) has adopted the anti-heat stress uniform (AHS uniform) designed by the Hong Kong Polytechnic University as a standard design of uniform for workers. The AHS uniform comprises polo shirt and trousers. For enquiries on details of the AHS uniform, please contact the Procurement Department of the CIC on 2100 9028, or the Assistant Secretary (Works Policies) 9 of the Development Bureau on 3509 8710.
4. The Contractor should have the flexibility in deciding the colour and style of his uniform for workers. Although the Contractor may show his company's logo and name on the uniform, it is not mandatory. It is also not mandatory to show the contract number or other contract specific information on the uniform to maximise possible re-use of the uniform in other Contracts of the Contractor.
5. While we should encourage the Contractor adopting AHS uniform, the Engineer / Architect / Supervising Officer / Surveyor should also take into consideration approval given to the uniform design of the Contractor under other public works contracts or similar design to the AHS uniform. Unless there is justification or circumstances that render the previously approved design not suitable for the Contract, the Engineer / Architect / Supervising Officer / Maintenance Surveyor should not unreasonably withheld approval of the uniform design that was approved under other public works contracts.

Do's and Don'ts*Do's*

- Do take into account the approval of uniform design given to the Contractor under other public works contracts or to the standard one developed/adopted by the construction industry if the Contractor submits the same uniform design for approval.
- Do be reasonable in enforcing the site uniform requirements taking into account the suitability and practicability of certain workers (e.g. divers, those wearing other personal protective equipment, etc.) to wear uniform.
- To maximize re-use of uniforms in other Contracts, do be flexible in enforcement to allow individual workers wearing uniform of different colour.

Don'ts

- Don't insist on showing the Contractor's logo or contract specific details on the uniform.

Note: These Implementation Guidelines are available in SDEV's memo ref. DEVB(Trg) 133/3(10) dated 23.1.2017, which can be downloaded from Works Group Intranet Portal.

APPENDIX 7.72 IMPLEMENTATION OF CONTRACTOR COOPERATIVE TRAINING SCHEME (CCTS) IN PUBLIC WORKS CONTRACTS

Implementation Guidelines

Introduction

These implementation guidelines provide reference guidance to project officers and resident site staff in implementing the CCTS in public works contracts. They should be read in conjunction with the Special Conditions of Contract for the CCTS (the “SCC”) given in the [SDEV’s memo ref. DEVB\(Trg\) 133/4 \(5\) dated 30.12.2011](#). The requirements in the SCC shall take precedence if there is conflict between the SCC and these guidelines. Notwithstanding the contractual requirements, the CCTS works on the basis of cooperation/partnering with contractors and sub-contractors to meet the overall manpower need of the construction industry and their specific needs.

2. In the following guidelines, references to sub-clauses refer to the sub-clauses of the SCC and the references to “sub-contractor” means “first-tier sub-contractor”. For simplicity, the term “Engineer” is used to represent Engineer, Architect, Supervising Officer or Maintenance Surveyor.

Employment of Trainees

3. Sub-clause (1) requires the Contractor and/or the sub-contractors to employ a minimum total number of trainees to undergo CCTS training. However, the Contractor and/or the sub-contractors can employ and train a total of more than the minimum number of trainees specified in the Contract. In fact, it is reasonably required and advisable for the Contractor to employ more than the minimum to take into account the drop-out of trainees before the completion of training, the passing rate at the intermediate trade tests/course-end assessment, and other risk factors leading to non-completion of the training. Early communication between the Engineer and the Contractor can help recognize and plan for these risks adequately.

4. All the trainees under the Contract need not be trained under one trade only and they do not need to be all employed by the Contractor or the sub-contractors. For example, if a minimum of 12 trainees are specified in the Contract, the Contractor can employ and train 4 trainees as levellers, one sub-contractor can employ and train another 4 trainees as drainlayers and another sub-contractor can employ and train yet another 4 trainees as formwork carpenters, all to make up the total minimum number of trainees of 12.

Mobile Training Quota

5. To meet the minimum total number of trainees to be trained under the Contract, the Contractor and/or the sub-contractors as appropriate do not have to assign the trainees to work in the Contract to obtain their training. Under sub-clause (8), they are allowed to second the trainees to work in other contracts (both public works contracts or private contracts) if necessary to obtain the training and such trainees can be counted towards the total number of trainees trained under the Contract when their training is completed. The contracts to which the trainees can be seconded are governed by the conditions stated in sub-clause (8)(a).

6. As other existing contracts of the Contractor may offer more ready opportunities than the Contract for earlier commencement of the CCTS training, secondment should be considered proactively and early upon the award of the Contract. Under such circumstance, the sub-contracting arrangement of the Contract may not be firmed up but this should not prevent the Contractor from procuring the sub-contractors of the Seconded Contracts to employ trainees to commence and undergo the CCTS training.

7. As part of his tender, the Contractor should have submitted a list of existing contracts for technical assessment and financial vetting. The Contractor Management Information System (CMIS) should also be able to identify a list of current public works contracts of the Contractor. These should be good references of potential Seconded Contracts.

Commencement of Training

8. Sub-clause (2) requires the Contractor and/or the sub-contractor to commence the training within 3 months from the commencement of the Contract and allows the Contractor to seek the approval of the Engineer to defer the commencement of training of any CCTS Trainee for a reason beyond the reasonable control of the Contractor. If the Contractor is unable to commence the training in the Contract within 3 months due to lack of suitable trade work in his construction programme, he should, in line with paragraph 6 above, proactively look for suitable training opportunities in all his other contracts for possible early commencement of training through secondment.

9. For example, if there is only very little drain laying work with short duration commencing in month 5 of the Contract which cannot provide sufficient or continuous training opportunities but there will be sufficient amount of formwork erection work in month 8 of the Contract to provide training for formwork carpenters, then the Contractor should start the training in month 8 of the Contract provided that there is no sufficient relevant work in any other contracts of the Contractor to enable the training to commence earlier.

10. However, if for example, the Contractor has another contract which has sufficient bar bending and fixing work commencing in month 4 of the Contract, then the Contractor should commence the training of bar bender and fixers in that other contract in month 4 of the Contract. But if the Contractor cannot reasonably recruit these workers in the market, he may elect to seek approval of the Engineer to defer the CCTS training to train the formwork carpenters instead.

11. If there is insufficient relevant work to accommodate the commencement of training of all the required trainees when the CCTS training first begins, the Contractor can then seek the approval of the Engineer to defer the commencement of the training for the remaining trainees.

12. Although the lack of suitable trade work in the works programme of the Contract or of all other contracts of the Contractor is considered a valid reason for deferring the commencement of training, the Engineer in assessing the Contractor's application for such deferral should consider the works programmes of all the Contractor's contracts and if approval is given, should also advise the Contractor when the commencement of the training should be deferred to in accordance with the works programmes considered.

Employment of CCTS Graduates

13. Sub-clause (5) requires the Contractor and/or the sub-contractors as appropriate to continue to employ the trainees upon completion of their training as CCTS Graduates for at least another 12 months to enable them to further enhance their skills and to become part of the productive workforce. During this 12-month period, the level of wages to be paid to the CCTS Graduates by their employers need to comply with sub-clause (5)(b).

14. The Contractor and/or the sub-contractor as appropriate may decide not to continue to employ the CCTS Graduates or to shorten the 12-month employment if any of the conditions in sub-clauses (5)(c)(i) to (v) is met. There is no need for the Contractor to seek the approval of the Engineer for such decision but the Contractor needs to notify the Engineer in accordance with sub-clause (10).

15. Again the list of existing contracts the Contractor submitted as part of the tender for technical assessment and financial vetting and the CMIS should be good references of potential contracts for the employment.

Replacement of Terminated Trainees

16. As per sub-clause (5)(a), the training of a CCTS Trainee is completed only when he has passed the relevant end-of-training assessment. Only CCTS Trainee who has completed the training can be counted towards the total number of trainees employed and trained under the Contract to meet the minimum total number of trainees specified in the Contract. The CCTS Trainee can take the assessment again with further training provided by the Contractor and/or the first-tier subcontractors at their own costs if and after he/she fails it. There is no limit on the number of times the CCTS Trainee can take the assessment providing the contractual requirements are complied with.

17. If the employment of the CCTS Trainee is terminated before the completion of his training, the Contractor is required under sub-clause (7) to replace such trainee within one month after the said termination. If the Contractor cannot make such replacement within one month and if requested by the Engineer, the Contractor needs to demonstrate to the satisfaction of the Engineer that he has exercised reasonable endeavors in replacing the CCTS Trainee. Such demonstration may, for example, include evidence that

- relevant recruitment advertisements had been placed
- reasonable wages commensurate with current market rates had been offered
- recruitment interviews had been held
- effort had been made to seek the CIC's assistance in recruiting new trainees
- CIC's Construction Jobsnet had been utilized in recruiting new trainees [web link - <http://jobsnet.hkcic.org/Eng/Default.aspx>]

Changes in CCTS terms and conditions

18. Sub-clause (11) allows the Final Contract Sum or final value of the Works to be adjusted to take account of any increase or decrease in Cost to the Contractor due to any change to the CCTS terms and conditions made on or after the date 10 days prior to the tender closing date. The Engineer should keep a record of those CCTS terms and conditions applicable just before the date 10 days prior to the tender closing date as a basis to evaluate

any subsequent material changes in the CCTS terms and conditions that may lead to changes in Cost to the Contractor.

APPENDIX 7.73 FILLING PRACTICE FOR WORKS CONTRACTS (Subsumed from WBTC No. 19/93)

1. Definitions

1.1 **Site-documents** means all manner of works-contract documents, papers, correspondence, reports, forms, drawings, images, charts, records, in whatsoever format or medium, gathered from award of the contract to completion of all the contractual obligations.

1.2 **File Register** is the comprehensive list of files kept at that filing location i.e. file registry.

1.3 **File Reference Number**, is the unique alpha-numeric identification number assigned to each file. The file reference number, reflects the subject of the file with like-subjects given closely related numbers. A document number, unique for that file, identifies and locates each site-document kept in the file. The file reference number with the document number is thus the full location address for a filed site-document.

1.4 **File Index** is the comprehensive list of documents kept in the file. The file index is kept inside the cover of each file. It is used to locate a site-document in a file and for stating the cross references which apply to each document and the details of each document.

2. Responsibility for filing of works-contract site-documents

2.1 The Architect's or the Engineer's Representative, as the case may be, is responsible for ensuring that site-documents are filed according to the requirements stated herein.

3. Standard practice for filing of works-contract site-documents

3.1 Retention of Site-documents

3.1.1 All site-documents shall be kept in the filing system: retention of originals by individuals is not permitted. Copies of documents which have further information written on them become "originals" which shall be kept in the filing system.

3.1.2 Copies of originals may be kept on other files for cross-reference and other purposes but these should be kept to a minimum. Copies shall be labelled "COPY" and also carry the file reference, including document number, of the original.

3.1.3 Meetings, conferences and telephone calls on contract matters shall be documented in writing to record the subject, important points, and the decisions made.

3.1.4 Electronic messages on contract matters shall be treated as correspondence with a hard copy paper printout of the message kept in the filing system. Attached to the file copy shall be a paper copy of the transmission log which details the date and time the message was received and by whom.

3.2 File Register

3.2.1 The file register is organised so that files are grouped according to their main use. The groups are divided into related topics and the topic divisions are sub-divided into related subjects. Further sub-division into subsidiary-subjects, and the addition of topics and subjects is possible to suit circumstances.

3.2.2 The file register is described in Annex 1.

3.3 File Reference Number

3.3.1 Each file shall have a unique alpha-numeric identification number which reflects the main use, topic and subject of the site-documents placed in it. As a result, related, similar or subsidiary subjects will have adjacent file reference numbers. This File Reference Number also reflects its position in the tiered logic of the File Register.

3.3.2 The file reference number shall consist of a series of identifiers, as shown below, separated by delimiters (/) :-

Project Identifier/(Contract)/File Division/File No/Document No

3.3.3 The identifiers are :-

Identifier	Definition
<i>Project Identifier</i> e.g. NLE	Unique alphanumeric code which signifies the PWP or group of projects or for department purposes (This is optional)
<i>Contract</i> e.g. NLE/(HY/91/08)	Contract No (Contained in Brackets)
<i>File Division</i> e.g. NLE/(HY/91/08)/M30	Files are grouped into File Divisions according to their main use, namely; <ul style="list-style-type: none"> • Management (of construction) • Records (of construction) • Construction (items, locations and activities) File Divisions are prefixed by the capital letter of its group and given a two digit identification number Each File Division shall contain the subject files necessary for dealing with that topic.
<i>File No</i> e.g. NLE/(HY/91/08)/M30/200	Files are assigned a unique three digit number for the file subject according to the order, or grouping, of the file subjects in the File Division. Successive volumes of the same file shall be numbered as such.
<i>Document No</i> e.g. (9)	Each document in the file shall be given a consecutive number, starting at 1. Enclosures have the same Document No but are also marked "enc".

3.4 Use of the File Register to suit circumstances

3.4.1 The hierarchial structure of the file register shall not be changed but it can be extended and unneeded parts can be ignored. The file divisions and file numbers stated in the file register shall not be assigned to another use.

Extending the file register must be done as a continuation of its hierarchical logic with subjects broken down into subsidiary and allied subjects.

3.4.2 **File Divisions** shall not be changed; they can however be left unused or have new divisions added, to suit particular needs.

3.4.3 **Files** can be added, or the subject further sub-divided into subsidiaries or allied subjects to suit particular needs. Sub-division continues the tiered logic of the filing system and is the recommended means of adapting it to suit circumstances.

The file reference number of a subsidiary-subject is the parent's number extended by a delimiter and a two digit identifying number.

e.g. **NLE/(HY/91/08)/M30/200/21**

Added subjects are assigned the next available sequential number in the most appropriate group of subjects in the division, ie 101, 102 if the subject is associated with 100.

e.g. **NLE/(HY/91/08)/M30/201**

3.4.4 If the file is made up of separate repeat items, ie interim payments, these shall be filed as a series of that subject file reference number. Each in the series being identified by an extension to the file reference number: this shall be by a .(dot) delimiter and sequential numbering starting from .1 (dot 1), ie 100.1, 100.2 etc.

e.g. **NLE/(HY/91/08)/M30/201.1**

3.5 Cross-Indexing

3.5.1 Site-documents shall be filed according to their main purpose but shall be cross-indexed to other classifications for easier document retrieval. It is recommended that document details including cross-indexing are noted on the file index sheets kept inside each file.

3.5.2 A copy of all correspondence shall be filed in chronological order of date sent or received on the correspondence file and cross-indexed to the sender and addressee. *Correspondence Cross-Index* is stated in Annex 2, this shall be modified and used to suit circumstances.

3.5.3 Documents in the **Management** group or the **Record** group of file divisions shall be cross-indexed to a site location, or part of the construction, so that management or record group documents for each location or part of construction can be more easily retrieved. *Location Cross-Index* is stated in Annex 3, this shall be modified and used to suit circumstances.

3.5.4 Documents in the **Construction** group of file divisions shall be cross-indexed to the work-type so that documents on particular construction activities can be selectively retrieved from the construction files. *Work-Type Cross-Index* is stated in Annex 4, these shall be detailed and used to suit circumstances.

Manual Cross-Indexing

3.5.5 It is recommended that the proforma file index sheet kept in the inside cover of each file includes spaces for cross-indexing documents. The codes are as listed in the annexes and further defined for each works contract. An example is illustrated below.

					File Ref:	Page:
Doc No.	Date	Type	From	To	Caption/ description	X-index

3.6 Computer-aided cross-referencing

3.6.1 Document management software have indexing functions in which unlimited numbers of index codes can be used if needed. These software are particularly useful for speedy retrieval of documents and usually do so by identifying the document address (file reference number and document number) as a result of selection criteria made up of index codes. It is recommended that cross-indexes in addition to those given in Annexes 2, 3 and 4 should be used to permit more selective document retrieval.

3.6.2 It is recommended that document management software for use on PC-computers be used and that the advice of department computer service units, or the Works Branch, be sought on suitable software for these purposes. Some software also stores documents as electronic image or text-files, but this requires use of scanning technology and capture of electronic textfiles and is not recommended unless proven as cost-effective for the proposed use.

I. REFERENCES

Hong Kong Government Manual of Office Practice - A Guide for Departments on Office Procedure, 1991

Annex 1

File Register (File Ref = Project Identifier/ Contract/ File Division/ File No/ Folio No)																																									
Management Group (Sheet 1 of 2)																																									
<i>Folio's in these File Divisions should be cross-referenced to a site position/item to enable retrieval (preferably computer-aided) of all folios referenced to that location</i>																																									
File Division	M05 - Administration		M10 - Correspondence		M15 - Financial & Contractual		M20 - Programme & Progress		M25 - Submittal & RFI																																
Notes			<i>copy of all correspondence (w/o enc) in chronological order</i>		<i>** means filed in sequential series ie 101.1...101.xx</i>		<i>** means filed in sequential series ie 101.1...101.xx</i>																																		
File No & Subject	100 Staff	200 Equipment Inventory	300 Procedures	400 Public Relations	500 Visits	100 Incoming mail log	200 Outgoing mail log	300 Chronological Copies of Correspondence	100 Interim Payment Procedures	105 ** Payment Submission	110 ** Milestone Certificates	115 ** Interim Payment Certificates	120 Liquidated Damages	125 Retention	130 Agreed Costs	135 Final Account	200 Request for Variation Orders (RFVO) Log	210 ** Valuation of Variation Orders	300 Cost Reporting	500 Claims Log	510 ** Claims	520 Extensions of Time	600 Subcontractor Agreements	700 Insurance	710 Bonds and Guarantees	800 Site Instructions	810 Dayworks	100 ** Baseline Works Programme	110 ** Three Month Rolling Programme	120 Programme Revision	200 ** Monthly Progress Report	210 ** Contractor's Progress Report	220 ** Site Progress Report	230 ** Engineer's Rep Progress Report	240 Contractor's Daily Report	250 Inspector's Daily Report	260 ARE's Weekly Reports	100 Submittal Log	110 Submittals	200 RFI Log	220 RFI's

			900	Completion		
			910	Maintenance		
			920	Handover		

File Register (File Ref= Project Identifier/Contract/File Division/File No/Folio No)									
Management Group (Sheet 2 of 2)									
<i>Folio's in these File Divisions should be cross-referenced to a site position/item to enable retrieval (preferably computer-aided) of all folios referenced to that location</i>									
File Division	M30 - Meetings		M35 - Quality Assurance		M40 - Safety		M45 - Environment		M50 - not used
Notes	<i>** means filed in sequential series ie 101.1...101.xx</i>		<i>** means filed in sequential series ie 101.1...101.xx</i>		<i>** means filed in sequential series ie 101.1...101.xx</i>				
File No & Subject	100	Engineer's Site Meeting	100	Site Quality Plan	100	Safety Plan	100	EPD	
	200	Contractor's Site Meeting	110	Contractor's Quality Plan	110	Safety Staff	200	Environmental Impact Assessments	
	210	** Progress Meeting with Contractor	120	Sub-Contractor Quality Plan	120	** Accident Reports	300	Air quality	
	300	PMO's Meetings	130	Suppliers QA	130	Site Safety Report	400	Water quality	
	310	** Progress Meeting with PMO	200	Procedures	140	Contractor's Safety Report	500	Noise quality	
	400	Govt Depts	300	** Non-conformity Reports against Engineer's Rep	150	Sub-Contractor Safety Report			
	500	Utilities	310	** Non-conformity Reports against Contractor	160	Off-site safety			
	600	Interfacing Contracts	320	** Non-conformity Reports against Sub-contractor					
			330	** Non-conformity Reports against Suppliers					

File Register (File Ref= Project Identifier/ Contract/ File Division/ File No/ Folio No)					
Record Group (Sheet 1 of 1)					
<i>Folio's in these File Divisions should be cross-referenced to a site position/item to enable retrieval (preferably computer-aided) of all folios referenced to that location</i>					
File Division	R05 - Surveys & Measurement	R10 - Drawings	R15 - Site Status	R20 - Quality Control	R25 - not used
<i>Notes</i>					
File No & Subject	100 Ground Investigation 200 Land Survey 210 Setting Out 220 Measurement Survey 300 Hydrographic Survey 310 Marine Charting 400 Aerial Survey 500 Measurements	100 Drawing Log 110 Drawing Transmittals 101 Bending Schedules 102 As-constructed Drawings	100 Site Diary 200 Photographs 300 Weather 400 Labour & Plant 500 On-Site Materials 600 Transport	005 Requests for Inspections 010 Laboratories 020 Off-site inspections 030 Temporary Works 100 Soil tests 110 Formation & Fill 200 Piling 300 Concrete 310 Pre-stressing 320 Reinforcement 400 Sub-base material 410 Road base 420 Asphaltic Materials 500 Movement Joints 510 Bearings 600 Steel Fabrication 610 Welding 620 Cables 700 Pipes & Drainage 710 Rock products 720 Concrete Products 730 Barriers 740 Paint & coatings 750 Mechanical Devices 760 Electrical Devices	

File Register (File Ref= Project Identifier/Contract/File Division/File No/Folio No)					
Construction Group (Sheet 1 of 2)					
<i>Folio's in these File Divisions should be cross-referenced to the Method of Measurement Section to enable retrieval (preferably computer-aided) of all folios referenced to that activity</i>					
File Division	C05 - Land	C10 - Geotechnical	C15 - Earthworks	C20 - Marine & Reclamation	C25 - Structures
Notes	<i># means filed in sequential series ie 101.1...101.xx for each named location/entity yy</i>	<i># means filed in sequential series ie 101.1...101.xx for each named location/entity yy</i>	<i># means filed in sequential series ie 101.1...101.xx for each named location/entity yy</i>	<i># means filed in sequential series ie 101.1...101.xx for each named location/entity yy</i>	<i># means filed in sequential series ie 101.1...101.xx for each named location/entity yy</i>
File No & Subject	100 # Possession yy 200 # Works Areas yy 300 # Access yy 400 # Shared Access yy 500 # Accommodation Works yy	100 # Design yy 200 # Approvals yy 300 # Construction yy	100 # Design yy 150 Blasting 200 # Land Borrow Area yy 300 # Dumping yy 400 # Construction yy 400 Blasting 410 Blasting Permit 420 Explosives	100 # Design yy 200 # Marine Borrow Area yy 210 # Marine Dumping yy 300 # Dredging yy 400 # Seawall yy 500 # Reclamation yy	100 # Design 110 # Design Certification 200 # Construction

File Register (File Ref= Project Identifier/Contract/File Division/File No/Folio No)					
Construction Group (Sheet 2 of 2)					
<i>Folio's in these File Divisions should be cross-referenced to the Method of Measurement Section to enable retrieval (preferably computer-aided) of all folios referenced to that activity</i>					
File Division	C30 - Roadworks	C35 - Railway	C40 - Tunnelling	C45 - Utilities	C50 - E&M
Notes	<i># means filed in sequential series ie 101.1...101.xx for each named location/entity yy</i>	<i># means filed in sequential series ie 101.1...101.xx for each named location/entity yy</i>	<i># means filed in sequential series ie 101.1...101.xx for each named location/entity yy</i>	<i># means filed in sequential series ie 101.1...101.xx for each named location/entity yy</i>	<i># means filed in sequential series ie 101.1...101.xx for each named location/entity yy</i>
File No & Subject	100 # Design yy 200 # Construction yy 300 # Traffic Control yy 400 # Diversions yy 500 # Lighting yy 600 # Street Furniture yy	100 # Layout yy 110 # Design yy 120 # Design Approval yy 200 # Construction yy 300 MTRC 400 Railway Inspectorate	100 # Layout yy 110 # Design yy 120 # Design Approval yy 200 # Construction yy	100 # Road Opening Permits yy 120 # Reinstatements yy 200 # Electricity yy 300 # Gas yy 400 # Water yy 500 # Telephone yy 600 # Fire Services yy	100 EMSD

Annex 2**Correspondence (MAIL) Cross-Index**

NB: Abbreviated form for computer purposes given in brackets

Engineer's Representative (ER)

CRE XX

SRE XX

RE XX

.....

Architect's Representative (ER)

CRA XX

SRA XX

RA XX

.....

Contractor (Contr)

Contr XX

Contr YY

Contr....

Sub-contractors (SContr)

SContr XX

SContr YY

SContr

Employer's Project Management Office (PMO)

PMO XX

PMO YY

PMO

Consultant (ConS)

ConS XX

ConS YY

ConS ...

Statutory Authorities (Govt)

XXX

YYY

.....

Official Organisations & Representatives (OFFS)

XXX

YYY

.....

Annex 3

Location (LOC) Cross-Index

NB: Abbreviated form for computer purposes given in brackets

SITE (SITE)
Site X
Site Y
Site ...

ACCESS (ACC)
Access X
Access Y
Access

AREA (AREA)
Area X
Area Y
Area

BORROW PIT (BORRO)
Borrow Pit X
Borrow Pit Y
Borrow Pit

DUMP SITE (DUMP)
Dump Site X
Dump Site Y
Dump Site

INTERFACE (INFAC)
Interface X
Interface Y
Interface

MARINE BORROW AREA (C_BORO)
Marine Borrow Area X
Marine Borrow Area Y
Marine Borrow Area

MARINE DUMP (C_DUMP)
Marine Dump Location X
Marine Dump Location Y
Marine Dump

OFF-SITE LOCATION (OFF-LOC)
Off-site Location X
Off-site Location Y
Off-site Location

RECLAMATION (RECLAM)
Reclamation X
Reclamation Y
Reclamation

ROADWAY (ROAD)
Roadway X
Roadway Y
Roadway

SEAWALL (CWALL)
Seawall X
Seawall Y
Seawall

STRUCTURE (STRUCT)
Structure X
Structure Y
Structure

TUNNEL (TUN)
Tunnel X
Tunnel Y
Tunnel

RAILWAY (RAIL)
Track X
Track Y
Track

Annex 4

Work-Type (TYPE) Cross-Index

NB: Abbreviated form for computer purposes given in brackets

PRELIMINARIES (PRELIM)
TESTING (TEST)
GROUND INVESTIGATION (GI)
SITE CLEARANCE (CLEAR)
FENCING (FENC)
DRAINAGE & DUCTS (DRAIN)
PIPEWORK (PIPE)
EARTHWORKS (EARTH)
ROADS & PAVINGS (RD_WK)
PILING WORKS (PILE)
FORMWORK (FORM)
STEEL REINFORCEMENT (REINF)
CONCRETE (CONC)
IN-SITU POST-TENSIONED PRESTRESSING (STRESS)
STEELWORK (STEEL)
WATERPROOFING (PROOF)
BEARINGS & MOVEMENT JOINTS (ARTIC)
MARINE WORKS (MARIN)
TUNNELLING (TUNEL)
GEOTECHNICAL WORKS (GEO)
RAILWAY WORKS (RLY-WK)
SOLID WASTE DISPOSAL (SOL_DIS)
BRICKWORK & MASONRY (BRICK)
FINISHINGS (FIN)
LANDSCAPE WORKS (LANSCAP)

APPENDIX 7.74 NOT USED

APPENDIX 7.75 NOT USED

APPENDIX 7.76 NOT USED

APPENDIX 7.76A NOT USED

APPENDIX 7.76B NOT USED

APPENDIX 7.76C NOT USED

APPENDIX 7.76D NOT USED

APPENDIX 7.77 NOT USED

APPENDIX 7.77A NOT USED

APPENDIX 7.77B NOT USED

APPENDIX 7.77C NOT USED

APPENDIX 7.77D NOT USED

APPENDIX 7.78 NOT USED

APPENDIX 7.79 NOT USED

APPENDIX 7.80 SAMPLE LETTER ON IMPLEMENTATION OF REVISED VARIATION ORDER THRESHOLD Amd No. 1/2025 UNDER ONGOING GCC CONTRACTS
(Ref.: SDEV's memo ref. () in DEVB(W) 546/83/01 dated 20.9.2024)

From: The Government of the Hong Kong Special Administrative Region (“**Employer**”)

To: [insert] (“**Contractor**”)

Date:

Dear Sirs,

[Contract Title and Contract No.]

The Employer and the Contractor have entered into the above Contract (“**Contract**”) on [date].

2. With effect from the date of this letter, the Employer and the Contractor (“**the parties**”) agree the following amendment to the Contract:

- (a) The figure of “\$1,000,000” given in paragraph [insert reference] of the Appendix to Form of Tender [as amended by Supplementary Agreement No. [insert reference]]¹ is replaced by “\$1,400,000”.

3. Except as amended by this letter, all the terms and conditions of the Contract [as amended by Supplementary Agreement Nos....]² shall continue to be binding on the parties and shall remain in full force and effect.

4. Save as expressly provided herein, nothing in this letter shall give rise to any right or entitlement of the Contractor to claim any payment, compensation, relief, Cost or extension of time on the basis of or arising out of or in connection with this letter. The Employer’s rights under the Contract shall not be prejudiced in any way by this letter.

IN WITNESS WHEREOF this letter has been executed as a deed³ by the parties on the date first above written

[Note: Project offices should double-check the clause references in their particular case.]

¹ Insert as appropriate.

² To be incorporated where there is/are previous supplementary agreement(s).

³ Both parties will have to execute the letter as a deed and the guidance on execution of public works contracts as a deed in DEVB TCW 7/2014 is applicable.

APPENDIX 7.81 SAMPLE LETTER ON IMPLEMENTATION OF REVISED VARIATION ORDER THRESHOLD Amd No. 1/2025 UNDER ONGOING NEC CONTRACTS

(Ref.: SDEV's memo ref. () in DEVB(W) 546/83/01 dated 20.9.2024)

From: The Government of the Hong Kong Special Administrative Region ("*Client*")

To: [insert] ("*Contractor*")

Date:

Dear Sirs,

[Contract Title and Contract No.]

The *Client* and the *Contractor* have entered into the above contract ("**this contract**") on [date].

2. With effect from the date of this letter, the *Client* and the *Contractor* ("**the Parties**") agree the following amendment to the Contract:

- (a) The figure of "\$1,000,000" given in Clauses [B1(3)]¹ and [B1(4)]² of the *additional conditions of contract* [as amended by Supplementary Agreement No. [insert reference]]³ is replaced by "\$1,400,000".

3. Except as amended by this letter, all the terms and conditions of this contract [as amended by Supplementary Agreement Nos....]⁴ shall continue to be binding on the Parties and shall remain in full force and effect.

4. Save as expressly provided herein, nothing in this letter shall give rise to any right or entitlement of the *Contractor* to claim any payment, compensation, relief or changes to the Completion Date, Key Dates or the Prices on the basis of or arising out of or in connection with this letter. The *Client*'s rights under this contract shall not be prejudiced in any way by this letter.

IN WITNESS WHEREOF this letter has been executed as a deed⁵ by the Parties the day and year first above written

[Note: Project offices should double-check the clause references in their particular case.]

¹ Amend as appropriate.

² Amend as appropriate.

³ Insert as appropriate.

⁴ To be incorporated where there is/are previous supplementary agreement(s).

⁵ Both Parties will have to execute the letter as a deed and the guidance on execution of public works contracts as a deed in DEVB TCW 7/2014 is applicable.

APPENDIX 7.82A STANDARD REQUEST FOR INSPECTION AND/OR SURVEY CHECK FORM (FOR GCC CONTRACTS)

(Ref.: SDEV's memo ref. () in DEVB(W) 510/70/03 dated 13.11.2020)

{Internal Notes: 1. Not applicable to ArchSD's contracts which would adopt in-house Request for Inspection Forms.

2. []^ Project offices to choose the appropriate term.}

Contract No. _____ Request No. _____ Rev. _____ #

To the [Engineer / Maintenance Engineer]^,

(1) Works to be inspected and/or surveyed:	Date & time for inspection and/or survey check:
(2) Location of works:	
(3) Works proposed after acceptance of (1):	
(4) Drawings, sketches, specifications, record forms for specific works (e.g. pile driving) enclosed:	
(5) Remarks (if this is a re-submission, rectification works carried out since last inspection and/or survey check shall be stated):	

Submitted on behalf of the Contractor:

Full name: _____ Signed: _____

Designation: _____ Date and time: _____

Received and filled by the [Engineer / Maintenance Engineer]^'s Representative:

Full name: _____ Signed: _____

Designation: _____ Date and time: _____

Inspection and/or survey check assigned to inspection and/or surveying officer with details below:

Full name: _____ Designation: _____

Received and filled in by the inspection and/or surveying officer:

Works outlined in (1) above [have / have not]* been inspected and/or surveyed [on _____ at _____]@. Permission to carry out the works proposed in (3) above is [given / not given]* for the following reason(s):

Non-conformities recorded: _____

Recurrence of non-conformities: [Yes / No / NA]*

Rectification works required: _____

This in no way limits or alters the Contractor's obligations under the Contract. Form is returned to the Contractor at time stated below.

Full name: _____ Signed: _____

Designation: _____ Date and time: _____

Countersigned by the supervisor of the inspection and/or surveying officer. For critical items, hold points, witness points, interfacing works or works to be covered-up, countersigned by the resident engineer or above rank:

Full name: _____ Signed: _____

Designation: _____ Date and time: _____

Received on behalf of the Contractor by:

Full name: _____

Signed: _____

Designation: _____

Date and time: _____

Remarks: # Insert one character from A to Z, for re-submission.

* Delete where inappropriate.

@ Fill in the date and time or delete if not inspected and/or surveyed.

c.c. with enclosures: interfacing parties (if applicable)

APPENDIX 7.82B STANDARD REQUEST FOR INSPECTION AND/OR SURVEY CHECK FORM (FOR NEC CONTRACTS)

(Ref.: SDEV's memo ref. () in DEVB(W) 510/70/03 dated 13.11.2020)

{Internal Notes: 1. Not applicable to ArchSD's contracts which would adopt in-house Request for Inspection Forms.

2. []^ Project offices to choose the appropriate term.}

Contract No. _____ Request No. _____ Rev. _____ #

To the [Supervisor / Service Manager]^,

(1) [works / service]^ to be inspected and/or surveyed:	Date & time for inspection and/or survey check:
(2) Location of [works / service]^:	
(3) [works / service]^ proposed after acceptance of (1):	
(4) Drawings, sketches, specifications, record forms for specific [works / service]^ (e.g. pile driving) enclosed:	
(5) Remarks (if this is a re-submission, rectification works carried out since last inspection and/or survey check shall be stated):	

Submitted on behalf of the *Contractor*:

Full name: _____ Signed: _____

Designation: _____ Date and time: _____

Received and filled by the [Supervisor's Representative / Service Manager's Delegate]^:

Full name: _____ Signed: _____

Designation: _____ Date and time: _____

Inspection and/or survey check assigned to inspection and/or surveying officer with details below:

Full name: _____ Designation: _____

Received and filled in by the inspection and/or surveying officer:

[works / service]^ outlined in (1) above [have / have not]* been inspected and/or surveyed [on _____ at _____]^@. Permission to carry out the [works / service]^ proposed in (3) above is [given / not given]* for the following reason(s):

Non-conformities recorded: _____

Recurrence of non-conformities: [Yes / No / NA]*

Rectification works required: _____

This in no way limits or alters the *Contractor*'s obligations under the contract. Form is returned to the *Contractor* at time stated below.

Full name: _____ Signed: _____

Designation: _____ Date and time: _____

Countersigned by the supervisor of the inspection and/or surveying officer. For critical items, hold points, witness points, interfacing works or [works / service]^ to be covered-up, countersigned by the resident engineer or above rank:

Full name: _____ Signed: _____

Designation: _____ Date and time: _____

Received on behalf of the *Contractor* by:

Full name: _____

Signed: _____

Designation: _____

Date and time: _____

Remarks: []# Insert one character from A to Z, for re-submission.

[]* Delete where inappropriate.

[]@ Fill in the date and time or delete if not inspected and/or surveyed.

c.c. with enclosures: interfacing parties (if applicable)

APPENDIX 7.83 SAMPLE LETTER ON IMPLEMENTATION OF MORE FREQUENT MILESTONE PAYMENT FOR NEC ECC HK EDITION CONTRACTS

(Ref.: SDEV's memo ref. () in DEVBWB WP4S-021-004-002 dated 10.10.2024)

From: The Government of the Hong Kong Special Administrative Region (“*Client*”)

To: [insert] (“*Contractor*”)

Date:

Dear Sirs,

[Contract Title and Contract No.]

**Supplementary Agreement No. []
More Frequent Milestone Payment**

The *Client* and the *Contractor* have entered into the above contract (“**the contract**”) on [date]. Words and expressions defined in the contract shall, save as otherwise defined herein, have the same meaning in this supplementary agreement.

2. With a view to enhancing the cash flow of the *Contractor* under the contract, the *Client* is desirous of revising the [Schedule of Milestones / *activity schedule*]¹ by inserting additional [milestones / activities]¹ therein such that payments to the *Contractor* for the relevant works / activities can better follow the cost incurred in completing the relevant works / activities.

3. As Subcontractors are also facing similar cash flow problem, the *Contractor* is required to make timely payments under the subcontracts to its relevant Subcontractors as appropriate upon receipt of [milestone payment / payment]¹ from the *Client* to ease the cash flow of the Subcontractors. When necessary, the *Contractor* will be requested to provide records to demonstrate its compliance with such requirement. In case the *Contractor* fails to make timely payments to its relevant Subcontractors, the *Project Manager* will exercise its power under this supplementary agreement to cease certifying payment to the *Contractor* using the revised [Schedule of Milestones / Activity Schedule]¹. In such cases, the *Project Manager* certifies payment for the relevant remaining works / activities under the contract using the original [Schedule of Milestones / *activity schedule*]¹. Besides, the performance of the *Contractor* in this regard will be duly reflected in the Contractor's Performance Report(s).

4. With effect from the date of this letter, the *Client* and the *Contractor* (“**the Parties**”) agree to incorporate the following amendments to the contract:

- (a) The [Schedule of Milestones / *activity schedule*]¹ of the contract is replaced by the [Schedule of Milestones / Activity Schedule]¹ (Revision No. 1) as attached in [Appendix 1]² hereto. The *Project Manager* certifies payment to

¹ To be deleted or amended by project offices as appropriate to suit the needs of their contracts.

² [Schedule of Milestones / Activity Schedule]¹ (Revision No. 1), incorporating the additional [milestones / activities]¹, shall be prepared by individual project office to suit its need.

the *Contractor* for the works / activities under the contract in accordance with the [Schedule of Milestones / Activity Schedule]¹ (Revision No. 1).

- (b) If in the opinion of the *Project Manager* the *Contractor* fails to make timely payment under a subcontract to the relevant Subcontractor upon receipt of [milestone payment / payment]¹ from the *Client*, the *Project Manager* has the full power to cease certifying payment to the *Contractor* for the relevant works / activities under the contract in accordance with the [Schedule of Milestones / Activity Schedule]¹ (Revision No. 1). In such cases, the *Project Manager* certifies payment for the relevant remaining works / activities under the contract in accordance with the [Schedule of Milestones / activity schedule]¹ as at the Contract Date.

5. Except as amended by this letter, all the terms and conditions of the contract [as amended by Supplementary Agreement Nos.... dated ...]³ shall continue to be binding on the Parties and shall remain in full force and effect.

6. Save as expressly provided herein, nothing in this letter shall give rise to any right or entitlement of the *Contractor* to claim any payment, compensation, relief or changes to the Completion Date, Key Dates or the Prices on the basis of or arising out of or in connection with this letter. The *Client's* rights under the contract shall not be prejudiced in any way by this letter.

IN WITNESS WHEREOF this letter has been executed as a deed⁴ by the Parties the day and year first above written.

[Please adopt appropriate execution clauses.]

³ To be incorporated where there is/are previous supplementary agreement(s).

⁴ Both Parties will have to execute the letter as a deed and the guidance on execution of public works contracts as a deed in DEVB TC(W) No. 7/2014 is applicable.

APPENDIX 7.84 SAMPLE LETTER ON IMPLEMENTATION OF MORE FREQUENT MILESTON PAYMENT FOR NEC4 ECC CONTRACTS
(Ref.: SDEV’s memo ref. () in DEVBWB WP4S-021-004-002 dated 10.10.2024)

From: The Government of the Hong Kong Special Administrative Region (“*Client*”)

To: [insert] (“*Contractor*”)

Date:

Dear Sirs,

[Contract Title and Contract No.]

**Supplementary Agreement No. []
More Frequent Milestone Payment**

The *Client* and the *Contractor* have entered into the above contract (“**the contract**”) on [date]. Words and expressions defined in the contract shall, save as otherwise defined herein, have the same meaning in this supplementary agreement.

2. With a view to enhancing the cash flow of the *Contractor* under the contract, the *Client* is desirous of revising the [Schedule of Milestones / *activity schedule*]¹ by inserting additional [milestones / activities]¹ therein such that payments to the *Contractor* for the relevant works / activities can better follow the cost incurred in completing the relevant works / activities.

3. As Subcontractors are also facing similar cash flow problem, the *Contractor* is required to make timely payments under the subcontracts to its relevant Subcontractors as appropriate upon receipt of [milestone payment / payment]¹ from the *Client* to ease the cash flow of the Subcontractors. When necessary, the *Contractor* will be requested to provide records to demonstrate its compliance with such requirement. In case the *Contractor* fails to make timely payments to its relevant Subcontractors, the *Project Manager* will exercise its power under this supplementary agreement to cease certifying payment to the *Contractor* using the revised [Schedule of Milestones / Activity Schedule]¹. In such cases, the *Project Manager* certifies payment for the relevant remaining works / activities under the contract using the original [Schedule of Milestones / *activity schedule*]¹. Besides, the performance of the *Contractor* in this regard will be duly reflected in the Contractor’s Performance Report(s).

4. With effect from the date of this letter, the *Client* and the *Contractor* (“**the Parties**”) agree to incorporate the following amendments to the contract:

- (a) The [Schedule of Milestones / *activity schedule*]¹ of the contract is replaced by the [Schedule of Milestones / Activity Schedule]¹ (Revision No. 1) as attached in [Appendix 1]² hereto. The *Project Manager* certifies payment to the *Contractor* for the works / activities under the contract in accordance

¹ To be deleted or amended by project offices as appropriate to suit the needs of their contracts.

² [Schedule of Milestones / Activity Schedule]¹ (Revision No. 1), incorporating the additional [milestones / activities]¹, shall be prepared by individual project office to suit its need.

with the [Schedule of Milestones / Activity Schedule]¹ (Revision No. 1).

- (b) If in the opinion of the *Project Manager* the *Contractor* fails to make timely payment under a subcontract to the relevant Subcontractor upon receipt of [milestone payment / payment]¹ from the *Client*, the *Project Manager* has the full power to cease certifying payment to the *Contractor* for the relevant works / activities under the contract in accordance with the [Schedule of Milestones / Activity Schedule]¹ (Revision No. 1). In such cases, the *Project Manager* certifies payment for the relevant remaining works / activities under the contract in accordance with the [Schedule of Milestones / activity schedule]¹ as at the Contract Date.

5. Except as amended by this letter, all the terms and conditions of the contract [as amended by Supplementary Agreement Nos.... dated ...]³ shall continue to be binding on the Parties and shall remain in full force and effect.

6. Save as expressly provided herein, nothing in this letter shall give rise to any right or entitlement of the *Contractor* to claim any payment, compensation, relief or changes to the Completion Date, Key Dates or the Prices on the basis of or arising out of or in connection with this letter. The *Client's* rights under the contract shall not be prejudiced in any way by this letter.

IN WITNESS WHEREOF this letter has been executed as a deed⁴ by the Parties the day and year first above written.

[Please adopt appropriate execution clauses.]

³ To be incorporated where there is/are previous supplementary agreement(s).

⁴ Both Parties will have to execute the letter as a deed and the guidance on execution of public works contracts as a deed in DEVB TC(W) No. 7/2014 is applicable.

APPENDIX 7.85 SAMPLE LETTER ON IMPLEMENTATION OF MORE FREQUENT MILESTON PAYMENT FOR GCC CONTRACTS
(Ref.: SDEV’s memo ref. () in DEVBWB WP4S-021-004-002 dated 10.10.2024)

From: The Government of the Hong Kong Special Administrative Region (“**Employer**”)

To: [insert] (“**Contractor**”)

Date:

Dear Sirs,

[Contract Title and Contract No.]

**Supplementary Agreement No. []
More Frequent Milestone Payment**

The Employer and the Contractor have entered into the above Contract (“**Contract**”) on [date]. Words and expressions defined in the Contract shall, save as otherwise defined herein, have the same meaning in this supplementary agreement.

2. With a view to enhancing the cash flow of the Contractor under the Contract, the Employer is desirous of revising the [Schedule of Milestones]¹ by inserting additional [milestones]¹ therein such that payments to the Contractor for the relevant works can better follow the cost incurred in completing the relevant works.

3. As Subcontractors are also facing similar cash flow problem, the Contractor is required to make timely payments under the subcontracts to his relevant Subcontractors as appropriate upon receipt of [milestone payment / payment]¹ from the Employer to ease the cash flow of the Subcontractors. When necessary, the Contractor will be requested to provide records to demonstrate his compliance with such requirement. In case the Contractor fails to make timely payments to his relevant Subcontractors, the [Engineer/Surveyor]² will exercise his power under this supplementary agreement to cease certifying payment to the Contractor using the revised [Schedule of Milestones]¹. In such cases, the [Engineer/Surveyor]² certifies payment for the relevant remaining works under the contract using the original [Schedule of Milestones]¹. Besides, the performance of the Contractor in this regard will be duly reflected in the Contractor’s Performance Report(s).

4. With effect from the date of this letter, the Employer and the Contractor (“**the Parties**”) agree to incorporate the following amendments to the Contract:

- (a) The [Schedule of Milestones]¹ of the Contract is replaced by the [Schedule of Milestones]¹ (Revision No. 1) as attached in [Appendix 1]³ hereto. The [Engineer/Surveyor]² certifies payment to the Contractor for the works

¹ To be amended by project offices as appropriate to suit the needs of their contracts.

² To be deleted as appropriate.

³ [Schedule of Milestones]¹ (Revision No. 1), incorporating the additional [milestones]¹, shall be prepared by individual project office to suit its need.

under the Contract in accordance with the [Schedule of Milestones]¹ (Revision No. 1).

- (b) If in the opinion of the [Engineer/Surveyor]² the Contractor fails to make timely payment under a subcontract to the relevant Subcontractor upon receipt of [milestone payment / payment]¹ from the Employer, the [Engineer/Surveyor]² has the full power to cease certifying payment to the Contractor for the relevant works under the Contract in accordance with the [Schedule of Milestones]¹ (Revision No. 1). In such cases, the [Engineer/Surveyor]² certifies payment for the relevant remaining works under the Contract in accordance with the [Schedule of Milestones]¹ as at the commencement date of the Contract.

5. Except as amended by this letter, all the terms and conditions of the Contract [as amended by Supplementary Agreement Nos....]⁴ shall continue to be binding on the parties and shall remain in full force and effect.

6. Save as expressly provided herein, nothing in this letter shall give rise to any right or entitlement of the Contractor to claim any payment, compensation, relief, Cost or extension of time on the basis of or arising out of or in connection with this letter. The Employer's rights under the Contract shall not be prejudiced in any way by this letter.

IN WITNESS WHEREOF this letter has been executed as a deed⁵ by the parties the day and year first above written

[Please adopt appropriate execution clauses.]

⁴ To be incorporated where there is/are previous supplementary agreement(s).

⁵ Both parties will have to execute the letter as a deed and the guidance on execution of public works contracts as a deed in DEVB TC(W) 7/2014 is applicable.