Section VII: Bill of Quantities[9]

Preamble of Bill of Quantities

A. General

1. The Bill of Quantities shall be read in conjunction with the Instructions to Bidders, General and Special Conditions of Contract, Technical Specifications, and Drawings.

2. The quantities given in the Bill of Quantities are estimated and provisional, and are given to provide a common basis for bidding. The basis of payment will be the actual quantities of work ordered and carried out, as measured by the Contractor and verified by the Project Manager and valued at the rates and prices bid in the priced Bill of Quantities, where applicable, and otherwise at such rates and prices as the Project Manager may fix within the terms of the Contract.

3. For any item for which measurement is based on records made before or during construction the records shall be prepared and agreed between the Engineer and the Contractor. Should the Contractor carry out such work without the prior agreement of the Engineer, the Engineer may request the Contractor to carry out investigations to confirm the extent of the work and the quantity of work certified for payment shall be solely at the Engineer's discretion. The cost of any such investigation shall be borne by the Contractor.

4. The rates and prices bid in the priced Bill of Quantities shall, except as otherwise provided under the Contract, include all construction equipment, labor, supervision, materials, erection, maintenance, insurance, profit, taxes, and duties, together with all general risks, liabilities, and obligations set out or implied in the Contract.

5. A rate or price shall be entered against each item in the priced Bill of Quantities, whether quantities are stated or not. The cost of items against which the Contractor has failed to enter a rate or price shall be deemed to be covered by other rates and prices entered in the Bill of Quantities.

6. The whole cost of complying with the provisions of the Contract shall be included in the Items provided in the priced Bill of Quantities, and where no Items are provided, the cost shall be deemed to be distributed among the rates and prices entered for the related Items of Work.

7. General directions and descriptions of work and materials are not necessarily repeated nor summarized in the Bill of Quantities. References to the relevant sections of the Contract documentation shall be made before entering prices against each item in the priced Bill of Quantities. The Specification Clause references where given in the item description of the Bills of Quantities are for the convenience of bidders and generally refer to the principal relevant- specification clause but do not necessarily represent the whole of the specification requirements for the work required within the item. The presence of a Specification clause reference shall not in any way reduce the Bidders obligation to complete work in accordance with all the requirements of the Specification.

8. Provisional Sums included and so designated in the Bill of Quantities shall be expended in whole or in part at the direction and discretion of the Project Manager in accordance with the Conditions of Contract.

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9. The method of measurement of completed work for payment shall be in accordance with the Specifications.
10. The abbreviations and symbols used in this Bill of Quantities are:

Sq	Square	**Mm**	millimeter
Cu	Cubic	**M**	meter
Nr	Number	**Km**	kilometer
Hr	Hour	**%**	percent
Kg	Kilogram	**d or dia**	diameter
Ha	Hectare	**t or Mt**	Metric ton
Prov. Sum	Provisional Sum	**NRs**	Nepali
US$	United States Dollars	**NRs.**	Nepali
md	Man days		

B. Day work Schedule

a)General

1. Work shall not be executed on a day work basis except by written order of the Project Manager. Bidders shall enter basic rates for day work items in the Schedules. These rates shall apply to any quantity of day work ordered by the Project Manager. Nominal quantities have been indicated against each item of day work, and the extended total for day work shall, be carried forward as a Provisional Sum to the Summary Total Bid Amount. Unless otherwise adjusted, payments for day work shall be subject to price adjustment in accordance with the provisions in the Conditions of Contract.

b) Day work Labor

1. In calculating payments due to the Contractor for the execution of day works, the hours for labor will be reckoned from the time of arrival of the labor at the job site to execute the particular item of day work to the time of departure from the job site, but excluding meal breaks and rest periods. Only the time of classes of labor directly doing work ordered by the Project Manager and are competent to perform such work will be measured. The time of gangers (charge hands) actually doing work with the gangs will also be measured but not the time of foremen or other supervisory personnel.
2. The Contractor shall be entitled to payment in respect of the total time that labor is employed on day work, calculated at the basic rates entered by it in the " SCHEDULE OF DAY WORK RATES: 1. LABOR". The rates for labor shall be deemed to cover all costs to the Contractor including (but not limited to) i) the amount of wages paid to such labor, transportation time, overtime, subsistence allowances, ii) any sums paid to or on behalf of such labor for social benefits in accordance with Nepal law, iii) Contractor's profit, overheads, superintendence, liabilities and insurance and iv) charges incidental to the foregoing.

c) Day work Equipment

1. The Contractor shall be entitled to payments in respect of Constructional Plant already on site and employed on day work at the basis rental rates entered by him in the “SCHEDULE OF DAY WORK RATES:2 EQUIPMENT”. The said rates shall be deemed to include due and complete allowance for depreciation, interest, indemnity and insurance, repairs, maintenance, supplies, fuel, lubricant, and other

consumables and all overhead, profit and administrative costs related to the use of such equipment. The cost of drivers, operators and assistants also shall be included in the rate of the equipment and no separately payment shall be made for it.

2. In calculating the payment due to the Contractor for Constructional Plant employed on day work, only the actual number of working hours will be eligible for payment, except that where applicable and agreed with the Project Manager, the travelling time from the part of the Site where the Construction Plant was located when ordered by the Project Manager to be employed on day work and the time for return journey there to shall be included for payment.

d) Day work Materials

1. The Contractor shall be entitled to payment in respect of materials used for day work (except for materials for which the cost is included in the percentage addition to labor costs as detailed heretofore), at the rates entered by him in the "SCHEDULE OF DAY WORK RATES: 3 MATERIALS" and shall be deemed to include overhead charges and profit as follows;
   (i) the rates for materials shall be calculated on the basis of the invoiced price, freight, insurance, handling expenses, damage, losses, etc. and shall provide for delivery to store for stockpiling at the Site.
   (ii) the cost of hauling materials for use on work ordered to be carried out as day work, from the store or stockpile on the Site to the place where it is to be used also shall be include in the same rate.

C. Payment for Pipes, Fittings and Appurtenances

Payments of supply and delivery of pipe (all types), fittings and appurtenances shall be provided in three installments. In first Install, Seventy (70%) of the cost of each items shall be provided after the delivery, acceptance and final inspection at the stockpiling site. Second Install, 25% of remaining payments of such items shall be after the completion of pipe laying and jointing and remaining last Install, 5% payments shall be done only after the completion of testing and commissioning of the project as a whole.

The acceptance shall be considered only after the certified pass certificate issued by National Bureau of Standard and Metrology for HDP (PE-100) and Galvanized Iron. Similarly, acceptance of the Seamless and Ductile Iron (DI) pipe shall be considered after the submission of required test /pass certificates approved by manufacturer and other certificates as needed by the client if any.

D. Insurance

The cost of providing insurance of Works and Contractor's Equipment shall be paid to the Contractor as provisional sum amount against submission of required insurance policies with the appropriate payment receipts, in the form acceptable to the Employer. The cost of providing Third Party Insurance (Including Employer's Property) shall be paid to the Contractor as provisional sum amount against submission of required insurance policies with the appropriate payment receipts, in the form acceptable to the Employer.

The cost of providing Insurance against accident to workmen shall be paid to the Contractor as provisional sum amount against submission of required insurance policies with the appropriate payment receipts, in the form acceptable to the Employer. The Contractor shall extend the validity period of all kinds of insurances until the completion of the project including extension of time given, if any, plus defect liability period. No extra/additional cost will be paid for the extension of validity period after original time of completion until the revised time of completion, if any, plus defect liability period.

Provisional Sums

Provisional Sums included and so designated in the Bill of Quantities shall be expended in whole or in part at the direction and discretion of the Engineer in accordance with the Conditions of Contract against provisional work mentioned under part of BOQ. It will be used by the Engineer for nominated sub-contractors, line agencies, third party inspecting agencies, charges levied by statutory electrical, telephone, or other authorities, or for other miscellaneous works. The use of provisional sum will also be for relocation of utilities above or under the ground that conflict with the existing or permanent line or level or the works; independent sampling and laboratory testing as directed by the Engineer, Replacement or Compensation for Plants and Trees removed due to the works etc. as directed by the Engineer.

The rates set out for such items shall be used for the valuation of works so ordered by the Engineer in writing whether the quantities are shown or not. If the amount of work ordered by the Engineer to be executed under a Provisional Quantity item exceeds the quantity shown in the Bill of Quantities, the rate for that item set out in the Contract shall not necessarily be deemed applicable to the excess.

A general provision for physical contingencies (quantity overruns) may be made by including a provisional sum in the Summary Bill of Quantities. Similarly, a contingency allowance for possible price increases should be provided as a provisional sum in the Summary Bill of Quantities. The inclusion of such provisional sums often facilitates budgetary approval by avoiding the need to request periodic supplementary approvals as the future need arises. Where such provisional sums or contingency allowances are used, the SCC should state the manner in which they will be used, and under whose authority (usually the Project Manager's).