SECTION IV

CONDITIONS OF CONTRACT

PART II- CONDITIONS OF PARTICULAR APPLICATION

The Conditions of Particular Application shall prevail over the General Conditions and are amendments and additions to the General Conditions. Clauses in this part having clause numbers 87 are amendments of the General Conditions and carry the numbers of the Clauses which they amend.

Conditions of Contract, Part II Conditions of Particular Application

Sub-Clause 1.1 Definitions

- (a) The "JBIC" is the Japan Bank for International Cooperation, Government of Japan
- (a) (i) The Employer is the Government of the People's Republic of Bangladesh represented by the Chief Engineer, Roads and Highways Department.
- (a) (iv) The Engineer is the Project Director, RHD, Rupsa Bridge Construction Project.

Amend subpara. (a) (iv) also by adding the following words after the word "Conditions"

"or any other competent person appointed by the Employer, and notified to the Contractor, to act in replacement of the Engineer."

- (a) (v) The Engineers Representative is the Consultant Project
 Manager or any other person appointed by the Engineer and
 notified to the contractor to act in replacement of the Engineers
 Representative.
- (b) (v) Add at the end:

"The word 'tender' is synonymous with 'bid', and the words 'Appendix to Tender' with 'Appendix to Bid', and the words 'tender documents' with 'bidding documents'."

Sub-Clause 2.1 Engineer's Duties And Authority

Add the following to Sub-Clause 2.1(b)

The Engineer shall obtain the specific approval of the Employer before taking any of the following actions specified in Part I:

- i) approving subletting of any part of the Works under Clause 4;
- ii) certifying additional cost determined under Clause 12;
- iii) determining an extension of time under Clause 44; or
- iv) issuing variation orders under Clause 51 exceeding 15% of the Contract Price as reasonably determined by the Engineer.
- v) Notwithstanding the obligation, as set out above, to obtain approval, if in

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the opinion of the Engineer, an emergency occurs affecting the safety of life or of the Works or of adjoining property, he may, without relieving the Contractor of any of his duties and responsibilities under the Contract instruct the Contractor to execute all such work or to do all such things as may, in the option of the Engineer be necessary to abate or reduce the risk. The Contractor shall forthwith comply, despite the absence of approval of the Employer, with any such instruction of the Engineer. The Engineer shall determine an addition to the Contract Price in respect of such instruction in accordance with Clause 52 and shall notify the Contractor accordingly with copy to the Employer.

Sub-Clause 2.7

Naming of Professional Engineer Add the following to Sub-Clause 2.7:

"Where the Engineer as defined in Clause 1.1 (a) (iv) is not a single named professional engineer the Engineer shall within 7 days of the award of the Contract and in any event before the Commencement Date of the Works notify to the Contractor in writing the name of the professional engineer who will act on his behalf and assume the responsibilities of the Engineer under the contract. The Engineer shall thereafter in like manner notify the Contractor of any replacement of the named professional engineer".

Sub-Clause 5.1 Language and Law

- (a) The language is the English language
- (b) The Law is that in force in Bangladesh

Sub-Clause 5.2 Priority of Contract Documents

Delete the documents listed 1-6 and substitute:

- (1) the Contract Agreement (if completed);
- (2) the Letter of Acceptance;
- (3) the Addendum:
- (4) the Bid and the Appendix to Bid;
- (5) the Conditions of Contract, Part II;
- (6) the Conditions of Contract, Part I:
- (7) the Specifications;
- (8) the priced Bill of Quantities:
- (9) the Supplementary Data (if any); and
- (10) the Drawings.

Add the following Sub-Clauses 6.6 to 6.13:

Sub-Clause 6.6 Errors in Drawing

The Contractor shall inspect and examine all drawings provided by the Engineer thoroughly and carefully in conjunction with all other Contract Documents for the Work. If the Contractor discovers any ambiguities, discrepancies, errors or omissions, he shall forthwith bring the same to the notice of the Engineer in writing before actually carrying out the work, and seek remedy as set out in clause 5.2 above.

Sub-Clause 6.7 Silence of Drawings

The apparent silence of the Specifications, Engineering Drawings, and other

Documents as to any detail or the apparent omission from them of a detailed description concerning any point shall be regarded as meaning that only the best general practice is to he used. All interpretations of the Specifications shall be made on this basis

In the case of any class of work for which there is no specification, such work shall be carried out in accordance with specifications approved by the Engineer. It is the responsibility of the Contractor to submit such specifications to the Engineer for approval prior to commencing the work.

Sub-Clause 6.8 Working Drawings by Contractor

The Contractor shall be required to submit to the Engineer for his approval the working/shop drawings and design calculations for (i) the temporary works viz., coffer dams, cribs, form work, staging, centering, scaffolding, specialized constructional handing and lunching equipment and the like, (ii) the templates and anchorage, temporary support details for prestressing cables; and also the material lists for structural fabrication if any, and (iii) any structure or part of the Works as may be required for the execution of the Works which are not included in the Engineering Drawings furnished by the Engineer. They shall include shop details, erection plans, bending schedules of reinforcing steel etc. These working/shop drawings must be approved by the Engineer before any work can be performed involving these drawings. The Contractor's drawings shall be submitted in six copies and calculations, where required, in 4 copies to the Engineer at least six weeks in advance of actual construction requirements.

Sub-Clause 6.9 Approval of Contractor's Drawings

Approval of the Contractor's drawings by the Engineer shall not be a complete check but will indicate only that the general methods of construction and detailing are satisfactory. Approval shall not be construed as permitting any departure from the Contract requirements. Approval of such drawings will not relieve the Contractor of his responsibility for any error which may exist as the Contractor shall be responsible for the dimensions and detailing of adequate connections and details and satisfactory construction of all Works. The Contractor shall be responsible for agreement and conformity of his working drawings with the Engineering Drawings and Specifications.

Sub-Clause 6.10 Variation from Engineer's Drawings

If the Contractor's drawings show variations from the Contract requirements because of standard shop practice or for other reasons, the Contractor shall describe such variations in his letter of submission. If the Contractor fails to describe such variations he shall not be relieved of the responsibility for executing the Work in accordance with the Contract, even though such drawings may have been approved.

Sub-Clause 6.11 Finished Work

Finished work in all cases shall conform to lines, grades, dimensions and adjustments shown on the Engineering Drawings and on approved plans and drawings, except as modified in written orders by the Engineer.

Sub-Clause 6.12 As Built Drawings

Progressively as the Works are completed the Contractor shall furnish to the

Engineer the "As Built" drawings all clearly revised and completed and brought up-to-date showing the permanent construction as actually made. The last lot of "As Built" drawings shall be submitted within two (2) months of completion of the Works. Each "As Built" drawing shall have a blank area 125 mm by 125 mm located adjacent to the title block. The title block shall display the following.

Number and Title of Drawings
Date of Drawing or Revision
Name of Project
Name of Contractor Submitting Drawing
Clear Identity of Contents and Location of Work
Specification Title and Number

These "As Built" drawings shall be drawings in ink on polyester film of approved quality from which clear prints can be made. In addition to the original drawings on reproducible polyester film, the Contractor shall submit ten (10 No.) sets of bound prints and 2 No. sets of CAD files on computer diskettes where considered appropriate by the Engineer. These drawings shall become the property of the Employer. The Taking Over Certificate (Clause 48) shall not be issued by the Engineer until "As Built" drawings for the relevant Works have been supplied. Refer also to Clause 0.4.6 of the Technical Specification.

Sub-Clause 6.13 Cost of Drawings

The cost of preparing all drawings and calculations and the cost of purchasing contract Documents, Specifications and Drawings as specified herein shall be deemed to have been included in the respective rates/prices quoted by the Contractor in the Bills of Quantities and the Contractor will be allowed no extra compensation therefore.

Add the following Sub-Clause 8.3:

Sub-Clause 8.3 Supply of Bricks

The Contractor shall ensure that all new bricks supplied for incorporation in the Works are certified as to their origin from a brick works which complies with Government regulations and does not use wood as a fuel in brick manufacture. The Contractor shall provide the Engineer with all information on proposed brick sources and shall permit the Engineer to inspect the site of any proposed or approved source at any time. Bricks shall not be manufactured and supplied to the Works site until the proposed sources have been approved in writing by the Engineer. Generally not more than 2 No. sources will be approved by the Engineer to supply bricks for the Works in this contract. The Engineer shall reject any batch of bricks if there is no acceptable evidence to confirm that it has come from an approved source.

Clause 9.1 Contract Agreement

Replace the word "Employer" with the word "Contractor"

Sub-Clause 10.1 Performance Security

Replace the text of Sub-Clause 10.1 with the following:

"The Contractor shall provide security for his proper performance of the Contract

to the Employer within 28 days after the receipt of the Letter of Acceptance. The performance security shall be in the form of a bank guarantee as stipulated by the Employer in the Appendix to Bid, and it shall be issued either (a) by a bank located in the country of the Employer or a foreign bank through a correspondent bank located in the country of the Employer, or (b) directly by a foreign bank which has been determined in advance to be acceptable to the Employer. The performance security shall be denominated in the types and proportions of currencies in which the Contract Price is payable. The Contractor shall notify the Engineer when providing the performance security to the Employer.

"Without limitation to the provisions of the preceding paragraph, whenever the Engineer determines an addition to the Contract Price as a result of a change in cost and/or legislation or as a result of a variation amounting to more than 25 percent of the portion of the Contract Price payable in a specific currency, the Contractor, at the Engineer's written request, shall promptly increase the value of the performance security in that currency by an equal percentage. The performance security of a joint venture shall be in the name of the joint venture."

Sub-Clause 10.2

Period of Validity of Performance Security Replace the words "14 days" with "28 days"

Sub-Clause 10.4

Cost of Performance Security Add the following to Sub-Clause 10.4:

"The cost of complying with the requirements of this clause shall be borne by the Contractor."

Sub-Clause 11.1

Inspection of Site

Read the word "hydrological" as "hydrological and hydrographic", and the word "sub-surface" as "sub-surface and sub-riverbed"

Sub-Clause 14.1

Program to be Submitted

"The time within which the program shall be submitted shall be 28 days."

Sub-Clause 14.3

Cash Flow Estimate to be Submitted

"The time within which the detailed cash flow estimate shall be submitted shall be 28 days."

Sub-Clause 14.5

Details of programme to be Submitted

Add the following to Sub-Clause 14.5:

The Contractor shall submit six copies of the programme including calculations and other data.

The programme shall be comprehensive and shall include:

- (i) detailed bar charts showing targets for all the major items of work;
- (ii) S-Curve showing the cumulative cost of all completed work items;
- (iii) materials procurement programme for all the manufactured and naturally occurring materials indicating quantities and rate of procurement, and utilization; and
- (iv) details of all items of plant and machinery, laboratory and other equipment to be utilized for the project indicating the make, number of items to be procured and detailed technical specifications. The programme for deployment of these items of machinery and equipment shall be furnished along with rates of progress to be achieved for these various items.

Sub-Clause 15.2 Language Ability of Contractor's Representative

Add the following to Sub-Clause 15.2:

"The Contractor's authorized representative shall be fluent in speaking, reading and writing of the English language, to ensure the proper transmission of instructions and information."

Sub-Clause 15.3 Replacement

Add the following to Sub-Clause 15.3:

"Should it be necessary for any reason to replace the Contractors Representative, then the replacement person shall have qualification and experience at least equal to the person to be replaced. The Contractor shall submit the qualification and experience of the replacement for approval by the Engineer. This requirement shall apply for all other named personnel of the Contractor."

Sub-Clause 16.3 Language Ability of Superintending Staff

Add the following to Sub-Clause 16.3:

"A reasonable proportion of the Contractor's superintending staff shall have a working knowledge of the English language.

The minimum number of staff and the positions to which this requirement applies shall be:

- the Project Manager
- the Foundation / Piling Engineer
- the Concrete / Prestressing Engineer
- the Material Engineer

Additionally the Contractor shall have available on site at all times a sufficient number of competent interpreters to ensure the proper transmission of

instructions and information."

Sub-Clause 16.4

Employment of Women and Children

Add the following to Sub-Clause 16.4:

"The Contractor is encouraged to the extent practicable and reasonable to recruit unskilled labor locally including women.

No Labor below the age of fourteen (14) years (or other minimum age mandated by the Government of Bangladesh) shall be employed on the works."

Sub-Clause 18.1

Boreholes and Exploratory Excavation

Amend second sentence as follows:

Such exploratory excavation shall be deemed to include dredging.

Add the following after "exploratory excavation" in excess of the requirements specified elsewhere in the Contract.

Sub-Clause 19.1 Safety, Security and Protection of the Environment

Delete Sub-Clauses 19.1 (b) and (c) and substitute the following clauses (b) to (f)

- (b) at his own cost, make such provisions for lighting the Works materials and plant and shall provide all such marks and lights as may be required by the Engineer or the Employer or any other authority having jurisdiction with the site together with all labors, stores, and services required for their efficient working and use at any time of day and night. He shall also provide at his own cost every description of watching and maintenance required in connection with the foregoing and all other services and for protecting and securing all places dangerous whether to the Contractors workmen or to other persons until the work shall have been handed over to the Employer, unless the Engineer shall decide that such services are no longer required.
- (c) carry out all works without unreasonable noise and disturbance. The Contractor shall indemnify and keep indemnified the Employer from and against any liability for damages on account of noise or other disturbance created in carrying out the work and from all claims demands, proceedings damages, costs charges and expenses whatsoever in regard to such liability.
- (d) take all reasonable precautions to prevent silting, bank or bed erosion, water quality degradation and death or injury to plant, animal or human life in or around any surface water on or adjacent to the project site.
- (e) shall take all reasonable precautions against pollution, interference with the supply or obstruction of the flow of underground water. These precautions shall include but not be limited to physical measures such as earth bunds of adequate capacity around fuel, oil and solvent storage tanks and stores, oil and grease traps in drainage systems from workshops, vehicle and plant washing facilities and

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service and fueling areas and kitchens, the establishment of sanitary solid and liquid waste disposal systems, the maintenance of these systems and measures, the establishment of emergency response procedures to pollution events, and dust suppression, all in accordance with normal good practice and to the satisfaction of the Engineer. Should any pollution arise from the contractor's activities he shall clean up the affected area immediately at his own cost and to the satisfaction of the Engineer, and shall pay full compensation to any affected parties.

(f) provide all light, signs, signals, etc., so as not to interfere with any traffic or signal lights of any local or other authority.

Add the following Sub-Clauses 19.3 to 19.8:

Sub-Clause 19.3 Protection of Trees and Vegetation

Unless otherwise provided in the Technical Specifications, the Contractor shall ensure that no trees or shrubs or waterside vegetation are felled or harmed except for those required to be cleared for execution of the Works. The Contractor shall protect trees and vegetation from damage to the satisfaction of the Engineer. No tree shall be removed without the prior approval of the Engineer and any competent authorities. Should the Contractor become aware during the period of the Contract that any tree or trees designated for clearance have cultural or religious significance he shall immediately inform the Engineer and await his instructions before proceeding with clearance. In the event that trees or other vegetation not designated for clearance are damaged or destroyed, they shall be repaired or replaced to the satisfaction of the Engineer, who shall also impose a penalty to twice the commercial value of any timber affected, as assessed by the Engineer.

Sub-Clause 19.4 Use of Wood as Fuel

The Contractor shall not use wood as a fuel for the execution of any part of the Works, including but not limited to the heating of bitumen and bitumen mixtures and the manufacture of bricks for use in the Works, and to the extent practicable shall ensure that fuels other than wood are used for cooking and water heating in all his camps and living accommodations.

Sub-Clause 19.5 Water Supply

The Contractor shall make his own arrangements at his own expense for water supply for construction and other purposes. Only clean water free from deleterious materials and of appropriate quality for its intended use shall be used. In providing water the Contractor shall ensure that the rights of and supply to existing users are not affected either in quality, quantity or timing. In the event of a dispute over the effect of the Contractor's arrangements on the water supply to others, the Engineer shall be informed immediately and shall instruct the Contractor as to appropriate remedial actions to be undertaken at the contractor's expense.

Sub-Clause 19.6 Hot Mix Plants

The contractor shall not locate any hot-mix or similar potentially polluting plant closer than 500m to any settlement. Any such plant shall be fitted with dust suppression equipment and shall be operated and maintained at all times in conformity with the manufacturer's specifications, instructions and manuals.

Sub-Clause 19.7 Relations with Local Communities and Authorities

In siting and operating his plant and facilities and in executing the Woks the Contractor shall at all times bear in mind and to the extent practicable minimize the impact of his activities on existing communities. Where communities are likely to be affected by major activities such as road widening or the establishment of a camp, large borrow pit or haul road, he shall liaison closely with the concerned communities and their representatives and if so directed, shall attend meetings arranged by the Engineer or Employer to resolve issues and minimize impacts on local communities.

Sub-Clause 19.8 Fire Prevention

The Contractor shall take all precautions necessary to ensure that no vegetation outside the area of the permanent works is affected by fires arising from the execution of the Works. The Contractor shall obtain and follow any instructions of the competent authorities with respect to fire hazard when working in the vicinity of gas installations. Should a fire occur in the natural vegetation or plantations adjacent to the road for any reason the Contractor shall immediately suppress it. In the event of any other fire emergency in the vicinity of the Works the contractor shall render assistance to the civil authorities to the best of his ability.

Sub-Clause 20.4 Employer's Risks

Amend Sub-Clause 20.4 to read as follows:

The Employer's risks are:

- (a) insofar as they directly affect the execution of the Works in the country where the Permanent Works are to be executed:
 - (i) war and hostilities (whether war be declared or not), invasion, act of foreign enemies;
 - (ii) rebellion, revolution, insurrection, or military or usurped power. or civil war;
 - (iii) ionizing radiations, or contamination by radioactivity from any nuclear fuel, or from any nuclear waste from the combustion of nuclear fuel, radioactive, toxic, explosive or other hazardous properties of any explosive nuclear assembly or nuclear component thereof:
 - (iv) pressure waves caused by aircraft or other aerial devices travelling at sonic or supersonic speeds;

- (v) riot, commotion or disorder, unless solely restricted to the employees of the Contractor or of his Subcontractors and arising from the conduct of the Works;
- (b) 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;
- (c) 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
- (d) any operation of the forces of nature (insofar as it occurs on the Site) which an experienced contractor:
 - (i) could not have reasonably foreseen, or
 - (ii) could reasonably have foreseen, but against which he could not reasonably have taken at least one of the following measures:
 - (A) prevent loss or damage to physical property from occurring by taking appropriate measures, or
 - (B) insure against such loss or damage.

Sub-Clause 21.1 Insurance of Works and Contractor's Equipment

Add the following words at the end of subpara. (a) and immediately before the last word of subpara. (b) of Sub-Clause 21.1:

"It being understood that such insurance shall provide for compensation to be payable in the types and proportion of currencies required to rectify the loss or damage incurred."

Sub-Clause 21.2 Scope of Cover

Amend subpara. (a) of Sub-Clause 21.2 by deleting the words "from the start of work at the Site" and by substituting therefor the words "from the first working day after the Commencement Date."

Add the following as Sub-Clause (c) under Sub-Clause 21.2:

(c) It shall be the responsibility of the Contractor to notify the insurance company of any change in the nature and extent of the Works and to ensure the adequacy of the insurance coverage at all times during the period of the Contract.

Sub-Clause 21.4 Exclusions

Amend Sub-clause 21.4 to read as follows:

"There shall be no obligation for the insurances in Sub-Clause 21.1 to include loss or damage caused by the risks listed under Sub-Clause 20.4 subparas. (a) (i) to (v) of the Conditions of Particular Application".

Sub-Clause 24.3 Workmen Compensation Act

Add the following to Sub-Clause 24.3:

In every case by virtue of the provisions of any applicable Bangladesh Workmen's Compensation Act, the Employer is obliged to pay compensation to any workman employed by the Contractor in execution of the Works, the employer will recover from the Contractor the amount of the compensation so paid, and, without prejudice to the rights of the Employer under the provisions of the said Act, the Employer shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due to the contractor whether under this contract or otherwise. The Employer shall not be bound to contest any claim made against it under the said Act, except on the written request of the Contractor and upon his giving to the Employer full security for all costs for which the Employer might become liable in consequence of contesting such claim.

Sub-Clause 28.2 Royalties

Add second sentence as follows:

"The Contractor shall also be liable for all payments or compensation, if any levied in relation to the dumping of part or all of any such materials."

Add the following Sub-Clauses 29.2 to 29.4:

Sub-Clause 29.2 Waterway Obstructions

Should any plant (floating or otherwise) belonging to or hired by the Contractor or any sub-contractor or any person employed by the contractor or by any sub-contractor or any materials or things therein sink from any cause whatsoever it shall immediately be reported by the contractor to the competent authorities and the Engineer, and the Contractor shall forthwith and with dispatch at his own cost raise and remove any such plant, material or things or otherwise deal with the same as the Engineer or the competent authorities may direct.

The fact that such sunken plant, materials or things are insured or have been declared a total loss or do not represent any further value shall not absolve the Contractor from his obligations under this Clause to raise and remove the same.

Sub-Clause 29.3 Lights, Markers and Buoys

Until such sunken plant and material or things have been raised and removed the Contractor shall set such buoys and display at night such lights and do all such things for the safety of others as may be required by the competent authorities or by the Engineer.

Sub-Clause 29.4 Contractor Liable

In the event of the Contractor not carrying out the obligations imposed on him by this Clause, the Employer may buoy and light such plant and raise and remove the same without prejudice to the right of the Employer to hold the Contractor liable and all expenses consequent thereon and incidental there to shall be borne by the Contractor and shall be recoverable from him (as a debt) by the Employer or may be deducted by the Employer from any money due or which may become due to the Contractor.

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Sub-Clause 33.2 Clearance of Contractors

Add the following to Sub-Clause 33.2:

On or before expiry of the Defects Liability Period the Contractor shall clear away all his temporary facilities including but not limited to offices, camps, storage and holding yards, workshops, crushing and mixing plant, diversion and haul roads so that the land is returned to at least its previous condition and, in the case of agricultural land, potential productivity. Clearance shall include but not be limited to tasks such as the removal of unwanted structures, removal of metallic and concrete debris, removal and disposal of any soil contaminated by diesel, bitumen or other polluting material, ripping to relieve compaction, grading, replacement of topsoil, and turfing and grassing, as appropriate. Where improvements have been made such as land filling or installation of boreholes or construction of boat landing these may be retained subject to the agreement of the landowner. The Employer reserves the right to inspect the site of any facilities established or used by the Contractor in connection with the Works and to undertake any corrective measures necessary to restore the land, and to recover the cost from monies due or to become due to the Contractor.

Add the following Sub-Clauses 34.2 to 34.12:

Sub-Clause 34.2 Rates of Wages and Conditions of Labor

The Contractor shall pay rates of wages and observe conditions of labor not less favorable than those established for the trade or industry where the work is carried out. In the absence of any rates of wages or conditions of labor so established, the Contractor shall pay rates of wages and observe conditions of labor which are not less favorable than the general level of wages and conditions observed by other employers whose general circumstances in the trade or industry in which the Contractor is engaged are similar.

Sub-Clause 34.3 Employer of Persons in Service

The Contractor shall not recruit or attempt to recruit his staff and labor from among persons in the service of the Employer or the Engineer.

Sub-Clause 34.4 Repatriation of Labor

The Contractor shall be responsible for the return to the place where they were recruited or to their domicile of all such persons as he recruited and employed for the purpose of or in connection with the Contract and shall maintain such persons as are to be so returned in a suitable manner until they shall have left the Site or in the case of persons who are not nationals of and have been recruited outside Bangladesh, shall have left Bangladesh.

Sub-Clause 34.5 Housing for Labor

Save insofar as the Contract otherwise provides, the Contractor shall provide and maintain such accommodation and amenities as he may consider necessary for all his staff and labor, employed for the purpose of or in connection with the Contract, including all fencing, water supply (both for drinking and other purposes), electricity supply, sanitation, cookhouses, fire prevention and fire

fighting equipment, air conditioning, cookers, refrigerators, furniture, and other requirements in connection with such accommodation or amenities. On completion of the Contract, unless otherwise agreed with the Employer, the temporary camps or housing provided by the Contractor shall be removed and the site reinstated to its original condition, all to the approval of the Engineer.

Sub-Clause 34.6 Accident Prevention Officer; Accidents

The Contractor shall have on his staff on Site an officer dealing only with questions regarding the safety and protection against accidents of all staff and labor. This officer shall be qualified for this work and shall have the authority to issue instructions and shall take protective measures to prevent accidents.

Sub-Clause 34.7 Health and Safety

Due precautions shall be taken by the Contractor, and at his own cost, to ensure the safety of his staff and labor and, in collaboration with and to the requirements of the local health authorities, to ensure that medical staff first aid equipment and stores, sick bay and suitable ambulance service are available at the camps, housing, and on the Site at all times throughout the period of the Contract and that suitable arrangements are made for the prevention of epidemics and for all necessary welfare and hygiene requirements. Such arrangements shall include provision of insect screens and education in health and safety.

Sub-Clause 34.8 Epidemics

In the event of any outbreak of illness of an epidemic nature, the Contractor shall comply with and carry out such regulations orders, and requirements as may be made by the Government or the local medical or sanitary authorities for the purpose of dealing with and overcoming the same.

Sub-Clause 34.9 Alcoholic Liquor or Drugs

The Contractor shall not, otherwise than in accordance with the Statutes, Ordinances, and Government Regulations or Orders for the time being in force, import, sell, give, barter, or otherwise dispose of any alcoholic liquor or drugs, or permit or suffer any such importation, sale, gift, barter, or disposal by his subcontractors, agents, staff, or labor.

Sub-Clause 34.10 Arms and Ammunition

The Contractor shall not give, barter, or otherwise dispose of to any person or persons any arms or ammunition of any kind or permit or suffer the same as aforesaid.

Sub-Clause 34.11 Festival and Religious Customs

The Contractor shall, in all dealings with his staff and labor, have due regard to all recognized festivals, days of rest, and religious and other customs.

Sub-Clause 34.12 Disorderly Conduct

The Contractor shall at all times take all reasonable precautions to prevent any unlawful, riotous, or disorderly conduct by or among his staff and labor and take all reasonable precautions for the preservation of peace and protection of persons and property in the neighborhood of the Works against the same. Disorderly conduct shall include harvesting of natural resources such as firewood or fish to the detriment of pre-existing conditions.

Add the following Sub-Clauses 35.2 and 35.3:

Sub-Clause 35.2 Records of Safety and Health

The Contractor shall maintain such records and make such reports concerning safety, health and welfare of persons and damage to property as the Engineer may from time to time prescribe.

Sub-Clause 35.3 Reporting of Accidents

The Contractor shall report to the Engineer details of any accident as soon as possible after its occurrence. In the case of any fatality or serious accident, the contractor shall, in addition, notify the Engineer immediately by the quickest available means.

Sub-Clause 44.1 Extension of Time for Completion

Add the following to Sub-Clause 44.1(c):

"The project area experiences adverse weather, storms, fog/mist, and river flood. The Contractor will have considered these conditions in his bid and the Works Programme shall be developed considering probable loss of time due to adverse conditions. It will be the obligation of the Contractor to revise his works programme and enhance his construction efforts from time to time to ensure completion of the entire work in time to meet the target for each working season."

Sub-Clause 45.1 Restriction on Working Hours

Add third sentence as follows:

"Provided also that the Contractor shall have the option to work continuously by day and by night and on locally recognized holidays or days of rest in respect of dredging work and also on piling work with the prior approval of the Engineer. The normal working week shall be considered to be Sunday to Thursday inclusive. Normal day working hours shall be considered to be 7.00 AM to 7.00 PM. If approval is given by the Engineer for works to proceed outside normal work days and hours, it may be conditional upon any related additional supervision costs being borne by the Contractor. Refer also to Sub-Clause 46.1."

Add the following Sub-Clause 49.5:

Sub-Clause 49.5 No remedying of defects in dredging work after Completion

Not withstanding Sub-Clause 49.2, the Contractor shall have no responsibility for the remedying of defects, shrinkages or other faults in respect of dredging work after the date stated in the Taking -Over Certificate.

Sub-Clause 52.1 Valuation of Variations

Add final sentences as follows:

"Where the Contract provides for the payment of the Contract Price in more than one currency, and varied work is valued at, or on the basis of, the rates and prices set out in the Contract, payment for such varied work shall be made in the proportions of various currencies specified in the Appendix to Bid for payment of

the Contract Price. Where the Contract provides for payment of the Contract Price in more than one currency, and new rates or prices are agreed, fixed, or determined as stated above, the amount or a proportion payable in each of the applicable currencies shall be specified when the rates or prices are agreed, fixed, or determined, it being understood that in specifying these amounts or proportions the Contractor and the Engineer (or, failing agreement, the Engineer) shall take into account the actual or expected currencies of cost (and the proportions thereof) of the inputs of the varied work without regard to the proportions of various currencies specified in the Appendix to Bid for payment of the Contract Price."

Sub-Clause 52.2 Power of Engineer to Fix

Rates

Add a final sentence to the first paragraph, as follows:

"Where the Contract provides for the payment of the Contract Price in more than one currency, the amount or proportion payable in each of the applicable currencies shall be specified when the rates or prices are agreed, fixed, or determined as stated above, it being understood that in specifying these amounts or proportions the Contractor and the Engineer (or, failing agreement, the Engineer) shall take into account the actual or expected currencies of cost (and the proportions thereof) of the inputs of the varied work without regard to the proportions of various currencies specified in the Appendix to Bid for payment of the Contract Price."

Add as a third paragraph:

"Provided further that no change in the rate or price for any item contained in the Contract shall be considered unless such item accounts for an amount more than 2 percent of the Contract Price, and the actual quantity of work executed under the item exceeds or falls short of the quantity set out in the Bill of Quantities by more than 25 percent."

Sub-Clause 52.3 Variations Exceeding 15 Percent

Add a final sentence as follows

"Where the Contract provides for the payment of the Contract Price in more than one currency, the amount or proportion payable in each of the applicable currencies shall be specified when such further sum is agreed or determined it being understood that in specifying these amounts or proportions the Contractor and the Engineer (or, failing agreement, the Engineer) shall take into account the currencies (and the proportions thereof) in which the Contractor's Site and general overhead cost of the Contract were incurred without being bound by the proportions of various currencies specified in the Appendix to Bid for payment of the Contract Price."

Clause 60 Certificates and Payment

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Clause 60 of the General Conditions is deleted and the following Sub-Clauses 60.1 to 60.14 are substituted therefore:

Sub-clause 60.1 Monthly Statements

The Contractor shall submit six copies of a statement to the Engineer at the end of each month, in a tabulated form approved by the Engineer, showing, the amounts to which the Contractor considers himself to be entitled. The statement shall include the following items, as applicable which shall be taken into account in the sequence listed:

- (a) the estimated Contract value of the Temporary and Permanent Works executed up to the end of the month in question, determined in accordance with Sub-Clause 56.1, at the unit rates and prices included in the Contract, in local currency;
- (b) the actual value certified for payment for the Temporary and Permanent Works executed up to the end of the previous month, at the unit rates and prices included in the Contract, in local currency:
- (c) the estimated Contract value at the unit rates and prices included in the Contract of the Temporary and Permanent Works for the month in question, in local currency obtained by deducting (b) from (a);
- (d) the equivalent of the amount set forth in (c), expressed in the various currencies in which the Contract Price is payable, and calculated by applying the proportions and the exchange rates set forth in the Appendix to Bid to the amount set forth in (c);
- (e) the value of any variations executed up to the end of the month in question, less the amount certified in the previous Interim Payment Certificate, expressed in the relevant amount of foreign and local currencies, pursuant to Clause 52;
- (f) amounts approved in respect of Daywork executed up to the end of the month in question, less the amount for Daywork certified in the previous Interim Payment Certificate, indicating the amounts of foreign and local currencies as determined from the Daywork Schedule of the Bill of Quantities;
- (g) amounts reflecting changes in cost and legislation, pursuant to Clause 70, expressed in the relevant amounts of foreign and local currencies;
- (h) any credit or debit for the month in question in respect of materials and Plant for the Permanent Works, in the relevant amounts, in foreign and local currencies and under the conditions set forth in Sub-Clause 60.3;
- (i) any amount to be withheld under the retention provisions of Sub-Clause 60.5, determined by applying the percentage set forth in Sub-Clause 60.5 to amounts in foreign and local currencies due under paragraphs 60.1 (d), (e), (f), and (g);

- (j) any amounts to be deducted as repayment of the Advance Mobilization Loan under the provisions of Sub-Clause 60.7; and
- (k) any other sum, expressed in the applicable currency or currencies, to which the Contractor may be entitled under the Contract or otherwise.

Sub-Clause 60.2 Monthly Payments

The said statement shall be approved or amended by the Engineer in such a way that, in his opinion, it reflects the amounts in various currencies due to the Contractor in accordance with the Contract, after deduction, other than pursuant to Clause 47, of any sums which may have become due and payable by the Contractor to the Employer. In cases where there is a difference of opinion as to the value of any item, the Engineer's view shall prevail. Within 28 days of receipt of the monthly statement referred to in Sub-Clause 60.1, the Engineer shall determine the amount due to the Contractor and shall deliver to the Employer and the Contractor an Interim Payment Certificate, certifying the amounts due to the Contractor.

Provided that the Engineer shall not be bound to certify any payment under this sub-clause if the net amount thereof, after all retentions and deductions, would be less than the Minimum Amount of Interim Payment Certificates stated in the Appendix to Bid. However, in such case, the unpaid certified amount will be added to the next interim payment, and the cumulative unpaid certified amount will be compared to the minimum amount of interim payment.

Notwithstanding the terms of this clause or any other clause of the Contract, no amount will be certified by the Engineer for payment until the performance security has been provided by the Contractor and approved by the Employer.

Sub-Clause 60.3 Materials and Plant for the Permanent Works

With respect to materials and Plant brought by the Contractor to the Site for incorporation in the Permanent Works, the Contractor shall (a) receive a credit in the month in which these materials and Plant are brought to the Site and (b) be charged a debit in the month in which they are incorporated in the Permanent Works, both such credit and debit to be determined by the Engineer in accordance with the following provisions:

- (a) no credit shall be given unless the following conditions shall have been met to the Engineer's satisfaction:
 - (i) The materials and Plant are in accordance with the specifications for the Works;
 - (ii) The materials and Plant have been delivered to the Site and are properly stored and protected against loss, damage, or deterioration;
 - (iii) The Contractor's records of the requirements, orders, receipts and

use of materials and Plant are kept in a form approved by the Engineer, and such records are available for inspection by the Engineer;

- (iv) The Contractor has submitted a statement of his cost of acquiring and delivering the materials and Plant to the Site, together with such documents as may be required for the purpose of evidencing such cost;
- (v) The origin of the materials and Plant and the currencies of payment therefore are those indicated in the Appendix to Bid; and
- (vi) The materials are to be used within a reasonable time.
- (b) the amount to be credited to the Contractor shall be the equivalent of 75 percent of the Contractor's reasonable cost of the materials and Plant delivered to the Site, as determined by the Engineer after review of the documents listed in subpara. (a) (iv) above;
- (c) the amount to be debited to the Contractor for any materials and Plant incorporated into the Permanent Works shall be equivalent to the credit previously granted to the Contractor for such materials and Plant pursuant to Sub-Clause 60.3 (b) above, as determined by the Engineer;
- (d) the currencies in which the respective amounts shall be credited or debited as set forth above shall be determined by the Engineer.

Sub-Clause 60.4 Place of Payment

Payments to the Contractor by the Employer shall be made in the currencies in which the Contract Price is payable into a bank account or accounts nominated by the Contractor.

Sub-Clause 60.5 Retention Money

A retention amounting to the percentage stipulated in the Appendix to Bid of the amounts due in each currency, determined in accordance with the procedure set out in Sub-Clause 60.1(i) shall be made by the Engineer in the first and following Interim Payment Certificates.

Sub-Clause 60.6 Payment of Retention Money

Upon the issue of the Taking-Over Certificate with respect to the whole of the Works, one half of the Retention Money, or upon the issue of a Taking-Over Certificate with respect to a Section or part of the Permanent Works only such proportion thereof as the Engineer determines having regard to the relative value of such Section or part of the Permanent Works, shall be certified by the Engineer for payment to the Contractor. The Contractor may substitute the remaining retention money with an on-demand bank guarantee in a form, and from a source, acceptable to the Employer.

Upon the expiration of the Defects Liability Period for the Works, the other half

of the Retention Money shall be certified by the Engineer for payment to the Contractor (or return of the remaining security, which replaced the Retention Money). Provided that, in the event of different Defects Liability Periods being applicable to different Sections or parts of the Permanent Works pursuant to Clause 48, the expression "expiration of the Defects Liability' Period" shall, for the purpose of this sub-clause, be deemed to mean the expiration of the latest of such periods.

Provided also that if at such time, there small remain to be executed by the Contractor any work instructed, pursuant to Clauses 49 and 50, in respect of the Works, the Engineer shall be entitled to withhold certification until completion of such work, an amount of Retention Money as shall, in the opinion of the Engineer, represent the cost of the work remaining to be executed.

Sub-Clause 60.7
Advance Payment

The Employer will make an interest-free advance payment to the Contract or exclusively for the costs of mobilization in respect of the Works in an amount named in the Letter of Acceptance, payable in the proportions of foreign and local currencies of the Contract Price, but in no event exceeding the amount stated in the Appendix to Bid. Payment of such advance amount will be due under separate certification by the Engineer after (a) execution of the Form of Agreement by the parties hereto; (b) provision by the Contractor of the performance security in accordance with Sub-Clause 10.1; and (c) provision by the Contractor of an unconditional bank guarantee in a form and by a bank acceptable to the Employer in amounts and currencies equal to the advance payment. Such bank guarantee shall remain effective until the advance payment has been repaid pursuant to the paragraph below, but the amount thereof shall be progressively reduced by the amount repaid by the Contractor as indicated in Interim Payment Certificates issued in accordance with this Clause No deductions of Income Taxes or VAT or Retention Money will be made on this mobilization loan as it is simply a loan and it will be fully recoverable during the period as mentioned below.

The advance payment shall be repaid through percentage deductions from the Interim Payments Certified by the Engineer in accordance with this Clause. Deductions shall commence in the next Interim Payment Certificate following that in which the total of all interim payments certified to the Contractor has reached the percentage of the Contract Price stipulated in the Appendix to Bid less Provisional Sums, and shall be made at the rate stated in the Appendix to Bid of the amount of all Interim Payment Certificates in the types and proportionate amounts of currencies of the advance payment until such time as the advance payment has been repaid; always provided that the advance payment shall be completely repaid prior to the time when 80 percent of the Contract Price has been certified for payment.

Sub-Clause 60.8 Time for Payment and Interest The amount due to the Contractor under any Interim Payment Certificate issued by the Engineer pursuant to this Clause, or to any other term of the Contract,

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shall, subject to Clause 47, be paid by the Employer to the Contractor within 56 days after the Contractor's monthly statement has been submitted to the Engineer or certification or, in the case of the Final Payment Certificate pursuant to Sub-Clause 60.13 within 84 days after the Final Statement and written discharge have been submitted to the Engineer for certification. In the event of the failure of the Employer to make payment within the times stated, the Employer shall pay to the Contractor interest compounded monthly at the rate of 12% per annum upon all sums unpaid from the date upon which the same should have been paid, in the currencies in which the payments are due. The provisions of this Sub-Clause are without prejudice to the Contractor's entitlement under Clause 69 or otherwise.

Sub-Clause 60.9 Correction of Certificates

The Engineer may by any Interim Payment Certificate make any correction or modification in any previous Interim Payment Certificate which has been issued by him, and shall have authority, if any work is not being carried out to his satisfaction, to omit or reduce the value of such work in any Interim Payment Certificate.

Sub-Clause 60.10 Statement at Completion

Not later than 84 days after the issue of the Taking-Over Certificate in respect of the whole of the Works, the Contractor shall submit to the Engineer six copies of a statement at Completion with supporting documents showing in detail, in the form approved by the Engineer:

- (a) the final value of all work done in accordance with the Contract up to the date stated in such Taking-Over Certificate;
- (b) any further sums which the Contractor considers to be due; and
- (c) an estimate of amounts which the Contractor considers will become due to him under the Contract.

Estimated amounts shall be shown separately in such Statement at Completion. The Engineer shall certify payment in accordance with Sub-Clause 60.2.

Sub-Clause 60.11 Final Statement

Not later than 56 days after the issue of the Defects Liability Certificate pursuant to Sub-Clause 62.1, the Contractor shall submit to the Engineer for consideration six copies of a draft final statement with supporting documents showing in detail, in the form approved by the Engineer:

- (a) the value of all work done in accordance with the Contract; and
- (b) any further sums which the Contractor considers to be due to him under the Contract or otherwise.

If the Engineer disagrees with or cannot verify any part of the draft final statement, the Contractor shall submit such further information as the Engineer

may reasonably require and shall make such changes in the draft as may be agreed between them. The Contractor shall then prepare and submit to the Engineer the final statement as agreed (for the purpose of these Conditions referred to as the "Final Statement").

If, following discussions between the Engineer and the Contractor and any changes to the draft final statement which may be agreed between them, it becomes evident that a dispute exists, the Engineer shall deliver to the Employer an Interim Payment Certificate for those parts of the draft final statement, if any, which are not in dispute. The dispute shall then be settled in accordance with Clause 67. The Final Statement shall be the agreed upon settlement of the dispute.

Sub-Clause 60.12 Discharge

Upon submission of the Final Statement, the Contractor shall give to the Employer, with a copy to the Engineer, a written discharge confirming that the total of the Final Statement represents full and final settlement of all monies due to the Contractor arising out of or in respect of the Contract. Provided that such discharge shall become effective only after payment due under the Final Payment Certificate issued pursuant to Sub-Clause 60.13 has been made and the performance security referred to in Sub-Clause 10.1 has been returned to the Contractor.

Sub-Clause 60.13 Final Payment Certificate

Within 28 days after receipt of the Final Statement, and the written discharge the Engineer shall deliver to the Employer (with a copy to the Contractor) a Final Payment Certificate stating:

- (a) the amount which, in the opinion of the Engineer, is finally due under the Contract or otherwise; and
- (b) after giving credit to the Employer for all amounts previously paid by the Employer and for all sums to which the Employer is entitled, other than under Clause 47, the balance, if any, due from the Employer to the Contractor or from the Contractor to the Employer as the case may be.

Sub-Clause 60.14 Cessation of Employer's Liability

The Employer shall not be liable to the Contractor for any matter or thing arising out of or in connection with the Contract or execution of the Works, unless the Contractor shall have included a claim in respect thereof in his Final Statement and (except in respect of matters or things arising after the issue of the Taking-Over Certificate in respect of the whole of the Works) in the Statement at Completion referred to in Sub-Clause 60.10.

Sub-Clause 62.1 Defects Liability Certificate

Delete the last sentence: "Provided that ———— set out in Sub-Clause 60.3."

Add the following sentence:

"The Defects Liability Certificate shall not be issued until the written warranties

guarantees specified in the Contract have been furnished to the Engineer in an acceptable form."

Sub-Clause 63.1 Default of Contractor

Delete the last paragraph of this Sub-Clause and substitutes:

"then the Employer may, after giving 14 day's notice to the Contractor, enter upon the Site and expel the Contractor therefrom without thereby voiding the Contract, or releasing the Contractor from any of his obligations or liabilities under the Contract, or affecting the rights and powers conferred on the Employer or the Engineer by the Contract, and may himself complete the Works or may employ any other contractor to complete the Works. The Employer or such other contractor may use for such completion so much of the Contractor's Equipment, Plant, Temporary Works, and materials, which have been deemed to be reserved exclusively for the execution of the Works, under the provisions of the Contract, as he or they may think proper, and the Employer may, at any time, sell any of the said Contractor's Equipment. Temporary Works, and unused Plant and materials, and apply the proceeds of sale in or towards the satisfaction of any sums due or which may become due to him from the Contractor under the Contract."

Sub-Clause 63.2 Valuation at Date of Expulsion

Alter the heading of Sub-Clause 63.2 by substituting "Valuation at Date of Expulsion" for "Valuation at Date of Termination". In Sub-Clause 63.2, delete the word "termination" on the second and fifth lines and substitute "expulsion".

Sub-Clause 63.3 Payment after Expulsion

Alter the heading of Sub-Clause 63.3 by substituting "Payment after Expulsion" for "Payment after Termination". In Sub-Clause 63.3, delete the words "terminates the Contractor's employment" on the first line, and substitute "shall enter and expel the Contractor".

Sub-Clause 63.4 Assignment of Benefit of Agreement

In Sub-Clause 63.4, delete the word "termination" on the second line, and substitute "expulsion".

Sub-Clause 65.2 Special Risks

Amend Sub-Clause 65.2 to read as follows: "The Special Risks are the risks defined under para. (a), subparas. (i) to (v) of Sub-Clause 20.4".

Sub-Clause 68.2 Notice to Employer and Engineer

For the purpose of this Sub-Clause the respective addresses are

- (a) The Employer's: The Chief Engineer, Roads and Highways Department, Representative Sarak Bhaban, Ramna, Dhaka.
- (b) The Engineer: The Project Director, Rupsa Bridge Construction Project, Roads and Highways Department.

Clause 69

Default of Employer

In Sub-Clause 69.1, 69.4 and 69.5, substitute "Sub-Clause 60.8" for "Sub-Clause 60.10".

Sub-Clause 69.3

Payment on Termination Delete all words following "Clause 65".

Sub-Clause 69.4

Contractor's Entitlement to Suspend Work Add the following paragraph:

"Without prejudice to the Contractor's entitlement to interest under Sub-Clause 60.10 and to terminate under Sub-Clause 69.1, the Contractor may suspend work or reduce the rate of work within 56 days after notification by the JBIC to the Employer's government that the JBIC has suspended disbursements from its loan, which finances in whole or in part the execution of the Works."

Add the following Sub-Clause 69.6:

Sub-Clause 69.6 Suspension of JBIC Loan In the event the JBIC suspends the loan to the Employer from which part of the payments to the Contractor are being made.

- (a) The Employer is obligated to notify the Contractor of such suspension within 7 days of having received the suspension notice from the JBIC.
- (b) If the Contractor has not received sums due to him upon the expiration of the 42 days for payment provided for in Sub-Clause 60.8, the Contractor may immediately issue a 14-day termination notice

Clause 70
Changes in Cost and Legislation

Delete Sub-Clauses 70.1 and 70.2 in their entirety, and substitute the following:

Sub-Clause 70.1
Price Adjustment

The amount payable to the Contractor and valued at based rates and prices in the Interim Payment Certificates issued by the Engineer pursuant to Sub-Clause 60.1 shall be adjusted in respect of the rise or fall in the indexed costs of labor, fuel, materials and other inputs to the Works, by the application of a price adjustment factor (p) determined by formula as prescribed in this Clause. However, the factor shall deem to be equal to one unless the calculated value of (p) is greater or smaller than one by at least 5% (five percent).

Sub-clause 70.2 Other Changes in Cost To the extent that full compensation for any rise or fall in costs to the Contractor is not covered by the provisions of this or other clauses in the Contract, the unit rates and prices included in the Contract shall be deemed to include amounts to cover the contingency of such other rise or fall of costs.

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Sub-Clause 70.3 Adjustment Formulae

The adjustment to the Interim Payment Certificates in respect of changes in Cost shall be determined from separate formulae as described below.

The Price Adjustment Factor (p) shall be determined by the following formula of general type:

p = X + a. LL/LL⁰ + b. FU/FU⁰ + e. BI/BI⁰ + d. CE/CE⁰ + e. RS/RS⁰ + f. ST/ST⁰ + g. BR/BR⁰ + h. MI/MI⁰

Where:

X is a fixed coefficient representing a non-adjustable portion in contractual payments, a, b, c, etc., are the weightings (coefficients) representing the estimated proportion of each cost element (labor, fuel, materials and other inputs to the Works) in relation to the Engineer's estimate of cost of the Works (net of Provisional Sums), and are detailed in Sub-Clause 70.3 hereof;

LL, FU, BI, CE, RS, ST, BR and MI are the current cost indices or prices applicable respectively to the elements of local labor, fuel, bitumen, cement, reinforcing steel, stone, bricks and miscellaneous expenditure at the specified time prior to the date of the payment under certification for adjustment; and LL^o, FU^o, B1^o, etc. are the base cost indices or prices corresponding to LL, FU, BI, etc. at the time prior to the date of submission of tenders specified in paragraph 70.6.

Sub-Clause 70.4 Sources of Indices And Weightings

The sources of indices shall be as follows:

Local labor (LL): the Nominal Wage Rate indices of construction labor in **Table 2.5** of Monthly Statistical Bulletin of Bangladesh (refer July 1998 Bulletin updated from time to time), published by the Bangladesh Bureau of Statistics (BBS), Ministry of Planning, Government of Bangladesh.

Fuel (FU): the official selling price of the authorized dealer of the Eastern Refineries of High Speed Diesel (HSD) at the fuel depot in Chittagong is to be used.

Bitumen (BI): The official index of the cost of 60/70 pen grade bitumen published by the appropriate authority in the Supplier's country. In cases where official index of such bitumen is not available or Bangladesh made bitumen is used, the cost of the authorized dealer of the Eastern Refineries for bitumen of 60/70 pen grade at Chittagong depot is to be used.

Cement (CE): The average wholesale price of local cement at Dhaka published by BBS in **Table 3.6** of Monthly Statistical Bulletin of Bangladesh (refer July 1998 Bulletin updated from time to time).

Reinforcing Steel (RS): The average wholesale price of Iron rods (10 mm or 3 suta) at Dhaka as published in **Table 3.6** of Monthly Statistical Bulletin of Bangladesh. The indices of steel bars of different diameter and prestressing steel tendons shall be taken the same as that of 10mm diameter bars.

Stone (ST): The average wholesale price of superior quality stone/boulders at Chattak, Sylhet published by BBS in **Table 3.6** of Monthly Statistical Bulletin of Bangladesh. The indices for stone/boulder 75mm-200mn diameter shall be taken for all stone sizes. If suitable indices for stone from other approved sources are not published or are not considered acceptable by the Engineer, the indices of Chattak, Sylhet shall prevail.

Bricks (BR): The average wholesale price of bricks 250mm (first class) for Dhaka, as published by BBS in **Table 3.6** of Monthly Statistical Bulletin of Bangladesh.

Miscellaneous Expenditure (MI): The price indices of Building Materials (base 1969-1970 = 100) published by BBS in **Table 3.5** of Monthly Statistical Bulletin of Bangladesh (refer July 1998 Bulletin updated from time to time).

Sub-Clause 70.5
Base, Current and
Provisional Indices

The official indices in respect of bitumen and stone to be used in the prescribed price Adjustment Formula shall be subject to approval by the Engineer. These indices shall be appropriate for their purpose and shall relate to the Contractor's proposed source of supply of bitumen and stone inputs on the basis of which his contract price and expected foreign currency requirements shall have been computed. As the proposed basis for price adjustment for bitumen and stone, the contractor shall have submitted with his tender:

- (i) Details of any proposed index from outside Bangladesh, including the latest values of official or provisional base indices; and
- (ii) Official publication showing the values of the proposed indices as available during the 12 months preceding the closing date for submission of tender.

Sub-Clause 70.6 Adjustment after Completion

The base cost indices or prices shall be those prevailing 28 days prior to the closing date for submission of Bids. Current indices or prices shall be those prevailing 28 days prior to the last day of the period to which a particular Interim Payment Certificate or completed work item is related, If at any time the current indices are not available, provisional indices as determined by the Engineer will be used, subject to subsequent correction of the amount paid to the Contractor when the current indices become available.

Sub-Clause 70.7 Weightings

With reference to Sub-Clause 70.3, the following weightings shall be used in calculating the Price Adjustment Factors to be applied to the respective portions of the adjustable amounts for work executed under the various Bills of Quantities:

The weightings in the formula may be adjusted if in the opinion of the Engineer, the weightings are rendered unreasonable, unbalanced or inapplicable as a result of changes in the methods of work or as a result of varied or additional work already executed or ordered under Clause 51, or for any other reason. The decision of the Engineer will be final and binding to the Contractor.

Bill No.	Description	Coeffi- cient	Weighting Factors for each Cost Element								
		X	a	ь	С	d	е	f	g	h	Total
1 .	General and Preliminary	0.25	0.16	0.20	-	0.03	•	0.01	0.05	0.30	1.00
2	Site Investigation	0.25	0.20	0.10	104	g at 🗕 🐔	-	-	-	0.45	1.00
3	Main Bridge Substructure	0.25	0.05	0.01	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	0.20	0.30	0.12	-	0.07	1.00
4	Main Bridge Superstructure	0.25	0.08	0.02		0.10	0.41	0.06	, -	0.08	1.00
5	Approach Br. Substructure	0.25	0.05	0.01	•	0.20	0.30	0.12	-	0.07	1.00
6	Approach Br. Superstructure	0.25	0.08	0.02	-	0.10	0.41	0.06	•	0.08	1.00
7 8	Hatia Canal Bridge Molonghata Canal Bridge	0.25	0.10	0.05		0.16	0.15	0.15	0.02	0.12	1.00
9 10	River Revetment Pier Protection Works	0.25	0.14	0.17	•			0.20		0.24	1.00
11	Box Culverts	0.25	0.10	0.05	12 to 2	0.16	0.15	0.15	0.02	0.12	1.00
12	Road Construction	0.25	0.10	0.08	0.05	38 (- 5)	. -	0.16	0.17	0.19	1.00
13	Electrical & Utility Service	0.25	0.22	0.08		·= · .	<u>-</u>	· -	-	0.45	1.00
14	Dsyworks & Provisional Sums	0.25	0.10	0.05	-	0.16	0.15	0.15	0.02	0.12	1.00

Sub-Clause 70.8
Subsequent
Legislation

The adjustable amount of each Interim Payment Certificate shall be the difference between (i) the amount which in the opinion of the Engineer, shall be due to the Contractor pursuant to Sub-Clause 60.1 (before deducting retention) including the amount at base rates and prices of the scheduled work carried out and Dayworks (unless otherwise adjusted) but excluding provisional sums and the value of materials on site, and (ii) the amount as calculated in (i) above and included in the last preceding Interim Payment Certificate issued by the Engineer. The adjustable amount shall exclude payments to nominated Sub-Contractors and any other amounts based upon actual cost or current prices.

Sub-Clause 70.9
Adjusted Amount

The adjusted amount of each Interim Payment Certificate shall be determined by applying the Price Adjustment Factor to the adjustable amount, and shall become payable to the Contractor in accordance with the provisions of Clause 60, subject to any deductions therefrom for retention money, liquidated damages, and any other monies due to the Employer from the Contractor including the recovery of advance mobilization loan, if any.

Sub-Clause 70.10
Adjustment after
Completion

If the Contractor shall fail to complete the works within the time for completion prescribed under Clause 43, adjustment of prices thereafter until the date of

completion of the Works shall be made using either the indices or prices relating to the prescribed time for completion, or the current indices or prices, whichever is more favorable to the Employer, provided that if an extension of time is granted pursuant to Clause 44 the above provision shall apply only to adjustments made after the expiry of such extension of time.

Sub-Clause 70.11 Change in Source and Currency

If the Contractor shall change the country of origin of the source of supply of any substantial input to the works, he shall immediately notify the Engineer who may modify the price adjustment provisions subsequent to such change to reflect the relevant cost index from the actual country. If the currencies in which the contract price is expressed are different from the currencies of the sources of the relevant indices, the Engineer shall determine the correction to be applied in calculating the Price Adjustment Factor in order to avoid distortions in the amount of price adjustment. Such correction shall be made by applying the factor Zo/Z to the relevant portion of the Price Adjustment Factor. Zo is the number of units of currency of the country of the index actually used equivalent, on the date of the base index, to one unit of the currency of the country of the index proposed in the Tender. Z is the corresponding number of such currency units on the date of the current index.

Sub-Clause 70.12 Subsequent Legislation

If, after the date 28 days prior to the latest date for submission of bids for the Contract, there occur in the country in which the works are being or are to be executed changes to any national or State Statue, Ordinance, Decree, or other Law or any regulation or by-law of any local or other duly constituted authority, or the introduction of any such State Statute, Ordinance, Decree, Law, regulation or by-law which causes additional or reduced cost to the Contract, other than under the proceeding Sub-clauses of this clause, in the Execution of the Contract, such additional or reduced cost shall, after due consultation with the Employer and the Contractor, be determined by the Engineer and shall be added to or deducted from the Contract Price and the Engineer shall notify the Contractor accordingly, with a copy to the Employer. Notwithstanding the foregoing, such additional or reduced cost shall not be separately paid or credited if the same shall already have taken into account in the indexing of any inputs to the Price Adjustment Formulae in accordance with the provisions of Sub-Clauses 70.1 to 70.11.

Sub-Clause 70.13 Items not included in Price Adjustment Calculation

The following items are not to be included in the price adjustment calculation:

- (a) Liquidated damages
- (b) Retention with-held and released
- (c) Advance payments in the form of loans and their repayments
- (d) The value of any additional or varied work valued at current price
- (e) Payment to "nominated" Sub-contractors included as "provisional sums" or prime cost items in the general cost.

Sub-Clause 72.2 Currency Proportions

Delete the words from "Central Bank of the Country in which the Works are to

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be executed" and substitute the following:

"Source stated in the Appendix to Bid".

After "prevailing", insert "for similar transactions".

Sub-Clause 72.4 Substantial Changes in Currency Requirements

The foreign and local currency portions of the balance of the Contract Price shall be amended by agreement between the Employer and the Contractor to reflect any substantial changes in the expected foreign and local currency requirements of the Contractor during the execution of the Works, provided that

- (a) the Contractor shall inform the Employer and the Engineer whenever any such substantial change may occur; or
- (b) the Engineer may recommend a review of such expected requirements if in his judgement there is evidence of a change in the country of origin of materials, Plant or services to be provided under the Contract which should result in any substantial change of such expected requirements.

Additional Clauses

Sub-clause 73.1 Foreign Taxation

The prices bid by the Contractor shall include all taxes, duties, and other charges imposed outside the Employer's country on the production, manufacture, sale, and transport of the Contractor's Equipment, Plant, materials, and supplies to be used on or furnished under the Contract, and on the services performed under the Contract.

Sub-Clause 73.2 Local Taxation

The prices bid by the Contractor shall include all customs duties, import duties, business taxes, and income and other taxes that may be levied in accordance with the laws and regulations in being on the date 28 days prior to the latest date for submission of bids in the Employer's country on the Contractor's Labor, Equipment, Plant, materials, and supplies (permanent, temporary, and consumable) acquired for the purpose of the Contract and on the services performed under the Contract. Nothing in the Contract shall relieve the Contractor from this responsibility to pay any tax that may be levied in the Employer's country on profits made by him in respect of the Contract. Value added tax (VAT) shall be applicable for the monies received for the Contracted work as per existing rules.

Deduction of income-tax and VAT shall be made from each certificate of payment as per the relevant provision of the Income-Tax Act and Sales Tax Acts or the rules framed thereunder as per the advice of the Tax Authorities.

The Contractor will be required to pay Duties and Taxes on imported Spares consumables, breakables and expendable items in cash at the time of clearance of

such goods as per existing custom rules.

The imported project materials shall be subject to payment of Customs Duty and Value Added Tax (CD/VAT etc.) by the importer/contractor or any other agency person of the Contractor at clearance stage.

Machinery, tools, implements and equipment imported for projects on reexportable basis will be allowed temporary importation facilities under Sections 35 and 36 of the Customs Act, 1969 and rules framed thereunder.

Expatriate Personnel (foreign experts and Consultants) who are direct employees of the donor agencies will be allowed the facilities and concessions admissible under SRO88-L/85/906/ Cus. dated 13.02.85 and SRO 89-L/85/907/ Cus dated 13.02.85. Other expatriate personnel in the project will not be entitled to the facilities, concessions, privileged person's status of customs pass book as mentioned in the above SRO's.

All supplies and services received or provided locally under the project will be subject to Domestic VAT etc., as per provisions of Act and Rules.

All equipment, vehicles, materials and supplies imported for the project shall be subject to advance income tax at the import stage as per income tax rule.

The Contractor should determine from the concerned authorities of the Government of Bangladesh any permissible relief on taxes and duties.

Sub-Clause 73.3 Income Taxes on Staff

The Contractor's staff and labor will be liable to pay personal income taxes in the Employer's country in respect of such of their salaries and wages as are chargeable under the laws and regulations for the time being in force, and the Contractor shall perform such duties in regard to such deductions thereof as may be imposed on him by such laws and regulations.

Sub-Clause 74.1 Custom Clearance The Contractor will be liable to pay all duties, port unloading, clearing and demurrage charges for any delay and inland transport charges in respect of all equipment, material and labor imported for the purpose of the Contract or reexported as applicable under the laws and regulations for the time being in force. The Employer will render its best endeavor in assisting the Contractor by giving necessary recommendations, where required, for obtaining clearance through the customs of the Contractor's equipment, materials etc., but the Employer will not in any case reimburse any sort of loss including time sustained by him due to the delay in custom clearance for any reason whatsoever.

Sub-Clause 75.1 Custom and Security Requirements

The Contractor shall comply with all regulations for the time being imposed by the Customs and Port Security Authorities in respect of the passage of plant, vehicles, equipment, materials, personnel, and any other articles etc. through custom barriers. The arrangement of adequate and proper security and protection of plant, vehicles, equipment, materials and any other articles from its arrival in the country to its safe transport to the project site shall be the sole responsibility of the Contractor and the Department will not in any case reimburse any loss sustained by him on this account. The Employer will render its best endeavor in assisting the Contractor by giving necessary recommendations where required for obtaining clearance through the customs of the Contractor's equipment, materials etc., but the Employer will not in any case reimburse any loss sustained by due to the delay in custom clearance for any reason whatsoever.

Sub-Clause 76.1 Contractor's Temporary Moorings

Should the Contractor for the purpose of the Contract desire to provide temporary moorings for his craft and floating plant, he will be allowed to do so in positions and manners approved by the Engineer. The Contractor shall not lay such moorings so as to interfere with traffic in the waterways and such moorings shall be removed if and when required by the Engineer.

Sub-Clause 77.1 Life Saving Appliances and First Aid Equipment

The Contractor shall provide and maintain upon the Works sufficient proper and efficient life saving appliances and first aid equipment to the approval of the Engineer and in accordance with the requirements of ILO Convention No. 62. The appliances and equipment shall be available for use at all times.

Sub-Clause 78.1 Use of Explosives

Except as may be provided in the Contract or ordered or authorized by the Engineer, the Contractor shall not use explosives. Where the use of explosives is so provided or ordered or authorized, the Contractor shall comply with the requirements of the following besides the law of the land as applicable:

- (a) The Contractor shall at all times take every possible precaution in and shall comply with the appropriate laws and regulations relating to the importation, handling, transportation, storage and use of explosives and shall at all times when engaged in blasting operations post sufficient warning flagmen to the full satisfaction of the Engineer.
- (b) The Contractor shall at all times make full liaison with and inform well in advance and obtain such permission as is required from all Government authorities, public bodies and private parties whatsoever concerned or affected or likely to be concerned or affected by blasting operations.
- (c) The Contractor shall pay all license fees and charges which may be required for storage or in respect of any other matter whatsoever.

Sub-Clause 79.1 Noise and Disturbance

All works shall be carried out without unreasonable noise and disturbance. The Contractor shall indemnify and keep indemnified the Employer from and against any liability for damages on account of noise or other disturbance created while or in carrying out the work and from and against all claims, demands, proceedings, damages, costs, charges and expenses whatever in regard or in relation to such liability.

Sub-Clause 80.1 Pollution

Subject and without prejudice to any other provision of the Contract and the law of the land and its obligations as applicable, the Contractor shall take all reasonable precautions:

- (a) In connection with the rivers streams, waterways, drains, watercourses, takes, reservoirs and the like to prevent:
 - (i) Silting
 - (ii) Erosion of their beds or banks
 - (iii) Pollution of the water so as to affect adversely the quality or appearance thereof or cause injury or death to animal and plant life.
- (b) in connection with underground water resources (including percolating water) to prevent:
 - (i) Any interference with the supply to or obstruction rein such sources.
 - (ii) Pollution of the water so as to affect adversely the quality thereof.

Sub-Clause 81.1 Sources of Materials

The responsibilities for arranging and procuring all materials from any approved source, including those from the site shall rest with the Contractor, who shall ensure smooth and timely supply of materials in adequate quantities required for the works.

The materials for embankment construction shall be obtained from areas approved by the Engineer. The Contractor shall arrange for the land at his own cost for borrowing embankment materials in acceptable quality and adequate quantity.

Similarly, the supply of stone aggregates for the works shall be from quarries approved by the Engineer. The responsibility for arranging uninterrupted supply of stone aggregate in acceptable quality from the approved sources shall be that of the Contractor.

The Contractor is responsible for determining the sources of bitumen, cement and steel supply. The Employer will not be responsible for any delays that result from the source that is chosen by the Contractor. If there is any scarcity of supply of Bangladeshi made bitumen, cement or steel no extension of time shall be allowed for this reason. In that case the Contractor shall have to arrange these materials for the requirement of the works from other sources to complete the work in time as per provision of the Contract.

Sub-Clause 82.1 Illegal Payments

If the Contractor, or any of his Subcontractors, agents or servants gives or offers to give to any person any payment, gift, gratuity or commission as an inducement or reward for doing or forbearing to do any action in relation to the Contract or any other contract with the Employer for showing or forbearing to show favor or

disfavor to any person in relation to the Contract or to any other contract with the Employer, the Employer may enter upon the Site and the Works and expel the Contractor and the provisions of Clause 63 hereof shall apply as if such entry and expulsion had been made pursuant to that clause.

Sub-Clause 83.1 Termination of Contract for Employer's Convenience

The Employer shall be entitled to terminate this Contract at any time for the Employer's convenience after giving 56 days' prior notice to the Contractor with a copy to the Engineer. In the event of such termination, the Contractor:

- (a) shall proceed as provided in Sub-Clause 65.7; and
- (b) shall be paid by the Employer as provided in Sub-Clause 65.8.

Sub-Clause 84.1 Restrictions on Eligibility

- (a) No eligibility restrictions are imposed upon the origin of the materials, Plant or Contractor's Equipment, other supplies, and services to be supplied under the Contract, and all countries and areas are eligible as the origin of such materials, Plant or Contractor's Equipment, other supplies, and services.
- (b) For the purpose of this clause, "origin" means the place where the materials and equipment were mined, grown, produced or manufactured, or from which the services are provided.

Sub-Clause 85.1 Joint and Several Liability

If the Contractor is a joint venture of two or more persons all such persons shall be jointly and severally bound to the Employer for the fulfillment of the terms of the Contract and shall designate one of such persons to act as a leader with authority to bind the joint venture. The composition or the constitution of the joint venture shall not be altered without the prior consent of the Employer.

Sub-Clause 86.1 Details to be Confidential

The Contractor shall treat the details of the Contract as private and confidential, save insofar as may be necessary for the purposes thereof, and shall not publish or disclose the same or any particulars thereof in any trade or technical paper or elsewhere without the previous consent in writing of the Employer or the Engineer. If any dispute arises as to the necessity of any publication or disclosure for the purpose of the Contract the same shall be referred to the Employer whose determination shall be final.

Sub-Clause 87.1 Microprocessors and Microchip

All microprocessors and microchip based systems used during construction of the works and in project management shall be fully year 2000 compliant. This means that all systems will recognize year 2000 as a leap year and will not be affected by date related problems.

