SECTION III

CONDITIONS OF CONTRACT PART I – GENERAL CONDITIONS

JICA Phase 2 Study Sec-III, Page-1 PCI/JOC

Conditions of Contract, Part I - General Conditions

Roads and Highways Department

Rupsa Bridge Construction Project

CONDITIONS OF CONTRACT

PART 1- GENERAL CONDITIONS

The Conditions of Contract, Part I - General Conditions, shall be those forming Part I of the Conditions of Contract for Works of Civil Engineering Construction", Fourth Edition 1987, reprinted in 1992 with further amendments, prepared by the *Federation Internationale des Ingenieurs - Conseils* (FIDIC). These Conditions are subject to the variations and additions set out in Part II hereof entitled "Conditions of Particular Application".

Copies of the FIDIC Conditions of Contract can be obtained from

FIDIC Secretariat P.O. Box 86 1000 Lausanne 12 Switzerland

Facsimile:

41 21 653 5432

Telephone:

41 21 653 5003



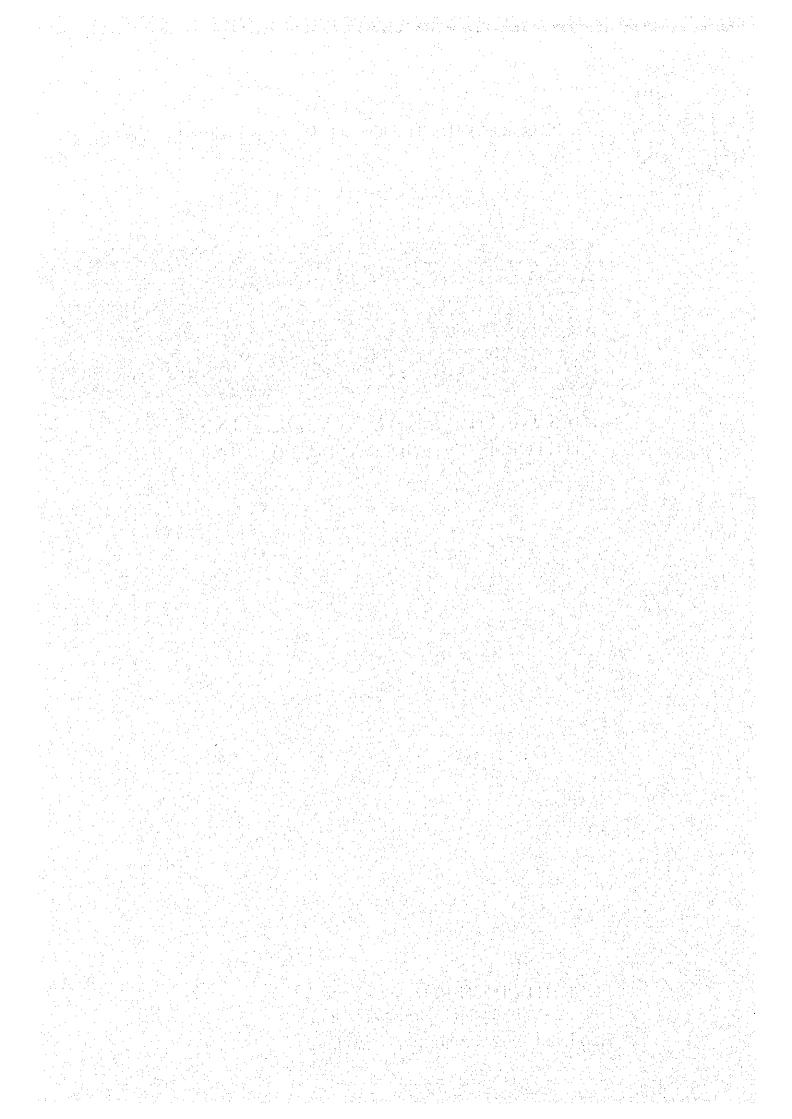
FEDERATION INTERNATIONALE DES INGENIEURS-CONSEILS

CONDITIONS OF CONTRACT FOR WORKS OF CIVIL

ENGINEERING CONSTRUCTION

PART I GENERAL CONDITIONS WITH FORMS OF TENDER AND AGREEMENT

FOURTH EDITION 1987
Reprinted 1988 with editorial amendments
Reprinted 1992 with further amendments



FOREWORD

The terms of the Fourth Edition of the Conditions of Contract for Works of Civil Engineering Construction have been prepared by the Fédération Internationale des Ingénieurs Conseils (FIDIC) and are recommended for general use for the purpose of construction of such works where tenders are invited on an international basis. The Conditions, subject to minor modifications, are also suitable for use on domestic contracts.

The version in English of the Conditions is considered by FIDIC as the official and authentic text for the purpose of translation.

In the preparation of the Conditions it was recognised that while there are numerous Clauses which will be generally applicable there are some Clauses which must necessarily vary to take account of the circumstances and locality of the Works. The Clauses of general application have been grouped together in this document and are referred to as Part I – General Conditions. They have been printed in a form which will facilitate their inclusion as printed in the contract documents normally prepared.

The General Conditions are linked with the Conditions of Particular Application, referred to as Part II, by the corresponding numbering of the Clauses, so that Parts I and II together comprise the Conditions governing the rights and obligations of the parties.

Part II must be specially drafted to suit each individual Contract.

When dredging and certain types of reclamation work are involved special consideration must be given to Part II.

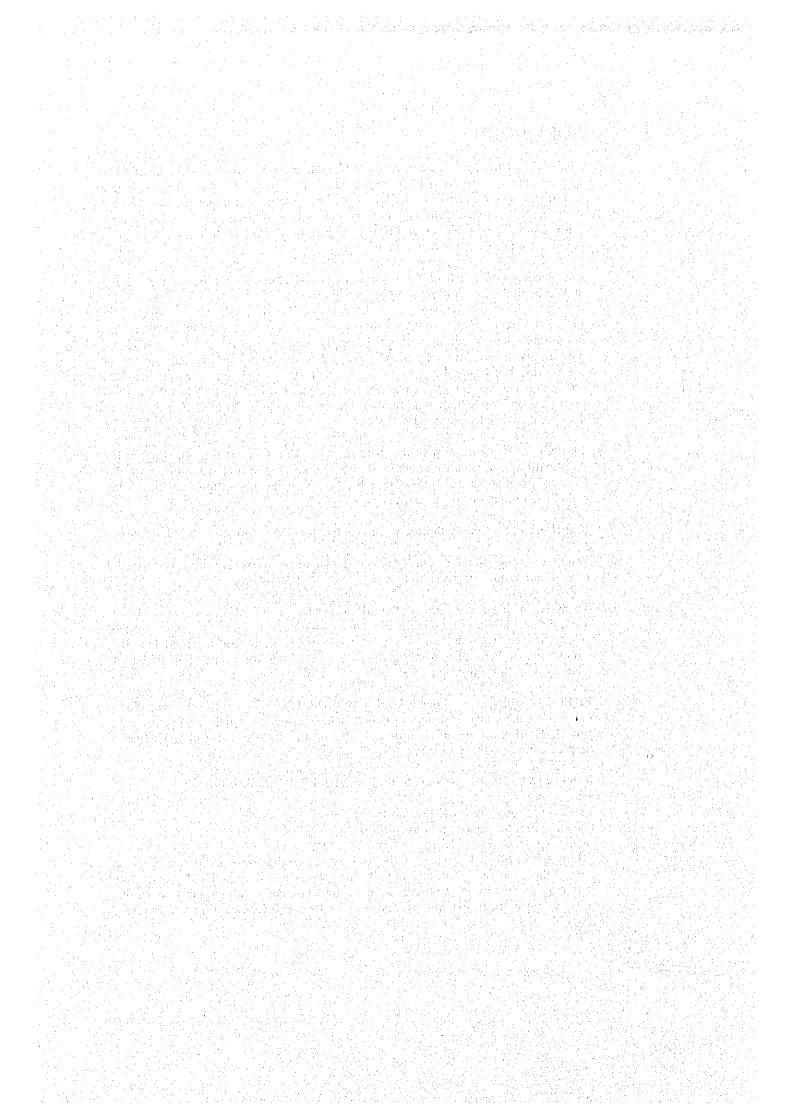
To assist in the preparation of Part II explanatory material and example clauses are published with the Conditions in a separately bound document entitled "Conditions of Contract for Works of Civil Engineering Construction, Part II – Conditions of Particular Application, with Guidelines for preparation of Part II Clauses, Fourth Edition".

FIDIC has published a "Guide to the Use of FIDIC Conditions of Contract for Works of Civil Engineering Construction" which includes comments on the provisions of the Fourth Edition of the Conditions. Users of the Fourth Edition may find it helpful to refer to this Guide.

It may also be helpful for users to refer to other FIDIC publications, such as:

Tendering Procedure (First Edition 1982) Construction, Insurance and Law (1986)

FIDIC gratefully acknowledges the suggestions and comments it has received during the preparation of this edition from European International Contractors (EIC) as mandatory of Confederation of International Contractors Associations (CICA) with participation of Associated General Contractors of America (AGC).



CONTENTS

PART I: GENERAL CONDITIONS

	Definitions and Interpretation
1.1 1.2 1.3	Definitions Headings and Marginal Notes Interpretation
1.4 1.5	Singular and Plural Notices, Consents, Approvals, Certificates and Determinations
2.1	Engineer and Engineer's Representative Engineer's Duties and Authority
2.2	Engineer's Representative Engineer's Authority to Delegate
2.4 2.5 2.6	Appointment of Assistants Instructions in Writing Engineer to Act Impartially
	Assignment and Subcontracting
3.1 4.1	Assignment of Contract Subcontracting
4.2	Assignment of Subcontractors' Obligations
5.1 5.2	Contract Documents Language/s and Law Priority of Contract Documents
6.1 6.2 6.3	Custody and Supply of Drawings and Documents One Copy of Drawings to be Kept on Site Disruption of Progress
6.4 6.5	Delays and Cost of Delay of Drawings Failure by Contractor to Submit Drawings
7.1 7.2 7.3	Supplementary Drawings and Instructions Permanent Works Designed by Contractor Responsibility Unaffected by Approval
	General Obligations
8.1 8.2 9.1	Contractor's General Responsibilities Site Operations and Methods of Construction Contract Agreement
0.1 0.2	Performance Security Period of Validity of Performance Security
0.3 1.1	Claims under Performance Security Inspection of Site
2.1 2.2 3.1	Sufficiency of Tender Not Foreseeable Physical Obstructions or Conditions Work to be in Accordance with Contract
4.1 4.2	Programme to be Submitted Revised Programme
4.3 4.4 5.1	Cash Flow Estimate to be Submitted Contractor not Relieved of Duties or Responsibilities Contractor's Superintendence
J. I.	i Communion d'appendiante de la completa de la com La ligitación de la completa de la c

	11		A
	40.4	이 등 경우 그렇는 것 같아. 이 사람들은 사람들이 하는 것들이 없는 것 같다.	
	16.1	Contractor's Employees	8
	16.2	Engineer at Liberty to Object	8
	17.1	Setting-out All All All All All All All All All Al	9
	18.1	Boreholes and Exploratory Excavation	9
	19.1	Safety, Security and Protection of the Environment	9
	19.2	Employer's Responsibilities	9
	20.1	Care of Works	9
	20.2	Responsibility to Rectify Loss or Damage	10
	20.3	Loss or Damage Due to Employer's Risks	10
	20.4	Employer's Risks	10
	21.1	Insurance of Works and Contractor's Equipment	10
	21.2	Scope of Cover	- 11
	21.3	Responsibility for Amounts not Recovered	11
	21.4	Exclusions	11
	22.1	Damage to Persons and Property	.11
	22.2	Exceptions	- 11
	22.3	Indemnity by Employer	12
	23.1	Third Party Insurance (including Employer's Property)	12
	23.2	Minimum Amount of Insurance	12
	23.3	Cross Liabilities	12
	24.1	Accident or Injury to Workmen	12
	24.2	Insurance Against Accident to Workmen	12
	25.1	Evidence and Terms of Insurances	12
	25.1	Adequacy of Insurances	12
	25.2 25.3	Remedy on Contractor's Failure to Insure	12
	and the second of		12
	25.4	Compliance with Policy Conditions	
	26.1	Compliance with Statutes, Regulations	13
	27.1	Fossils	13
	28.1	Patent Rights	13
	28.2	Royalties	13
	29.1	Interference with Traffic and Adjoining Properties	13
	30.1	Avoidance of Damage to Roads	14
	30.2	Transport of Contractor's Equipment or Temporary Works	14
	30.3	Transport of Materials or Plant	14
	,30.4	Waterborne Traffic	14
	31.1	Opportunities for Other Contractors	14
	31.2	Facilities for Other Contractors	14
	32.1	Contractor to Keep Site Clear	15
	33.1	Clearance of Site on Completion	.15
		Labour	
	34.1	Engagement of Staff and Labour	15
	35.1	Returns of Labour and Contractor's Equipment	15
		아들이라는 이 사는 이름을 하는 것을 하면 하는 것이 나는 사람이 없다.	
		Materials, Plant and Workmanship	
	36.1	Quality of Materials, Plant and Workmanship	15
	36.2	그는 현실과 한 사는 병원에 가는 사람들이 되는 것이 되었다. 그는 그 사람들은 한 경우를 하는 것이 되었다는 것 같은 것은 사람들이 되었다.	15
	36.3	그는 사람들이 그는 일반 집에 되었다. 학생들은 회사를 가는 학생들에 들어가고 되었다. 그 전 경찰 사람들과 회사를 가지 않는다는 것이 없는다.	15
			16
	36.4	그리는 문에 살리 기물을 하는 것이 되어난 당신 한 학생들이 이상하다고 있는 것은 것이 되었습니다. 중 그녀는 점점 기상 등 모양이 되었다.	16
	36.5	그 제상 눈물 중요 나는 말하는 것은 사람들이 하느라 되는 것이 하는 것이 되었다. 그런 그런 하는 그는 말이 살 살아보고 되었다. 그는 것은 사람들이 나를 하는 것이 없었다.	16
	37.1		er i film et eft alle.
	37.2	。这是一种"我们,我们的一个是有数数"的,我们就是一个有一个人的,就是一个人的,也是有一个人的,我们就是一个人的,我们就是一个人的,只要一个人的。"我们,我们就	16
	37.3		16
	37.4		16
	37.5	그는 사람들이 그렇게 그렇게 하는 것을 하는 것이 되었다. 그렇게 모양하는 사람들은 사람들이 되었다는 것은 것이라고 하는 사람들이 되었다. 그는 것이 없는 것은 사람들이 되었다.	17
	38.1	Examination of Work before Covering up	17
3	and the first term	医大性性性 网络大克 计分别 医皮肤骨髓性 化二氯氯二甲二酚 化硫酸氯基酚化氯酸 医直线性畸胎 电影电影的	11 - 98 1

orie i dos Pilos Missociales		
	8.2 Uncovering and Making Openings9.1 Removal of Improper Work, Materials or Plant	17
		17
	9.2 Default of Contractor in Compliance	17
	Suspension	
	0.1 Suspension of Work	
	0.2 Engineer's Determination following Suspension	17
	0.3 Suspension lasting more than 84 Days	18
	and the state of t	18
성공하다 하는 항상 등로 보다.	Commencement and Delays	
	1.1 Commencement of Works	10
	2.1 Possession of Site and Access Thereto	18
	2.2 Failure to Give Possession	18 19
	2.3 Rights of Way and Facilities	19 19
化表现 电电子设计 化氯甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基	3.1 Time for Completion	19
4	4.1 Extension of Time for Completion	19
	4.2 Contractor to Provide Notification and Detailed Particulars	19
	4.3 Interim Determination of Extension	19
	5.1 Restriction on Working Hours	20
	6.1 Rate of Progress	20
化氯化氯化二甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基	7.1 Liquidated Damages for Delay	20
	7.2 Reduction of Liquidated Damages	20
化氯磺基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲	8.1 Taking-Over Certificate	- 21
	8.2 Taking-Over of Sections or Parts	21
	8.3 Substantial Completion of Parts	21
- [11] : 환경 : 11 [12] - 12 [12] : 1	8.4 Surfaces Requiring Reinstatement	21
	Defects Liability	
	9.1 Defects Liability Period 9.2 Completion of Outstanding Work and Remedying Defects	21
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	22
	9.3 Cost of Remedying Defects9.4 Contractor's Failure to Carry Out Instructions	22
しゅうしょ しゅうしゅう かいしょう しょうしゅう はんだい しょりしょくしゃ	2.1 Contractor to Search	22
		22
	Alterations, Additions and Omissions	김희롱 기원
- 19	1.1 Variations	22
マー・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・	1.2 Instructions for Variations	22 23
	2.1 Valuation of Variations	23 23
7	2.2 Power of Engineer to Fix Rates	23
5	2.3 Variations Exceeding 15 percent	23
5	2.4 Daywork	24
	Procedure for Claims	
100000000000000000000000000000000000000	3.1 Nutice of Claims	24
	3.2 Contemporary Records	24
	3.3 Substantiation of Claims	25
	3.4 Failure to Comply	25
그 물론하고 기가를 가득하고 5	3.5 Payment of Claims	25
	인크 발표 등록 경우로 보이를 가지 않고 별살로 한 라고를 되었다.	
	Contractor's Equipment, Temporary Works	
1000000000000000000000000000000000000	and Materials	
18 18 18 18 18 18 18 18 18 5	6.1 Contractor's Equipment, Temporary Works and Materials; Exclusive	25
	Use for the Works	
	3.2 Employer not Liable for Damage	25
	I.3 Customs Clearance	the second control of the control of
10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Customs Clearance	25
5. (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	© FIDIC 1987	25 III

	54.4	Re-export of Contractor's Equipment	25
	54.5	Conditions of Hire of Contractor's Equipment	26
	54.6	Costs for the Purpose of Clause 63	26
	54.7	Incorporation of Clause in Subcontracts	26
	54.8	Approval of Materials not Implied	26
		선생님, 불어들은 것 이렇게 많아 많다. 사물에 일을 가지 않는 것 같다.	
		Measurement	
	55.1	Quantities	26
	56.1	Works to be Measured	26
	57.1	Method of Measurement	27
	57.2	Breakdown of Lump Sum Items	27
		Dialianal Cuma	
		Provisional Sums	
	58.1 ·	Definition of "Provisional Sum"	27
	58.2	Use of Provisional Sums Production of Vouchers	27
	58.3	Production of Vouchers	27
		Nominated Subcontractors	
	59.1	Definition of "Nominated Subcontractors"	27
	59.2	Nominated Subcontractors; Objection to Nomination	- / 27
	59.3	Design Requirements to be Expressly Stated	 28
	59.4	Payments to Nominated Subcontractors	28
	59.5	Certification of Payments to Nominated Subcontractors	28
		Certificates and Payment	
	60.1	Monthly Statements	29
	60.2	Monthly Payments	29
	60.3	Payment of Retention Money	29
	60.4	Correction of Certificates	29
	60.5	Statement at Completion	30
	60.6	Final Statement	30
	60.7	Discharge Company of the Company of	30
	60.8	Final Payment Certificate	3(
	60.9 60.10	Cessation of Employer's Liability	3(
	61.1	Time for Payment Approval only by Defects Liability Certificate	31 31
	62.1	Defects Liability Certificate	3
	62.2	Unfulfilled Obligations	3
		Remedies	
	63.1	Default of Contractor	3
	63.2	Valuation at Date of Termination	3:
of the first water the second state. The first state of the second	63 3	Payment after Termination	3
	63.4	Assignment of Benefit of Agreement	3
	64.1	Urgent Remedial Work	3
		Special Risks	
	65.1	No Liability for Special Risks	3:
高级 化环烷酸	65.2	Special Risks	3
	65.3	Damage to Works by Special Risks	3
	65.4	Projectile, Missile	3
	65.5	Increased Costs arising from Special Risks	3
	65.6 65.7	Outbreak of War	3
	65.7 65.8	Removal of Contractor's Equipment on Termination Payment if Contract Terminated	3 ⁴
	 .	The symbolical Confidence of the second seco	رد .

66.1	Release from Performance Payment in Event of Release from Performance	
00.1	1 ayment in Event of Release from Performance	3
	Settlement of Disputes	
67.1	Engineer's Decision	3
67.2	Amicable Settlement	3
67.3	Arbitration	3
67.4	Failure to Comply with Engineer's Decision	3
	Notices	
68.1	Notice to Contractor	3
68.2	Notice to Employer and Engineer	3
68.3	Change of Address	3
	Default of Employer	
69.1	Default of Employer	3
69.2	Removal of Contractor's Equipment	3
69.3	Payment on Termination	. 3
69.4	Contractor's Entitlement to Suspend Work	3
69.5	Resumption of Work	3
	Changes in Cost and Legislation	
70.1	Increase or Decrease of Cost	3
70.2	Subsequent Legislation	3
	Currency and Rates of Exchange	
71.1	Currency Restrictions	38
72.1	Rates of Exchange	38
72.2	Currency Proportions	38
72.3	Currencies of Payment for Provisional Sums	38

REFERENCE TO PART II
INDEX
TENDER
AGREEMENT
EDITORIAL AMENDMENTS IN 1988
FURTHER AMENDMENTS IN 1992

© FIDIC 1987

는 사용하다 하다 하는 사용하고 있는 것 같다. 하는 것 같은 사용하는 사용하는 사용하는 사용하는 사용하는 사용하는 사용하는 사용하는
는 사이에 되는 이 사용에 가는 사람들은 사이는 사이를 통해 하고 있다. 그는 사람들은 사람들이 사용되어 가는 사람들이 되었다. 그는 사람들이 되었다.
는 사람들이 되는 것이 되었다. 그 사람들이 가장 하는 것으로 되었다. 그는 사람들이 되었다. 그런 사람들이 되었다. 그런 사람들이 되었다. 그런 사람들이 되었다.
는 사용 수 있다. 그는 10년 1일 12년
는 사람들에 되었다. 이 사람들이 되는 이 사람들이 되었다. 이 생각이 되었다면 하는 사람들이 하는 사람들이 하는 것이 되었다. 그 사람들이 되었다. - 사람들은 사람들은 사람들이 사람들이 하는 사람들이 사람들이 되었다. 사람들이 사람들이 사람들이 사람들이 사람들이 사람들이 사람들이 사람들이
는 사람들이 되는 것이 되었다. 그런 경기에 들어 보고 있다면 하는 것이 되었다. 그런 사람들이 되었다. 그런 사람들이 되었다. 그런 사람들이 되었다.
는 사람들에 가는 사람들이 되었다. 그는 사람들은 사람들이 하는 사람들이 가는 사람들이 되었다. 그는 사람들이 되었다. 그는 사람들은 사람들이 되었다.
는 사용하는 사용하는 것이 되었다. 이 경험 보고 하여 한 사용 등이 되었다. 하는 사용하는 사용하는 사용하는 것이 되었다. 그는 사용하는 사용하는 것이 되었다. - 사용하는 사용하는 것이 하는 사용하는 사용하는 사용하는 것이 되었다. 그는 사용
는 사람이 이렇게 하는데, 그런 사람들에 가는 이렇게 하면 하나 하는데 이렇게 하는데
一个大学的一定的一点,一点一点,只要一点的话,看到这个人的,这个人的话,就是一个女人的话,就是这个人的话,只要是一个女人的话,这是一个人的话,我们就是一个人的
는 이 문문 회사 (1986년) 1987년 1987년 1988년 1987년 1987년 1987년 1988년 1982년 1982년 1987년 1987년 1987년 1987년 1987년 1987년 1
는 이 이 아이들은 사람이 아이들이 되었다. 이 사람들은 사람들은 사람들은 사람들은 사람들은 사람들은 사람들은 사람들이 되었다. 그는 사람들은 사람들은 사람들은 사람들은 사람들은 사람들은 사람들은
는 사용하는 보고 있는 것이 되었다. 등 보고 있는 사람들이 되었다. 그 학생들은 경기 사람들은 경기를 가는 것이 되었다. 사람들이 되었다.
는 이번 이번 일본 및 이번에도 한 15분이 한 15분에 대한 15분이 되었다. 전 15분이 15분이 15분이 15분이 15분이 15분이 15분이 15분이
는 사람들이 하는 것이 되는 것이 되는 것이 되는 것이 되었다. 그는 것이 되는 것이 되었다.
는 사람이 있는 것도 있는 것도 있는 것도 있습니다. 그런 기가 되었는 기가 하면 생각되고 있는 그 것을 하는 것을 가장 하는 것을 가장 하는 것을 했다.
는 사람이 있는 것이 사람이 가는 것이 가는 것이 같은 사람이 보고 하는 것이 되었다. 그런 사람들은 사람들이 되었다. 그런 것은 것이다.
는 사용하다 하는 것이 되었다. 이번 사용이 되었다면 하는 것이 되었다는 사용을 하고 있다는 것이 되었다면 하는 것이 되었다. 이번 사용이 되었다면 하는 것이 되었다.
는 사람들은 보다 하는 것이 되는 것은 것으로 한다면 하는 것이다. 그렇게 되는 것이 없는 것이 되었다는 것이 되었다는 것이 되었다는 것이다.
는 사용되었다. 한다는 사람들은 마음이 가장 하는 사람들이 되었다. 그런 사람들은 사람들은 사람들은 사람들은 사람들은 사람들은 사람들은 사람들은

PART I - GENERAL CONDITIONS

Definitions and Interpretation

Definitions

- 1.1 In the Contract (as hereinafter defined) the following words and expressions shall have the meanings hereby assigned to them, except where the context otherwise requires:
 - (a) (i) "Employer" means the person named as such in Part II of these Conditions and the legal successors in title to such person, but not (except with the consent of the Contractor) any assignee of such person.
 - (ii) "Contractor" means the person whose tender has been accepted by the Employer and the legal successors in title to such person, but not (except with the consent of the Employer) any assignee of such person.
 - (iii) "Subcontractor" means any person named in the Contract as a Subcontractor for a part of the Works or any person to whom a part of the Works has been subcontracted with the consent of the Engineer and the legal successors in title to such person, but not any assignee of any such person.
 - (iv) "Engineer" means the person appointed by the Employer to act as Engineer for the purposes of the Contract and named as such in Part II of these Conditions.
 - (v) "Engineer's Representative" means a person appointed from time to time by the Engineer under Sub-Clause 2.2.
 - (b) (i) "Contract" means these Conditions (Parts I and II), the Specification, the Drawings, the Bill of Quantities, the Tender, the Letter of Acceptance, the Contract Agreement (if completed) and such further documents as may be expressly incorporated in the Letter of Acceptance or Contract Agreement (if completed).
 - (ii) "Specification" means the specification of the Works included in the Contract and any modification thereof or addition thereto made under Clause 51 or submitted by the Contractor and approved by the Engineer.
 - (iii) "Drawings" means all drawings, calculations and technical information of a like nature provided by the Engineer to the Contractor under the Contract and all drawings, calculations, samples, patterns, models, operation and maintenance manuals and other technical information of a like nature submitted by the Contractor and approved by the Engineer.
 - (iv) "Bill of Quantities" means the priced and completed bill of quantities forming part of the Tender.
 - (v) "Tender" means the Contractor's priced offer to the Employer for the execution and completion of the Works and the remedying of any defects therein in accordance with the provisions of the Contract, as accepted by the Letter of Acceptance.
 - (vi) "Letter of Acceptance" means the formal acceptance by the Employer of the Tender.
 - (vii) "Contract Agreement" means the contract agreement (if any) referred to in Sub-Clause 9.1.
 - (viii) "Appendix to Tender" means the appendix comprised in the form of Tender annexed to these Conditions.
 - (c) (i) "Commencement Date" means the date upon which the Contractor receives the notice to commence issued by the Engineer pursuant to Clause 41.
 - (ii) "Time for Completion" means the time for completing the execution of and passing the Tests on Completion of the Works or any Section or part thereof as stated in the Contract (or as extended under Clause 44) calculated from the Commencement Date.

- (d) (i) "Tests on Completion" means the tests specified in the Contract or otherwise agreed by the Engineer and the Contractor which are to be made by the Contractor before the Works or any Section or part thereof are taken over by the Employer.
 - (ii) "Taking-Over Certificate" means a certificate issued pursuant to Clause 48.
- (e) (i) "Contract Price" means the sum stated in the Letter of Acceptance as payable to the Contractor for the execution and completion of the Works and the remedying of any defects therein in accordance with the provisions of the Contract.
 - (ii) "Retention Money" means the aggregate of all monies retained by the Employer pursuant to Sub-Clause 60.2(a).
 - (iii) "Interim Payment Certificate" means any certificate of payment issued by the Engineer other than the Final Payment Certificate.
 - (iv) "Final Payment Certificate" means the certificate of payment issued by the Engineer pursuant to Sub-Clause 60.8.
- (f) (i) "Works" means the Permanent Works and the Temporary Works or either of them as appropriate.
 - (ii) "Permanent Works" means the permanent works to be executed (including Plant) in accordance with the Contract.
 - (iii) "Temporary Works" means all temporary works of every kind (other than Contractor's Equipment) required in or about the execution and completion of the Works and the remedying of any defects therein.
 - (iv) "Plant" means machinery, apparatus and the like intended to form or forming part of the Permanent Works.
 - (v) "Contractor's Equipment" means all appliances and things of whatsoever nature (other than Temporary Works) required for the execution and completion of the Works and the remedying of any defects therein, but does not include Plant, materials or other things intended to form or forming part of the Permanent Works.
 - (vi) "Section" means a part of the Works specifically identified in the Contract as a Section.
 - (vii) "Site" means the places provided by the Employer where the Works are to be executed and any other places as may be specifically designated in the Contract as forming part of the Site.
- (g) (i) "cost" means all expenditure properly incurred or to be incurred, whether on or off the Site, including overhead and other charges properly allocable thereto but does not include any allowance for profit.
 - (ii) "day" means calendar day.
 - (iii) "foreign currency" means a currency of a country other than that in which the Works are to be located.
 - (iv) "writing" means any hand-written, type-written, or printed communication, including telex, cable and facsimile transmission.

Headings and Marginal Notes

1.2 The headings and marginal notes in these Conditions shall not be deemed part thereof or be taken into consideration in the interpretation or construction thereof or of the Contract.

Interpretation

1.3 Words importing persons or parties shall include firms and corporations and any organisation having legal capacity.

Singular and Plural

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

Notices, Consents, Approvals, Certificates and Determinations

1.5 Wherever in the Contract provision is made for the giving or issue of any notice, consent, approval, certificate or determination by any person, unless otherwise specified such notice, consent, approval, certificate or determination shall be in writing and the words "notify", "certify" or "determine" shall be construed accordingly. Any such consent, approval, certificate or determination shall not unreasonably be withheld or delayed.

Engineer and Engineer's Representative

Engineer's Duties and Authority

- 2. 1 (a) The Engineer shall carry out the duties specified in the Contract.
 - (b) The Engineer may exercise the authority specified in or necessarily to be implied from the Contract, provided, however, that if the Engineer is required, under the terms of his appointment by the Employer, to obtain the specific approval of the Employer before exercising any such authority, particulars of such requirements shall be set out in Part II of these Conditions. Provided further that any requisite approval shall be deemed to have been given by the Employer for any such authority exercised by the Engineer.
 - (c) Except as expressly stated in the Contract, the Engineer shall have no authority to relieve the Contractor of any of his obligations under the Contract.

Engineer's Representative

2.2 The Engineer's Representative shall be appointed by and be responsible to the Engineer and shall carry out such duties and exercise such authority as may be delegated to him by the Engineer under Sub-Clause 2.3.

Engineer's Authority to Delegate

2.3 The Engineer may from time to time delegate to the Engineer's Representative any of the duties and authorities vested in the Engineer and he may at any time revoke such delegation. Any such delegation or revocation shall be in writing and shall not take effect until a copy thereof has been delivered to the Employer and the Contractor.

Any communication given by the Engineer's Representative to the Contractor in accordance with such delegation shall have the same effect as though it had been given by the Engineer. Provided that:

- (a) any failure of the Engineer's Representative to disapprove any work, materials or Plant shall not prejudice the authority of the Engineer to disapprove such work, materials or Plant and to give instructions for the rectification thereof; and
- (b) if the Contractor questions any communication of the Engineer's Representative he may refer the matter to the Engineer who shall confirm, reverse or vary the contents of such communication.

Appointment of Assistants

2.4 The Engineer or the Engineer's Representative may appoint any number of persons to assist the Engineer's Representative in the carrying out of his duties under Sub-Clause 2.2. He shall notify to the Contractor the names, duties and scope of authority of such persons. Such assistants shall have no authority to issue any instructions to the Contractor save in so far as such instructions may be necessary to enable them to carry out their duties and to secure their acceptance of materials, Plant or workmanship as being in accordance with the Contract, and any instructions given by any of them for those purposes shall be deemed to have been given by the Engineer's Representative.

Instructions in Writing

2.5 Instructions given by the Engineer shall be in writing, provided that if for any reason the Engineer considers it necessary to give any such instruction orally, the Contractor shall comply with such instruction. Confirmation in writing of such oral instruction given by the Engineer, whether before or after the carrying out of the instruction, shall be deemed to be an instruction within the meaning of this Sub-Clause. Provided further that if the Contractor, within 7 days, confirms in writing to the Engineer any oral instruction of the Engineer and such confirmation is not contradicted in writing within 7 days by the Engineer, it shall be deemed to be an instruction of the Engineer.

The provisions of this Sub-Clause shall equally apply to instructions given by the Engineer's Representative and any assistants of the Engineer or the Engineer's Representative appointed pursuant to Sub-Clause 2.4.

Engineer to Act Impartially

- 2.6 Wherever, under the Contract, the Engineer is required to exercise his discretion by:
 - (a) giving his decision, opinion or consent,
 - (b) expressing his satisfaction or approval,
 - (c) determining value, or
 - (d) otherwise taking action which may affect the rights and obligations of the Employer or the Contractor

he shall exercise such discretion impartially within the terms of the Contract and having regard to all the circumstances. Any such decision, opinion, consent, expression of satisfaction, or approval, determination of value or action may be opened up, reviewed or revised as provided in Clause 67.

Assignment and Subcontracting

Assignment of Contract

- 3. 1 The Contractor shall not, without the prior consent of the Employer (which consent, notwithstanding the provisions of Sub-Clause 1.5, shall be at the sole discretion of the Employer), assign the Contract or any part thereof, or any benefit or interest therein or thereunder, otherwise than by:
 - (a) a charge in favour of the Contractor's bankers of any monies due or to become due under the Contract, or
 - (b) assignment to the Contractor's insurers (in cases where the insurers have discharged the Contractor's loss or liability) of the Contractor's right to obtain relief against any other party liable.

Subcontracting

- the Contractor shall not subcontract the whole of the Works. Except where otherwise provided by the Contract, the Contractor shall not subcontract any part of the Works without the prior consent of the Engineer. Any such consent shall not relieve the Contractor from any liability or obligation under the Contract and he shall be responsible for the acts, defaults and neglects of any Subcontractor, his agents, servants or workmen as fully as if they were the acts, defaults or neglects of the Contractor, his agents, servants or workmen.
 - Provided that the Contractor shall not be required to obtain such consent for:
 - (a) the provision of labour,
 - (b) the purchase of materials which are in accordance with the standards specified in the Contract, or
 - (c) the subcontracting of any part of the Works for which the Subcontractor is named in the Contract.

Assignment of Subcontractors' Obligations

4.2 In the event of a Subcontractor having undertaken towards the Contractor in respect of the work executed, or the goods, materials, Plant or services supplied by such Subcontractor, any continuing obligation extending for a period exceeding that of the Defects Liability Period under the Contract, the Contractor shall at any time, after the expiration of such Period, assign to the Employer, at the Employer's request and cost, the benefit of such obligation for the unexpired duration thereof.

Contract Documents

Language/s and Law

- 5. 1 There is stated in Part II of these Conditions:
 - (a) the language or languages in which the Contract documents shall be drawn up, and
 - (b) the country or state the law of which shall apply to the Contract and according to which the Contract shall be construed.

If the said documents are written in more than one language, the language according to which the Contract shall be construed and interpreted is also stated in Part II of these Conditions, being therein designated the "Ruling Language".

Priority of Contract Documents

- 5.2 The several documents forming the Contract are to be taken as mutually explanatory of one another, but in case of ambiguities or discrepancies the same shall be explained and adjusted by the Engineer who shall thereupon issue to the Contractor instructions thereon and in such event, unless otherwise provided in the Contract, the priority of the documents forming the Contract shall be as follows:
 - (1) The Contract Agreement (if completed);
 - (2) The Letter of Acceptance;
 - (3) The Tender;
 - (4) Part II of these Conditions;
 - (5) Part I of these Conditions; and
 - (6) Any other document forming part of the Contract.

Custody and Supply of Drawings and Documents

6.1 The Drawings shall remain in the sole custody of the Engineer, but two copies thereof shall be provided to the Contractor free of charge. The Contractor shall make at his own cost any further copies required by him. Unless it is strictly necessary for the purposes of the Contract, the Drawings, Specification and other documents provided by the Employer or the Engineer shall not, without the consent of the Engineer, be used or communicated to a third party by the Contractor. Upon issue of the Defects Liability Certificate, the Contractor shall return to the Engineer all Drawings, Specification and other documents provided under the Contract.

The Contractor shall supply to the Engineer four copies of all Drawings, Specification and other documents submitted by the Contractor and approved by the Engineer in accordance with Clause 7, together with a reproducible copy of any material which cannot be reproduced to an equal standard by photocopying. In addition the Contractor shall supply such further copies of such Drawings, Specification and other documents as the Engineer may request in writing for the use of the Employer, who shall pay the cost thereof.

One Copy of Drawings to be Kept on Site

6.2 One copy of the Drawings, provided to or supplied by the Contractor as aforesaid, shall be kept by the Contractor on the Site and the same shall at all reasonable times be available for inspection and use by the Engineer and by any other person authorised by the Engineer in writing.

Disruption of Progress

6.3 The Contractor shall give notice to the Engineer, with a copy to the Employer, whenever planning or execution of the Works is likely to be delayed or disrupted unless any further drawing or instruction is issued by the Engineer within a reasonable time. The notice shall include details of the drawing or instruction required and of why and by when it is required and of any delay or disruption likely to be suffered if it is late.

Delays and Cost of Delay of Drawings

- 6.4 If, by reason of any failure or inability of the Engineer to issue, within a time reasonable in all the circumstances, any drawing or instruction for which notice has been given by the Contractor in accordance with Sub-Clause 6.3, the Contractor suffers delay and/or incurs costs then the Engineer shall, after due consultation with the Employer and the Contractor, determine:
 - (a) any extension of time to which the Contractor is entitled under Clause 44, and
 - (b) the amount of such costs, which shall be added to the Contract Price,

and shall notify the Contractor accordingly, with a copy to the Employer.

Failure by Contractor to Submit Drawings

6.5 If the failure or inability of the Engineer to issue any drawings or instructions is caused in whole or in part by the failure of the Contractor to submit Drawings, Specification or other documents which he is required to submit under the Contract, the Engineer shall take such failure by the Contractor into account when making his determination pursuant to Sub-Clause 6.4.

Supplementary Drawings and Instructions

7.1 The Engineer shall have authority to issue to the Contractor, from time to time, such supplementary Drawings and instructions as shall be necessary for the purpose of the proper and adequate execution and completion of the Works and the remedying of any defects therein. The Contractor shall carry out and be bound by the same.

Permanent Works Designed by Contractor

- 7.2 Where the Contract expressly provides that part of the Permanent Works shall be designed by the Contractor, he shall submit to the Engineer, for approval:
 - (a) such drawings, specifications, calculations and other information as shall be necessary to satisfy the Engineer as to the suitability and adequacy of that design, and
 - (b) operation and maintenance manuals together with drawings of the Permanent Works as completed, in sufficient detail to enable the Employer to operate, maintain, dismantle, reassemble and adjust the Permanent Works incorporating that design. The Works shall not be considered to be completed for the purposes of taking over in accordance with Clause 48 until such operation and maintenance manuals, together with drawings on completion, have been submitted to and approved by the Engineer.

Responsibility Unaffected by Approval

7.3 Approval by the Engineer, in accordance with Sub-Clause 7.2, shall not relieve the Contractor of any of his responsibilities under the Contract.

General Obligations

Contractor's General Responsibilities

8.1 The Contractor shall, with due care and diligence, design (to the extent provided for by the Contract), execute and complete the Works and remedy any defects therein in accordance with the provisions of the Contract. The Contractor shall provide all superintendence, labour, materials, Plant, Contractor's Equipment and all other things, whether of a temporary or permanent nature, required in and for such design, execution, completion and remedying of any defects, so far as the necessity for providing the same is specified in or is reasonably to be inferred from the Contract.

The Contractor shall give prompt notice to the Engineer, with a copy to the Employer, of any error, omission, fault or other defect in the design of or Specification for the Works which he discovers when reviewing the Contract or executing the Works.

Site Operations and Methods of Construction

8.2 The Contractor shall take full responsibility for the adequacy, stability and safety of all Site operations and methods of construction. Provided that the Contractor shall not be responsible (except as stated hereunder or as may be otherwise agreed) for the design or specification of Permanent Works, or for the design or specification of any Temporary Works not prepared by the Contractor. Where the Contract expressly provides that part of the Permanent Works shall be designed by the Contractor, he shall be fully responsible for that part of such Works, notwithstanding any approval by the Engineer.

Contract Agreement

9.1 The Contractor shall, if called upon so to do, enter into and execute the Contract Agreement, to be prepared and completed at the cost of the Employer, in the form annexed to these Conditions with such modification as may be necessary.

Performance Security

10.1 If the Contract requires the Contractor to obtain security for his proper performance of the Contract, he shall obtain and provide to the Employer such security within 28 days after the receipt of the Letter of Acceptance, in the sum stated in the Appendix to Tender. When providing such security to the Employer, the Contractor shall notify the Engineer of so doing. Such security shall be in the form annexed to these Conditions or in such other form as may be agreed between the Employer and the Contractor. The institution providing such security shall be subject to the approval of the Employer. The cost of complying with the requirements of this Clause shall be borne by the Contractor, unless the Contract otherwise provides.

Period of Validity of Performance Security

The performance security shall be valid until the Contractor has executed and completed the Works and remedied any defects therein in accordance with the Contract. No claim shall be made against such security after the issue of the Defects Liability Certificate in accordance with Sub-Clause 62.1 and such security shall be returned to the Contractor within 14 days of the issue of the said Defects Liability Certificate.

Claims under Performance Security

10.3 Prior to making a claim under the performance security the Employer shall, in every case, notify the Contractor stating the nature of the default in respect of which the claim is to be made.

Inspection of Site

11.1 The Employer shall have made available to the Contractor, before the submission by the Contractor of the Tender, such data on hydrological and sub-surface conditions as have been obtained by or on behalf of the Employer from investigations undertaken relevant to the Works but the Contractor shall be responsible for his own interpretation thereof.

The Contractor shall be deemed to have inspected and examined the Site and its surroundings and information available in connection therewith and to have satisfied himself (so far as is practicable, having regard to considerations of cost and time) before submitting his Tender, as to:

- (a) the form and nature thereof, including the sub-surface conditions,
- (b) the hydrological and climatic conditions,
- (c) the extent and nature of work and materials necessary for the execution and completion of the Works and the remedying of any defects therein, and
- (d) the means of access to the Site and the accommodation he may require,

and, in general, shall be deemed to have obtained all necessary information, subject as above mentioned, as to risks, contingencies and all other circumstances which may influence or affect his Tender.

The Contractor shall be deemed to have based his Tender on the data made available by the Employer and on his own inspection and examination, all as aforementioned.

Sufficiency of Tender

12.1

12.2

The Contractor shall be deemed to have satisfied himself as to the correctness and sufficiency of the Tender and of the rates and prices stated in the Bill of Quantities, all of which shall, except insofar as it is otherwise provided in the Contract, cover all his obligations under the Contract (including those in respect of the supply of goods, materials, Plant or services or of contingencies for which there is a Provisional Sum) and all matters and things necessary for the proper execution and completion of the Works and the remedying of any defects therein.

Not Foreseeable Physical Obstructions or Conditions

- If, however, during the execution of the Works the Contractor encounters physical obstructions or physical conditions, other than climatic conditions on the Site, which obstructions or conditions were, in his opinion, not foreseeable by an experienced contractor, the Contractor shall forthwith give notice thereof to the Engineer, with a copy to the Employer. On receipt of such notice, the Engineer shall, if in his opinion such obstructions or conditions could not have been reasonably foreseen by an experienced contractor, after due consultation with the Employer and the Contractor, determine:
 - (a) any extension of time to which the Contractor is entitled under Clause 44, and
 - (b) the amount of any costs which may have been incurred by the Contractor by reason of such obstructions or conditions having been encountered, which shall be added to the Contract Price.

and shall notify the Contractor accordingly, with a copy to the Employer. Such determination shall take account of any instruction which the Engineer may issue to the Contractor in connection therewith, and any proper and reasonable measures acceptable to the Engineer which the Contractor may take in the absence of specific instructions from the Engineer.

Work to be in Accordance with Contract

13.1 Unless it is legally or physically impossible, the Contractor shall execute and complete the Works and remedy any defects therein in strict accordance with the Contract to the satisfaction of the Engineer. The Contractor shall comply with and adhere strictly to the Engineer's instructions on any matter, whether mentioned in the Contract or not, touching or concerning the Works. The Contractor shall take instructions only from the Engineer (or his delegate).

Programme to be Submitted

14.1 The Contractor shall, within the time stated in Part II of these Conditions after the date of the Letter of Acceptance, submit to the Engineer for his consent a programme, in such form and detail as the Engineer shall reasonably prescribe, for the execution of the Works. The Contractor shall, whenever required by the Engineer, also provide in writing for his information a general description of the arrangements and methods which the Contractor proposes to adopt for the execution of the Works.

Revised Programme

14.2 If at any time it should appear to the Engineer that the actual progress of the Works does not conform to the programme to which consent has been given under Sub-Clause 14.1, the Contractor shall produce, at the request of the Engineer, a revised programme showing the modifications to such programme necessary to ensure completion of the Works within the Time for Completion.

Cash Flow Estimate to be Submitted

14.3 The Contractor shall, within the time stated in Part II of these Conditions after the date of the Letter of Acceptance, provide to the Engineer for his information a detailed cash flow estimate, in quarterly periods, of all payments to which the Contractor will be entitled under the Contract and the Contractor shall subsequently supply revised cash flow estimates at quarterly intervals, if required to do so by the Engineer.

Contractor not Relieved of Duties or Responsibilities

14.4 The submission to and consent by the Engineer of such programmes or the provision of such general descriptions or cash flow estimates shall not relieve the Contractor of any of his duties or responsibilities under the Contract.

Contractor's Superintendence

15. 1 The Contractor shall provide all necessary superintendence during the execution of the Works and as long thereafter as the Engineer may consider necessary for the proper fulfilling of the Contractor's obligations under the Contract. The Contractor, or a competent and authorised representative approved of by the Engineer, which approval may at any time be withdrawn, shall give his whole time to the superintendence of the Works. Such authorised representative shall receive, on behalf of the Contractor, instructions from the Engineer.

If approval of the representative is withdrawn by the Engineer, the Contractor shall, as soon as is practicable, having regard to the requirement of replacing him as hereinafter mentioned, after receiving notice of such withdrawal, remove the representative from the Works and shall not thereafter employ him again on the Works in any capacity and shall replace him by another representative approved by the Engineer.

Contractor's Employees

16. 1 The Contractor shall provide on the Site in connection with the execution and completion of the Works and the remedying of any defects therein:

- (a) only such technical assistants as are skilled and experienced in their respective callings and such foremen and leading hands as are competent to give proper superintendence of the Works, and
- (b) such skilled, semi-skilled and unskilled labour as is necessary for the proper and timely fulfilling of the Contractor's obligations under the Contract.

Engineer at Liberty to Object

The Engineer shall be at liberty to object to and require the Contractor to remove forthwith from the Works any person provided by the Contractor who, in the opinion of the Engineer, misconducts himself, or is incompetent or negligent in the proper performance of his duties, or whose presence on Site is otherwise considered by the Engineer to be undesirable, and such person shall not be again allowed upon the Works without the consent of the Engineer. Any person so removed from the Works shall be replaced as soon as possible.

16.2

Setting-out 17. 1 The Contractor shall be responsible for:

- (a) the accurate setting-out of the Works in relation to original points, lines and levels of reference given by the Engineer in writing,
- (b) the correctness, subject as above mentioned, of the position, levels, dimensions and alignment of all parts of the Works, and
- (c) the provision of all necessary instruments, appliances and labour in connection with the foregoing responsibilities.
- If, at any time during the execution of the Works, any error appears in the position, levels, dimensions or alignment of any part of the Works, the Contractor, on being required so to do by the Engineer, shall, at his own cost, rectify such error to the satisfaction of the Engineer, unless such error is based on incorrect data supplied in writing by the Engineer, in which case the Engineer shall determine an addition to the Contract Price in accordance with Clause 52 and shall notify the Contractor accordingly, with a copy to the Employer.

The checking of any setting-out or of any line or level by the Engineer shall not in any way relieve the Contractor of his responsibility for the accuracy thereof and the Contractor shall carefully protect and preserve all bench-marks, sight-rails, pegs and other things used in setting-out the Works.

Boreholes and Exploratory Excavation

18.1 If, at any time during the execution of the Works, the Engineer requires the Contractor to make boreholes or to carry out exploratory excavation, such requirement shall be the subject of an instruction in accordance with Clause 51, unless an item or a Provisional Sum in respect of such work is included in the Bill of Quantities.

Safety, Security and Protection of the Environment

- 19.1 The Contractor shall, throughout the execution and completion of the Works and the remedying of any defects therein:
 - (a) have full regard for the safety of all persons entitled to be upon the Site and keep the Site (so far as the same is under his control) and the Works (so far as the same are not completed or occupied by the Employer) in an orderly state appropriate to the avoidance of danger to such persons,
 - (b) provide and maintain at his own cost all lights, guards, fencing, warning signs and watching, when and where necessary or required by the Engineer or by any duly constituted authority, for the protection of the Works or for the safety and convenience of the public or others, and
 - (c) take all reasonable steps to protect the environment on and off the Site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of his methods of operation.

Employer's Responsibilities

- 19.2 If under Clause 31 the Employer shall carry out work on the Site with his own workmen he shall, in respect of such work:
 - (a) have full regard to the safety of all persons entitled to be upon the Site, and
 - (b) keep the Site in an orderly state appropriate to the avoidance of danger to such persons.

If under Clause 31 the Employer shall employ other contractors on the Site he shall require them to have the same regard for safety and avoidance of danger.

Care of Works 20.1

- The Contractor shall take full responsibility for the care of the Works and materials and Plant for incorporation therein from the Commencement Date until the date of issue of the Taking-Over Certificate for the whole of the Works, when the responsibility for the said care shall pass to the Employer. Provided that:
- (a) if the Engineer issues a Taking-Over Certificate for any Section or part of the Permanent Works the Contractor shall cease to be liable for the care of that Section or part from the date of issue of the Taking-Over Certificate, when the responsibility for the care of that Section or part shall pass to the Employer, and

(b) the Contractor shall take full responsibility for the care of any outstanding Works and materials and Plant for incorporation therein which he undertakes to finish during the Defects Liability Period until such outstanding Works have been completed pursuant to Clause 49.

Responsibility to Rectify Loss or Damage

20.2 If any loss or damage happens to the Works, or any part thereof, or materials or Plant for incorporation therein, during the period for which the Contractor is responsible for the care thereof, from any cause whatsoever, other than the risks defined in Sub-Clause 20.4, the Contractor shall, at his own cost, rectify such loss or damage so that the Permanent Works conform in every respect with the provisions of the Contract to the satisfaction of the Engineer. The Contractor shall also be liable for any loss or damage to the Works occasioned by him in the course of any operations carried out by him for the purpose of complying with his obligations under Clauses 49 and 50.

Loss or Damage Due to Employer's Risks

20.3

In the event of any such loss or damage happening from any of the risks defined in Sub-Clause 20.4, or in combination with other risks, the Contractor shall, if and to the extent required by the Engineer, rectify the loss or damage and the Engineer shall determine an addition to the Contract Price in accordance with Clause 52 and shall notify the Contractor accordingly, with a copy to the Employer. In the case of a combination of risks causing loss or damage any such determination shall take into account the proportional responsibility of the Contractor and the Employer.

Employer's Risks

20.4 The Employer's risks are:

- (a) war, hostilities (whether war be declared or not), invasion, act of foreign enemies,
- (b) rebellion, revolution, insurrection, or military or usurped power, or civil war,
- (c) ionising radiations, or contamination by radio-activity from any nuclear fuel, or from any nuclear waste from the combustion of nuclear fuel, radio-active toxic explosive or other hazardous properties of any explosive nuclear assembly or nuclear component thereof,
- (d) pressure waves caused by aircraft or other aerial devices travelling at sonic or supersonic speeds,
- (e) riot, commotion or disorder, unless solely restricted to employees of the Contractor or of his Subcontractors and arising from the conduct of the Works,
- (f) loss or damage due to the use or occupation by the Employer of any Section or part of the Permanent Works, except as may be provided for in the Contract,
 - (g) loss or damage to the extent that it is due to the design of the Works, other than any part of the design provided by the Contractor or for which the Contractor is responsible, and
 - (h) any operation of the forces of nature against which an experienced contractor could not reasonably have been expected to take precautions.

Insurance of Works and Contractor's Equipment

21.1

- The Contractor shall, without limiting his or the Employer's obligations and responsibilities under Clause 20, insure:
 - (a) the Works, together with materials and Plant for incorporation therein, to the full replacement cost (the term "cost" in this context shall include profit),
 - (b) an additional sum of 15 per cent of such replacement cost, or as may be specified in Part II of these Conditions, to cover any additional costs of and incidental to the rectification of loss or damage including professional fees and the cost of demolishing and removing any part of the Works and of removing debris of whatsoever nature, and
 - (c) the Contractor's Equipment and other things brought onto the Site by the Contractor, for a sum sufficient to provide for their replacement at the Site.

Scope of Cover

- 21.2 The insurance in paragraphs (a) and (b) of Sub-Clause 21.1 shall be in the joint names of the Contractor and the Employer and shall cover:
 - (a) the Employer and the Contractor against all loss or damage from whatsoever cause arising, other than as provided in Sub-Clause 21.4, from the start of work at the Site until the date of issue of the relevant Taking-Over Certificate in respect of the Works or any Section or part thereof as the case may be, and
 - (b) the Contractor for his liability:
 - (i) during the Defects Liability Period for loss or damage arising from a cause occurring prior to the commencement of the Defects Liability Period, and
 - (ii) for loss or damage occasioned by the Contractor in the course of any operations carried out by him for the purpose of complying with his obligations under Clauses 49 and 50.

Responsibility for Amounts not Recovered

- 21.3 Any amounts not insured or not recovered from the insurers shall be borne by the Employer or the Contractor in accordance with their responsibilities under Clause 20.
- **Exclusions**
- 21.4 There shall be no obligation for the insurances in Sub-Clause 21.1 to include loss or damage caused by:
 - (a) war, hostilities (whether war be declared or not), invasion, act of foreign enemies,
 - (b) rebellion, revolution, insurrection, or military or usurped power, or civil war,
 - (c) ionising radiations, or contamination by radio-activity from any nuclear fuel, or from any nuclear waste from the combustion of nuclear fuel, radio-active toxic explosive or other hazardous properties of any explosive nuclear assembly or nuclear component thereof, or
 - (d) pressure waves caused by aircraft or other aerial devices travelling at sonic or supersonic speeds.

Damage to Persons and Property

- 22.1 The Contractor shall, except if and so far as the Contract provides otherwise, indemnify the Employer against all losses and claims in respect of:
 - (a) death of or injury to any person, or
 - (b) loss of or damage to any property (other than the Works),

which may arise out of or in consequence of the execution and completion of the Works and the remedying of any defects therein, and against all claims, proceedings, damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto, subject to the exceptions defined in Sub-Clause 22.2.

Exceptions

- 22.2 The "exceptions" referred to in Sub-Clause 22.1 are:
 - (a) the permanent use or occupation of land by the Works, or any part thereof,
 - (b) the right of the Employer to execute the Works, or any part thereof, on, over, under, in or through any land,
 - (c) damage to property which is the unavoidable result of the execution and completion of the Works, or the remedying of any defects therein, in accordance with the Contract, and
 - (d) death of or injury to persons or loss of or damage to property resulting from any act or neglect of the Employer, his agents, servants or other contractors, not being employed by the Contractor, or in respect of any claims, proceedings, damages, costs, charges and expenses in respect thereof or in relation thereto or, where the injury or damage was contributed to by the Contractor, his servants or agents, such part of the said injury or damage as may be just and equitable having regard to the extent of the responsibility of the Employer, his servants or agents or other contractors for the injury or damage.

Indemnity by Employer

22.3 The Employer shall indemnify the Contractor against all claims, proceedings, damages, costs, charges and expenses in respect of the matters referred to in the exceptions defined in Sub-Clause 22.2.

Third Party Insurance (including Employer's Property)

23.1 The Contractor shall, without limiting his or the Employer's obligations and responsibilities under Clause 22, insure, in the joint names of the Contractor and the Employer, against liabilities for death of or injury to any person (other than as provided in Clause 24) or loss of or damage to any property (other than the Works) arising out of the performance of the Contract, other than the exceptions defined in paragraphs (a), (b) and (c) of Sub-Clause 22.2.

Minimum Amount of Insurance

23.2 Such insurance shall be for at least the amount stated in the Appendix to Tender.

Cross Liabilities

23.3 The insurance policy shall include a cross liability clause such that the insurance shall apply to the Contractor and to the Employer as separate insureds.

Accident or Injury to Workmen

24.1 The Employer shall not be liable for or in respect of any damages or compensation payable to any workman or other person in the employment of the Contractor or any Subcontractor, other than death or injury resulting from any act or default of the Employer, his agents or servants. The Contractor shall indemnify and keep indemnified the Employer against all such damages and compensation, other than those for which the Employer is liable as aforesaid, and against all claims, proceedings, damages, costs, charges, and expenses whatsoever in respect thereof or in relation thereto.

Insurance Against Accident to Workmen

24.2 The Contractor shall insure against such liability and shall continue such insurance during the whole of the time that any persons are employed by him on the Works. Provided that, in respect of any persons employed by any Subcontractor, the Contractor's obligations to insure as aforesaid under this Sub-Clause shall be satisfied if the Subcontractor shall have insured against the liability in respect of such persons in such manner that the Employer is indemnified under the policy, but the Contractor shall require such Subcontractor to produce to the Employer, when required, such policy of insurance and the receipt for the payment of the current premium.

Evidence and Terms of Insurances

25.1 The Contractor shall provide evidence to the Employer prior to the start of work at the Site that the insurances required under the Contract have been effected and shall, within 84 days of the Commencement Date, provide the insurance policies to the Employer. When providing such evidence and such policies to the Employer, the Contractor shall notify the Engineer of so doing. Such insurance policies shall be consistent with the general terms agreed prior to the issue of the Letter of Acceptance. The Contractor shall effect all insurances for which he is responsible with insurers and in terms approved by the Employer.

Adequacy of Insurances

25.2

25.3

25.4

The Contractor shall notify the insurers of changes in the nature, extent or programme for the execution of the Works and ensure the adequacy of the insurances at all times in accordance with the terms of the Contract and shall, when required, produce to the Employer the insurance policies in force and the receipts for payment of the current premiums.

Remedy on Contractor's Failure to Insure

If the Contractor fails to effect and keep in force any of the insurances required under the Contract, or fails to provide the policies to the Employer within the period required by Sub-Clause 25.1, then and in any such case the Employer may effect and keep in force any such insurances and pay any premium as may be necessary for that purpose and from time to time deduct the amount so paid from any monies due or to become due to the Contractor, or recover the same as a debt due from the Contractor.

Compliance with Policy Conditions

In the event that the Contractor or the Employer fails to comply with conditions imposed by the insurance policies effected pursuant to the Contract, each shall indemnify the other against all losses and claims arising from such failure.

Compliance with Statutes, Regulations

- 26.1 The Contractor shall conform in all respects, including by the giving of all notices and the paying of all fees, with the provisions of:
 - (a) any National or State Statute, Ordinance, or other Law, or any regulation, or bye-law of any local or other duly constituted authority in relation to the execution and completion of the Works and the remedying of any defects therein, and
 - (b) the rules and regulations of all public bodies and companies whose property or rights are affected or may be affected in any way by the Works,

and the Contractor shall keep the Employer indemnified against all penalties and liability of every kind for breach of any such provisions. Provided always that the Employer shall be responsible for obtaining any planning, zoning or other similar permission required for the Works to proceed and shall indemnify the Contractor in accordance with Sub-Clause 22.3.

Fossils 27.1

All fossils, coins, articles of value or antiquity and structures and other remains or things of geological or archaeological interest discovered on the Site shall, as between the Employer and the Contractor, be deemed to be the absolute property of the Employer. The Contractor shall take reasonable precautions to prevent his workmen or any other persons from removing or damaging any such article or thing and shall, immediately upon discovery thereof and before removal, acquaint the Engineer of such discovery and carry out the Engineer's instructions for dealing with the same. If, by reason of such instructions, the Contractor suffers delay and/or incurs costs then the Engineer shall, after due consultation with the Employer and the Contractor, determine:

- (a) any extension of time to which the Contractor is entitled under Clause 44, and
- (b) the amount of such costs, which shall be added to the Contract Price,

and shall notify the Contractor accordingly, with a copy to the Employer.

Patent Rights 28.1

The Contractor shall save harmless and indemnify the Employer from and against all claims and proceedings for or on account of infringement of any patent rights, design trademark or name or other protected rights in respect of any Contractor's Equipment, materials or Plant used for or in connection with or for incorporation in the Works and from and against all damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto, except where such infringement results from compliance with the design or Specification provided by the Engineer.

Royalties

28.2

Except where otherwise stated, the Contractor shall pay all tonnage and other royalties, rent and other payments or compensation, if any, for getting stone, sand, gravel, clay or other materials required for the Works.

Interference with Traffic and Adjoining Properties

- 29.1 All operations necessary for the execution and completion of the Works and the remedying of any defects therein shall, so far as compliance with the requirements of the Contract permits, be carried on so as not to interfere unnecessarily or improperly with:
 - (a) the convenience of the public, or
 - (b) the access to, use and occupation of public or private roads and footpaths to or of properties whether in the possession of the Employer or of any other person.

The Contractor shall save harmless and indemnify the Employer in respect of all claims, proceedings, damages, costs, charges and expenses whatsoever arising out of, or in relation to, any such matters insofar as the Contractor is responsible therefor.

Avoidance of Damage to Roads

30.1

30.2

30.3

The Contractor shall use every reasonable means to prevent any of the roads or bridges communicating with or on the routes to the Site from being damaged or injured by any traffic of the Contractor or any of his Subcontractors and, in particular, shall select routes, choose and use vehicles and restrict and distribute loads so that any such extraordinary traffic as will inevitably arise from the moving of materials, Plant, Contractor's Equipment or Temporary Works from and to the Site shall be limited, as far as reasonably possible, and so that no unnecessary damage or injury may be occasioned to such roads and bridges.

Transport of Contractor's Equipment or Temporary Works

Save insofar as the Contract otherwise provides, the Contractor shall be responsible for and shall pay the cost of strengthening any bridges or altering or improving any road communicating with or on the routes to the Site to facilitate the movement of Contractor's Equipment or Temporary Works and the Contractor shall indemnify and keep indemnified the Employer against all claims for damage to any such road or bridge caused by such movement, including such claims as may be made directly against the Employer, and shall negotiate and pay all claims arising solely out of such damage.

Transport of Materials or Plant

If, notwithstanding Sub-Clause 30.1, any damage occurs to any bridge or road communicating with or on the routes to the Site arising from the transport of materials or Plant, the Contractor shall notify the Engineer with a copy to the Employer, as soon as he becomes aware of such damage or as soon as he receives any claim from the authority entitled to make such claim. Where under any law or regulation the haulier of such materials or Plant is required to indemnify the road authority against damage the Employer shall not be liable for any costs, charges or expenses in respect thereof or in relation thereto. In other cases the Employer shall negotiate the settlement of and pay all sums due in respect of such claim and shall indemnify the Contractor in respect thereof and in respect of all claims, proceedings, damages, costs, charges and expenses in relation thereto. Provided that if and so far as any such claim or part thereof is, in the opinion of the Engineer, due to any failure on the part of the Contractor to observe and perform his obligations under Sub-Clause 30.1, then the amount, determined by the Engineer, after due consultation with the Employer and the Contractor, to be due to such failure shall be recoverable from the Contractor by the Employer and may be deducted by the Employer from any monies due or to become due to the Contractor and the Engineer shall notify the Contractor accordingly, with a copy to the Employer, Provided also that the Employer shall notify the Contractor whenever a settlement is to be negotiated and, where any amount may be due from the Contractor, the Employer shall consult with the Contractor before such settlement is agreed.

Waterborne Traffic

30.4 Where the nature of the Works is such as to require the use by the Contractor of waterborne transport the foregoing provisions of this Clause shall be construed as though "road" included a lock, dock, sea wall or other structure related to a waterway and "vehicle" included craft, and shall have effect accordingly.

Opportunities for Other Contractors

- 31.1 The Contractor shall, in accordance with the requirements of the Engineer, afford all reasonable opportunities for carrying out their work to:
 - (a) any other contractors employed by the Employer and their workmen,
 - (b) the workmen of the Employer, and
 - (c) the workmen of any duly constituted authorities who may be employed in the execution on or near the Site of any work not included in the Contract or of any contract which the Employer may enter into in connection with or ancillary to the Works.

Facilities for Other Contractors

- 31.2 If, however, pursuant to Sub-Clause 31.1 the Contractor shall, on the written request of the Engineer:
 - (a) make available to any such other contractor, or to the Employer or any such authority, any roads or ways for the maintenance of which the Contractor is responsible,

- (b) permit the use, by any such, of Temporary Works or Contractor's Equipment on the Site, or
- (c) provide any other service of whatsoever nature for any such,

the Engineer shall determine an addition to the Contract Price in accordance with Clause 52 and shall notify the Contractor accordingly, with a copy to the Employer.

Contractor to Keep Site Clear

32.1 During the execution of the Works the Contractor shall keep the Site reasonably free from all unnecessary obstruction and shall store or dispose of any Contractor's Equipment and surplus materials and clear away and remove from the Site any wreckage, rubbish or Temporary Works no longer required.

Clearance of Site on Completion

33.1 Upon the issue of any Taking-Over Certificate the Contractor shall clear away and remove from that part of the Site to which such Taking-Over Certificate relates all Contractor's Equipment, surplus material, rubbish and Temporary Works of every kind, and leave such part of the Site and Works clean and in a workmanlike condition to the satisfaction of the Engineer. Provided that the Contractor shall be entitled to retain on Site, until the end of the Defects Liability Period, such materials, Contractor's Equipment and Temporary Works as are required by him for the purpose of fulfilling his obligations during the Defects Liability Period.

Labour

Engagement of Staff and Labour

34.1 The Contractor shall, unless otherwise provided in the Contract, make his own arrangements for the engagement of all staff and labour, local or other, and for their payment, housing, feeding and transport.

Returns of Labour and Contractor's Equipment

35.1 The Contractor shall, if required by the Engineer, deliver to the Engineer a return in detail, in such form and at such intervals as the Engineer may prescribe, showing the staff and the numbers of the several classes of labour from time to time employed by the Contractor on the Site and such information respecting Contractor's Equipment as the Engineer may require.

Materials, Plant and Workmanship

Quality of Materials, Plant and Workmanship

36.1 All materials, Plant and workmanship shall be:

- (a) of the respective kinds described in the Contract and in accordance with the Engineer's instructions, and
- (b) subjected from time to time to such tests as the Engineer may require at the place of manufacture, fabrication or preparation, or on the Site or at such other place or places as may be specified in the Contract, or at all or any of such places.

The Contractor shall provide such assistance, labour, electricity, fuels, stores, apparatus and instruments as are normally required for examining, measuring and testing any materials or Plant and shall supply samples of materials, before incorporation in the Works, for testing as may be selected and required by the Engineer.

Cost of Samples

- 36.2 All samples shall be supplied by the Contractor at his own cost if the supply thereof is clearly intended by or provided for in the Contract.
- Cost of Tests 36.3
 - 3 The cost of making any test shall be borne by the Contractor if such test is:
 - (a) clearly intended by or provided for in the Contract, or
 - (b) particularised in the Contract (in cases only of a test under load or of a test to ascertain whether the design of any finished or partially finished work is appropriate for the purposes which it was intended to fulfil) in sufficient detail to enable the Contractor to price or allow for the same in his Tender.

Cost of Tests not Provided for

- 36.4 If any test required by the Engineer which is:
 - (a) not so intended by or provided for,
 - (b) (in the cases above mentioned) not so particularised, or
 - (c) (though so intended or provided for) required by the Engineer to be carried out at any place other than the Site or the place of manufacture, fabrication or preparation of the materials or Plant tested,

shows the materials, Plant or workmanship not to be in accordance with the provisions of the Contract to the satisfaction of the Engineer, then the cost of such test shall be borne by the Contractor, but in any other case Sub-Clause 36.5 shall apply.

Engineer's Determination where Tests not Provided for

- 36.5 Where, pursuant to Sub-Clause 36.4, this Sub-Clause applies the Engineer shall, after due consultation with the Employer and the Contractor, determine:
 - (a) any extension of time to which the Contractor is entitled under Clause 44, and
 - (b) the amount of such costs, which shall be added to the Contract Price.

and shall notify the Contractor accordingly, with a copy to the Employer.

Inspection of Operations

37.1 The Engineer, and any person authorised by him, shall at all reasonable times have access to the Site and to all workshops and places where materials or Plant are being manufactured, fabricated or prepared for the Works and the Contractor shall afford every facility for and every assistance in obtaining the right to such access.

Inspection and Testing

37.2 The Engineer shall be entitled, during manufacture, fabrication or preparation to inspect and test the materials and Plant to be supplied under the Contract. If materials or Plant are being manufactured, fabricated or prepared in workshops or places other than those of the Contractor, the Contractor shall obtain permission for the Engineer to carry out such inspection and testing in those workshops or places. Such inspection or testing shall not release the Contractor from any obligation under the Contract.

Dates for Inspection and Testing

The Contractor shall agree with the Engineer on the time and place for the inspection or testing of any materials or Plant as provided in the Contract. The Engineer shall give the Contractor not less than 24 hours notice of his intention to carry out the inspection or to attend the tests. If the Engineer, or his duly authorised representative, does not attend on the date agreed, the Contractor may, unless otherwise instructed by the Engineer, proceed with the tests, which shall be deemed to have been made in the presence of the Engineer. The Contractor shall forthwith forward to the Engineer duly certified copies of the test readings. If the Engineer has not attended the tests, he shall accept the said readings as accurate.

Rejection 37.4

If, at the time and place agreed in accordance with Sub-Clause 37.3, the materials or Plant are not ready for inspection or testing or if, as a result of the inspection or testing referred to in this Clause, the Engineer determines that the materials or Plant are defective or otherwise not in accordance with the Contract, he may reject the materials or Plant and shall notify the Contractor thereof immediately. The notice shall state the Engineer's objections with reasons. The Contractor shall then promptly make good the defect or ensure that rejected materials or Plant comply with the Contract. If the Engineer so requests, the tests of rejected materials or Plant shall be made or repeated under the same terms and conditions. All costs incurred by the Employer by the repetition of the tests shall, after due consultation with the Employer and the Contractor, be determined by the Engineer and shall be recoverable from the Contractor by the Employer and may be deducted from any inonies due or to become due to the Contractor and the Engineer shall notify the Contractor accordingly, with a copy to the Employer.

Independent Inspection

37.5 The Engineer may delegate inspection and testing of materials or Plant to an independent inspector. Any such delegation shall be effected in accordance with Sub-Clause 2.4 and for this purpose such independent inspector shall be considered as an assistant of the Engineer. Notice of such appointment (not being less than 14 days) shall be given by the Engineer to the Contractor.

Examination of Work before Covering up

38.1 No part of the Works shall be covered up or put out of view without the approval of the Engineer and the Contractor shall afford full opportunity for the Engineer to examine and measure any such part of the Works which is about to be covered up or put out of view and to examine foundations before any part of the Works is placed thereon. The Contractor shall give notice to the Engineer whenever any such part of the Works or foundations is or are ready or about to be ready for examination and the Engineer shall, without unreasonable delay, unless he considers it unnecessary and advises the Contractor accordingly, attend for the purpose of examining and measuring such part of the Works or of examining such foundations.

Uncovering and Making Openings

38.2 The Contractor shall uncover any part of the Works or make openings in or through the same as the Engineer may from time to time instruct and shall reinstate and make good such part. If any such part has been covered up or put out of view after compliance with the requirement of Sub-Clause 38.1 and is found to be executed in accordance with the Contract, the Engineer shall, after due consultation with the Employer and the Contractor, determine the amount of the Contractor's costs in respect of such of uncovering, making openings in or through, reinstating and making good the same, which shall be added to the Contract Price, and shall notify the Contractor accordingly, with a copy to the Employer. In any other case all costs shall be borne by the Contractor.

Removal of Improper Work, Materials or Plant

39.1 The Engineer shall have authority to issue instructions from time to time, for:

- (a) the removal from the Site, within such time or times as may be specified in the instruction, of any materials or Plant which, in the opinion of the Engineer, are not in accordance with the Contract.
- (b) the substitution of proper and suitable materials or Plant, and
- (c) the removal and proper re-execution, notwithstanding any previous test thereof or interim payment therefor, of any work which, in respect of
 - (i) materials, Plant or workmanship, or
 - (ii) design by the Contractor or for which he is responsible,

is not, in the opinion of the Engineer, in accordance with the Contract.

Default of Contractor in Compliance

39.2

40. 1

In case of default on the part of the Contractor in carrying out such instruction within the time specified therein or, if none, within a reasonable time, the Employer shall be entitled to employ and pay other persons to carry out the same and all costs consequent thereon or incidental thereto shall, after due consultation with the Employer and the Contractor, be determined by the Engineer and shall be recoverable from the Contractor by the Employer, and may be deducted by the Employer from any monies due or to become due to the Contractor and the Engineer shall notify the Contractor accordingly, with a copy to the Employer.

Suspension

Suspension of Work

The Contractor shall, on the instructions of the Engineer, suspend the progress of the Works or any part thereof for such time and in such manner as the Engineer may consider necessary and shall, during such suspension, properly protect and secure the Works or such part thereof so far as is necessary in the opinion of the Engineer. Unless such suspension is:

- (a) otherwise provided for in the Contract,
- (b) necessary by reason of some default of or breach of contract by the Contractor or for which he is responsible,

- (c) necessary by reason of climatic conditions on the Site, or
- (d) necessary for the proper execution of the Works or for the safety of the Works or any part thereof (save to the extent that such necessity arises from any act or default by the Engineer or the Employer or from any of the risks defined in Sub-Clause 20.4),

Sub-Clause 40.2 shall apply.

Engineer's Determination following Suspension

- 40.2 Where, pursuant to Sub-Clause 40.1, this Sub-Clause applies the Engineer shall, after due consultation with the Employer and the Contractor, determine:
 - (a) any extension of time to which the Contractor is entitled under Clause 44, and
 - (b) the amount, which shall be added to the Contract Price, in respect of the cost incurred by the Contractor by reason of such suspension,

and shall notify the Contractor accordingly, with a copy to the Employer.

Suspension lasting more than 84 Days

40.3

41.1

If the progress of the Works or any part thereof is suspended on the instructions of the Engineer and if permission to resume work is not given by the Engineer within a period of 84 days from the date of suspension then, unless such suspension is within paragraph (a), (b), (c) or (d) of Sub-Clause 40.1, the Contractor may give notice to the Engineer requiring permission, within 28 days from the receipt thereof, to proceed with the Works or that part thereof in regard to which progress is suspended. If, within the said time, such permission is not granted, the Contractor may, but is not bound to, elect to treat the suspension, where it affects part only of the Works, as an omission of such part under Clause 51 by giving a further notice to the Engineer to that effect, or, where it affects the whole of the Works, treat the suspension as an event of default by the Employer and terminate his employment under the Contract in accordance with the provisions of Sub-Clause 69.1, whereupon the provisions of Sub-Clauses 69.2 and 69.3 shall apply.

Commencement and Delays

Commencement of Works

The Contractor shall commence the Works as soon as is reasonably possible after the receipt by him of a notice to this effect from the Engineer, which notice shall be issued within the time stated in the Appendix to Tender after the date of the Letter of Acceptance. Thereafter, the Contractor shall proceed with the Works with due expedition and without delay.

Possession of Site and Access Thereto

- 42.1 Save insofar as the Contract may prescribe:
 - (a) the extent of portions of the Site of which the Contractor is to be given possession from time to time,
 - (b) the order in which such portions shall be made available to the Contractor,

and, subject to any requirement in the Contract as to the order in which the Works shall be executed, the Employer will, with the Engineer's notice to commence the Works, give to the Contractor possession of

- (c) so much of the Site, and
- (d) such access as, in accordance with the Contract, is to be provided by the Employer as may be required to enable the Contractor to commence and proceed with the execution of the Works in accordance with the programme referred to in Clause 14, if any, and otherwise in accordance with such reasonable proposals as the Contractor shall, by notice to the Engineer with a copy to the Employer, make. The Employer will, from time to time as the Works proceed, give to the Contractor possession of such further portions of the Site as may be required to enable the Contractor to proceed with the execution of the Works with due dispatch in accordance with such programme or proposals, as the case may be.

Failure to Give Possession

- 42.2 If the Contractor suffers delay and/or incurs costs from failure on the part of the Employer to give possession in accordance with the terms of Sub-Clause 42. I, the Engineer shall, after due consultation with the Employer and the Contractor, determine:
 - (a) any extension of time to which the Contractor is entitled under Clause 44, and
 - (b) the amount of such costs, which shall be added to the Contract Price, and shall notify the Contractor accordingly, with a copy to the Employer.

Rights of Way and Facilities

42.3 The Contractor shall bear all costs and charges for special or temporary rights of way required by him in connection with access to the Site. The Contractor shall also provide at his own cost any additional facilities outside the Site required by him for the purposes of the Works.

Time for Completion

43.1 The whole of the Works and, if applicable, any Section required to be completed within a particular time as stated in the Appendix to Tender, shall be completed, in accordance with the provisions of Clause 48, within the time stated in the Appendix to Tender for the whole of the Works or the Section (as the case may be), calculated from the Commencement Date, or such extended time as may be allowed under Clause 44.

Extension of Time for Completion

44.1 In the event of:

- (a) the amount or nature of extra or additional work,
- (b) any cause of delay referred to in these Conditions,
- (c) exceptionally adverse climatic conditions,
- (d) any delay, impediment or prevention by the Employer, or
- (e) other special circumstances which may occur, other than through a default of or breach of contract by the Contractor or for which he is responsible,

being such as fairly to entitle the Contractor to an extension of the Time for Completion of the Works, or any Section or part thereof, the Engineer shall, after due consultation with the Employer and the Contractor, determine the amount of such extension and shall notify the Contractor accordingly, with a copy to the Employer.

Contractor to Provide Notification and Detailed Particulars

- 44.2 Provided that the Engineer is not bound to make any determination unless the Contractor has
 - (a) within 28 days after such event has first arisen notified the Engineer with a copy to the Employer, and
 - (b) within 28 days, or such other reasonable time as may be agreed by the Engineer, after such notification submitted to the Engineer detailed particulars of any extension of time to which he may consider himself entitled in order that such submission may be investigated at the time.

Interim Determination of Extension

44.3

Provided also that where an event has a continuing effect such that it is not practicable for the Contractor to submit detailed particulars within the period of 28 days referred to in Sub-Clause 44.2(b), he shall nevertheless be entitled to an extension of time provided that he has submitted to the Engineer interim particulars at intervals of not more than 28 days and final particulars within 28 days of the end of the effects resulting from the event. On receipt of such interim particulars, the Engineer shall, without undue delay, make an interim determination of extension of time and, on receipt of the final particulars, the Engineer shall review all the circumstances and shall determine an overall extension of time in regard to the event. In both such cases the Engineer shall make his determination after due consultation with the Employer and the Contractor and shall notify the Contractor of the determination, with a copy to the Employer. No final review shall result in a decrease of any extension of time already determined by the Engineer.

Restriction on Working Hours

45.1 Subject to any provision to the contrary contained in the Contract, none of the Works shall, save as hereinafter provided, be carried on during the night or on locally recognised days of rest without the consent of the Engineer, except when work is unavoidable or absolutely necessary for the saving of life or property or for the safety of the Works, in which case the Contractor shall immediately advise the Engineer. Provided that the provisions of this Clause shall not be applicable in the case of any work which it is customary to carry out by multiple shifts.

Rate of Progress

46.1

If for any reason, which does not entitle the Contractor to an extension of time, the rate of progress of the Works or any Section is at any time, in the opinion of the Engineer, too slow to comply with the Time for Completion, the Engineer shall so notify the Contractor who shall thereupon take such steps as are necessary, subject to the consent of the Engineer, to expedite progress so as to comply with the Time for Completion. The Contractor shall not be entitled to any additional payment for taking such steps. If, as a result of any notice given by the Engineer under this Clause, the Contractor considers that it is necessary to do any work at night or on locally recognised days of rest, he shall be entitled to seek the consent of the Engineer so to do. Provided that if any steps, taken by the Contractor in meeting his obligations under this Clause, involve the Employer in additional supervision costs, such costs shall, after due consultation with the Employer and the Contractor, be determined by the Engineer and shall be recoverable from the Contractor by the Employer, and may be deducted by the Employer from any monies due or to become due to the Contractor and the Engineer shall notify the Contractor accordingly, with a copy to the Employer.

Liquidated Damages for Delay

47.1 If the Contractor fails to comply with the Time for Completion in accordance with Clause 48, for the whole of the Works or, if applicable, any Section within the relevant time prescribed by Clause 43, then the Contractor shall pay to the Employer the relevant sum stated in the Appendix to Tender as liquidated damages for such default and not as a penalty (which sum shall be the only monies due from the Contractor for such default) for every day or part of a day which shall elapse between the relevant Time for Completion and the date stated in a Taking-Over Certificate of the whole of the Works or the relevant Section, subject to the applicable limit stated in the Appendix to Tender. The Employer may, without prejudice to any other method of recovery, deduct the amount of such damages from any monies due or to become due to the Contractor. The payment or deduction of such damages shall not relieve the Contractor from his obligation to complete the Works, or from any other of his obligations and liabilities under the Contract.

Reduction of Liquidated Damages

47.2

If, before the Time for Completion of the whole of the Works or, if applicable, any Section, a Taking-Over Certificate has been issued for any part of the Works or of a Section, the liquidated damages for delay in completion of the remainder of the Works or of that Section shall, for any period of delay after the date stated in such Taking-Over Certificate, and in the absence of alternative provisions in the Contract, be reduced in the proportion which the value of the part so certified bears to the value of the whole of the Works or Section, as applicable. The provisions of this Sub-Clause shall only apply to the rate of liquidated damages and shall not affect the limit thereof.