

STANDARD BIDDING DOCUMENT
For

*Fencing works, Re-establishment of equipments and
Supply of labour for discharge measurement in
Khumbu and Humla stations*

Procurement of Works
Sealed Quotation

Issued by:
Government of Nepal
Department of Hydrology and Meteorology
Nagpokhari Naxal, Kathmandu

Falgun, 2073

Section IX. Forms of Securities

Bid Security (Bank Guarantee)

Whereas, *[name of Bidder]* (hereinafter called "the Bidder") has submitted his Quotation (bid) dated *[date]* for the construction of *[name of Contract]* (hereinafter called "the bid").

Know all people by these presents that We *[name of Bank]* of *[name of country]* having our registered office at *[address]* (hereinafter called "the Bank") are bound unto *[name of Employer]* (hereinafter called "the Employer") in the sum of *[amount]* for which payment well and truly to be made to the said Employer, the Bank binds itself, its successors, and assigns by these presents.

Sealed with the Common Seal of the said Bank this *[day]* day of *[month]*, *[year]*.

The conditions of this obligation are:

- (1) If, after bid opening, the Bidder withdraws his bid during the period of bid validity specified in the Form of Bid; or
- (2) If the Bidder having been notified of the acceptance of his bid by the Employer during the period of bid validity:
 - (a) fails or refuses to execute the Form of Agreement in accordance with the Instructions to Bidders, if required; or
 - (b) fails or refuses to furnish the Performance Security, in accordance with the Instruction to Bidders; or
 - (c) does not accept the correction of the bid,

we undertake to pay to the Employer up to the above amount upon receipt of his first written demand, without the Employer's having to substantiate his demand, provided that in his demand the Employer will note that the amount claimed by him is due to him owing to the occurrence of one or any of the three conditions, specifying the occurred condition or conditions.

This Guarantee will remain in force up to and including the date *[number]* days² after the deadline for submission of bids as such deadline is stated in the Instructions to Bidders or as it may be extended by the Employer, notice of which extension(s) to the Bank is hereby waived. Any demand in respect of this Guarantee should reach the Bank not later than the above date.

Date _____ Signature of the Bank _____

Witness _____ Seal _____

[signature, name, and address]

² 75 days after submission bids as per the provision of PPR 2007.. The date should be inserted by the Employer before the bidding documents are issued.

Performance Bank Guarantee

To: *[name and address of Employer]*

Whereas *[name and address of contractor]* (hereinafter called "the contractor") has undertaken, in pursuance of Contract No. *[number]* dated *[date]* to execute *[name of Contract and brief description of Works]* (hereinafter called "the Contract");

And whereas it has been stipulated by you in the said Contract that the contractor shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with his obligations in accordance with the Contract;

And whereas we have agreed to give the contractor such a Bank Guarantee;

Now therefore we hereby affirm that we are the Guarantor and responsible to you, on behalf of the contractor, up to a total of *[amount of Guarantee]* *[amount in words]*³ such sum being payable in the types and proportions of currencies in which the Contract Price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of *[amount of Guarantee]*⁴ as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the contractor before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed there under or of any of the Contract documents which may be made between you and the contractor shall in any way release us from any liability under this Guarantee, and we hereby waive notice of any such change, addition, or modification.

This Guarantee shall be valid for at least 30 days beyond the date of issue of Defects Liability Certificate.

Signature and seal of the Guarantor _____

Name of Bank _____

Address _____

Date _____

³ An amount is to be inserted by the Guarantor, representing the percentage of the Contract Price specified in the Contract, and denominated in Nepalese Rupees.

⁴ The Unconditional (or "On-Demand") Bank Guarantee has the merit of simplicity and of being universally known and accepted by commercial banks. The contracting community, however, strongly objects to this type of Security because the Guarantee can be called (or threatened to be called) by Employers without justification. Employers should recognize the contractual conditions governing nonperformance by the Contractor and should normally act only on the advice of the Project Manager in calling a Performance Guarantee.

Bank Guarantee for Advance Payment

To: *[name and address of Employer]*

[name of Contract]

Gentlemen:

In accordance with the provisions of the Conditions of Contract, Sub clause 11.9("Advance Payment") of the above-mentioned Contract, *[name and address of contractor]* (hereinafter called "the contractor") shall deposit with *[name of Employer]* a Bank Guarantee to guarantee his proper and faithful performance under the said Clause of the Contract in an amount of *[amount of Guarantee]* *[amount in words]*⁵

We, the *[Bank or Financial Institution]*, as instructed by the contractor, agree unconditionally and irrevocably to guarantee as primary obligator and not as Surety merely, the payment to *[name of Employer]* on his first demand without whatsoever right of objection on our part and without his first claim to the contractor, in the amount not exceeding *[amount of Guarantee]* *[amount in words]*⁶

We further agree that no change or addition to or other modification of the terms of the Contract or of Works to be performed there under or of any of the Contract documents which may be made between *[name of Employer]* and the contractor, shall in any way release us from any liability under this Guarantee, and we hereby waive notice of any such change, addition, or modification.

The validity period of the guarantee shall be 30 days beyond the period scheduled for repayment of the advance payment and the guarantee shall remain valid and in full effect from the date of the advance payment under the Contract until the *[name of Employer]* receives full repayment of the same amount from the Contractor.

.

Yours truly,

Signature and seal: _____

Name of Bank/Financial Institution: _____

Address: _____

Date: _____

⁵ An amount is to be inserted by the Bank or Financial Institution representing the amount of the Advance Payment, and denominated in Nepali Rupees of the Advance Payment as specified in the Contract.

⁶ An amount is to be inserted by the Bank or Financial Institution representing the amount of the Advance Payment, and denominated in Nepali Rupees.

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Section I. Invitation for Sealed Quotation

Government of Nepal
Ministry of Population & Environment
Department of Hydrology and Meteorology
Invitation for Bids

Date of first Publication: 2073/11/5

Department of Hydrology and Meteorology (DHM) invites sealed bid from Government of Nepal registered and eligible bidders for the Procurement of following Goods and works.

Contract ID No.	Description of Works	Price of Bid- Document (Non-refundable (NRs)) and Bid validity Period	Estimated Amount without VAT	Bid security amount (NRs) and Bid Security Validity Period , Account No. to Deposit and Bank (Rastriya Banijya Bank, Thamel)	Last Date and Time of Purchase	Last Date and Time of Submission	Date and Time of Bid opening
5/SS/HD/DHM/073-74 (works)	Fencing works, Re-establishment of equipments in Discharge measurement in Humla Station and Khumbu Station	1000/- and 45 days	NRs. 8,41,448/-	23,000/- & 75 days AC no.:- 1100 203 000 000	2073/11/19 during office hour	2073/11/20 12:00 noon	2073/11/20 02:00 pm

1. Bidding will be conducted through the National Competitive Bidding procedures as specified in the Public Procurement Act 2063 and Public Procurement regulation 2064. Eligible Bidders may obtain further information and inspect the bidding documents at the above office.

E-mail: shivaamet@gmail.com , Telephone no.:- +977 1 4433563 Website: www.dhm.gov.np

2. Eligible and interested Bidders are invited to submit their unit rate for the goods and works described as in bidding documents with a certified copy of Company Registration Certificate, PAN/VAT Certificate, and Tax Clearance (2072/73) and Self Declaration letter of not being blacklisted till to submit date.
3. Bidding documents may be purchased from the above office by eligible Bidders on the submission of a written application accompanied by a letter of Authority from the firm to the address above along with the copy of Company/Firm registration certificate. The payment mode may be direct deposit or bank transfer to the Gov. **Revenue A/c Title No.14227** on RastriyaBanijya Bank, Thamel, Kathmandu, Nepal or Bankers cheque payable to Department of Hydrology and Meteorology, Kathmandu, Nepal. (**Office Code No. 27-331-04, A/C No. ka-1-1-001**)
4. Sealed bids must be submitted to the Procurement Unit of Department of Hydrology and Meteorology. Documents received after submission deadline shall not be accepted.
5. Bids shall be opened in the presence of Bidder's representatives who choose to attend on the opening date given in above Table **at the office of Department of Hydrology and Meteorology, P.O.Box 406, Nagpokhari, Naxal, Kathmandu, Nepal.**
6. If the last date of purchasing, submission and opening falls on a government holiday, then the next working day shall be considered the last day. In such a case the bid validity and bid security validity shall be recognized with effect from the original bid submission deadline.
7. Bids should comply in all respects with the Instruction to Bidder included in the Bid Document. Non-compliance with these instructions shall result in disqualification.
8. Bidders are advised to visit site and assess the actual site conditions before submitting their bid.
9. The Department of Hydrology and Meteorology reserves the right to accept or reject, wholly or partly any or all the bids without assigning reason, whatsoever.

Section II. Instructions to Bidders

Notes on the Instructions to Bidders

This section of the bidding documents should provide the information necessary for Bidders to prepare responsive bids, in accordance with the requirements of the Employer. It should also give information on bid submission, opening and evaluation, and award of Contract.

These Instructions to Bidders shall not be part of the Contract and shall cease to have effect once the Contract is signed.

Instructions to Bidder

- 1. Scope of Works** The Employer stated in the Invitation for Sealed Quotation invites bids for the construction of works as detailed in attached specifications, drawings and the bill of quantities provided herein. .
- 2. Eligible Bidder** This Invitation for Bids is open to all registered contractors with qualifications as described below:
 - a) Up to date Firm/Company Registration Certificate
 - b) VAT and PAN Registration Certificates
 - c) Tax Clearance Certificate (072-73)
 - d) A written declaration made by the Bidder stating that the Bidder is not ineligible to participate in the bid; has no conflict of interest in the bid procurement proceedings and has not been punished for the profession or business related offence.
 - e) Power of Attorney
 - f) Other documents as needed
- 3. One Bid per Bidder** Each Bidder shall submit only one quotation, A Bidder who submits more than one quotation shall cause all the quotations with the Bidder's participation to be disqualified.
- 4. Cost of Bidding** The Bidder shall bear all costs associated with the preparation and submission of his bid and the Employer shall in no case be liable for those costs.
- 5. Site Visit** The Bidder at his own cost, responsibility and risk may visit the site of the works and acquire all necessary information for preparing the bid and entering into a contract for construction of the works.
- 6. Content of Quotation Form** The Quotation Form comprise the documents listed below:
 - Invitation for Sealed Quotations
 - Instructions to Bidders
 - Forms of Bid, Letter of Acceptance and Agreement
 - General Conditions of Contract (GCC)
 - Special Conditions of Contract (SCC)
 - Technical Specification
 - Drawings
 - Bill of Quantities
 - Sample Forms of Securities
- 7. Clarification** A prospective Bidder may obtain clarification on the Quotation Form from the Employer.
- 8. Language of Bid** All documents relating to the bid shall be in English or in Nepali.
- 9. Documents Comprising Bid** The bid by the Bidder shall comprise the following:
 - a. Bid and Eligibility Information
 - b. Bid Security
 - c. Priced Bill of Quantities

- 10. Bid Prices** The contract shall be for the whole works described in scope of works based on the priced Bill of Quantities submitted by the Bidder. The Bidder shall fill in rates and prices for all items of the works in Nepali Rupees. Items for which no rate or price is entered shall be deemed covered by the other rates and prices in the Bill of Quantities and shall not be paid separately by the Employer.
- All duties, taxes and other levies payable by the contractor under the contract shall be included in the rates, prices and total Bid Price submitted by the Bidder.
- 11. Bid Validity** The Bid shall remain valid for the period of 45 days after opening. Of the quotation.
- 12. Bid Security** The Bidder shall furnish a Bid Security in Nepali Rupees in the amount equivalent to Nrs. 23000/-(Nepali rupees twenty three thousand only) of the bid amount. The Bid Security shall remain valid for a period of 75 days after opening of the quotation..
- The Bid Security shall be in the form of cash voucher deposited in the Bank Account of the Employer specified in the notice for "Invitation for Quotation" or a bank guarantee from a bank acceptable to the Employer.
- 13. Format and Signing of Bids** The bid shall be typed or written in indelible ink and shall be signed by an authorized person. Any entries or amendments including alternations, additions or corrections made shall be initialled by the same authorized person.
- 14. Sealing and Marking of Bids** The Bidder shall submit his bid in sealed envelopes. The envelope shall be addressed to the Employer specified in the Invitation for Quotation and shall bear the name and identification number of the quotation.
- 15. Deadline for Submission of Bids** Bids shall be delivered to the Employer at the address no later than the time and date specified in the Invitation for Quotation.
- 16. Late Bids** Any bid received by the Employer after the deadline shall not be accepted and shall be returned unopened to the Bidder upon request.
- 17. Modification and Withdrawal of Bids** Bids once submitted shall not be withdrawn or modified.
- 18. Bid Opening** The Employer shall open the bids in the presence of the Bidders' representatives who choose to attend at the time and in the place as specified in the Invitation for Quotation. The Employer shall prepare and provide minutes of the bid opening including the information disclosed to those present.
- 19. Process to be Confidential** Information relating to the examination, evaluation and comparison of bids and recommendations for the award of a contract shall not be disclosed to Bidders or any other persons not officially concerned with such process until the award to the successful Bidder has been announced. Any efforts by the Bidder to influence the Employer in the bid evaluation, bid comparison or contract award decisions may result in rejection of Bidder's bid.
- 20. Examination of Bids** Prior to the detailed evaluation of Bids, the Employer shall determine whether each bid (a) meets the eligibility criteria defined in Clause 2; (b) has been properly signed; (c) is accompanied by the required securities; and (d) is substantially responsive to the requirements of the Bidding documents.

- 21. Evaluation and Comparison of Bids**
- 21.1 In evaluating the Bids, the Employer shall determine for each bid the evaluated Bid Price by adjusting any corrections for errors. Bids shall be checked by the Employer for any arithmetic errors. Errors shall be corrected by the Employer as follows:
- a. where there is a discrepancy between the amounts in figures and in words, the amount in words shall govern; and
 - b. where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted shall govern
- 21.2 If the Bidder does not accept the corrected amount, the bid shall be rejected and the Bid Security may be forfeited.
- 22. Award of Contract**
- 22.1 The Employer shall decide the award of the contract to the Bidder whose bid is within the approved estimate and who has offered the lowest evaluated Bid Price within 15 days of the opening of the quotation, provided that such Bidder has been determined to be eligible in accordance with the provisions of Clauses 2.
- 22.2 If the bid, which results in the lowest Evaluated Bid price, is unbalanced or frontloaded in relation to the Employer's estimate of the items of Work to be performed under the contract, the Employer shall ask the bidder to give clarification with detailed rate analysis for any or all items of the Bill of Quantities. If the clarification is found satisfactory then the Employer shall increase at the expense of the bidder the performance security set forth in Clause 25 by an additional 8% of the quoted amount to protect the Employer against financial loss in the event of default of the successful bidder under the contract and if the clarification is found unsatisfactory then the Employer may reject such bid.
- 23. Employer's Right to Accept any Bid and to Reject any or all Bids**
- The Employer reserves the right to accept or reject any bid or to cancel the bidding process and reject all bids, at any time prior to the award of the contract, without assigning any reasons whatsoever and without thereby incurring any liability to the affected Bidder or Bidders.
- 24. Notification of Award and Signing of Agreement**
- 24.1 The Bidder whose bid is accepted and all other participating bidders shall be notified of the award by the Employer.
- 24.2 The notification (hereafter called the "Letter of Acceptance") to the successful Bidder shall state the sum that the Employer shall pay the Bidder in consideration of the execution, completion, and maintenance of the works as described by the contract. Within 7 days of receipt of the Letter of Acceptance, the successful Bidder shall deliver the Performance Security pursuant Clause 25 and sign the Agreement.
- 24.3 Inability of the Bidder to make an Agreement within the above stated period shall result in cancellation of the Contract Award and forfeiture of the Bidder's Bid Security, upon which the Contract shall then be awarded to the next successive successful Bidder.
- 25. Performance Security**
- The successful Bidder shall deliver to the Employer a Performance Security in cash or Bank Guarantee acceptable to the Employer equivalent to 5% of the bid amount..
- i) If bid price of the bidder selected for acceptance is up to 15 (fifteen) percent less than the approved cost estimate, the performance security amount shall be 5 (five) percent of the bid price.
 - ii) For the bid price less than 15 percent of the cost estimate, the performance security amount shall be determined as follows:
- Performance Security Amount = [(0.85 x Cost Estimate – Bid Price) x 0.5] + 5% of Bid Price.**
- The Bid Price and Cost Estimate shall be inclusive of Value Added Tax.

27. Corrupt or Fraudulent Practices

The Employer shall reject a bid for award if it determines that the Bidder recommended for award of contract has engaged in corrupt or fraudulent practices in competing for the contract in question.

28. Conduct of Bidders

28.1 The Bidder shall be responsible to fulfil his obligations as per the requirement of the Contract Agreement, Bidding documents, GoN's Procurement Act and Regulations.

28.2 The Bidder shall not carry out or cause to carry out the following acts with an intention to influence the implementation of the procurement process or the procurement agreement :

- a) give or propose improper inducement directly or indirectly,
- b) distortion or misrepresentation of facts
- c) engaging or being involved in corrupt or fraudulent practice
- d) interference in participation of other prospective bidders.
- e) coercion or threatening directly or indirectly to cause harm to the person or the property of any person to be involved in the procurement proceedings,
- f) collusive practice among bidders before or after submission of bids for distribution of works among bidders or fixing artificial/uncompetitive bid price with an intention to deprive the Employer the benefit of open competitive bid price..
- g) contacting the Employer with an intention to influence the Employer with regards to the bid or interference of any kind in examination and evaluation of the bids during the period after opening of bids up to the notification of award of contract

29. Blacklisting Bidder

29.1 Without prejudice to any other right of the Employer under this Contract, GoN, Public Procurement Monitoring Office may blacklist a bidder for his conduct up to three years on the following grounds and seriousness of the act committed by the bidder:

- a) if it is proved that the bidder committed acts pursuant to the Sub - Clause 28.2,
- b) if the bidder fails to sign an agreement pursuant to Sub - Clause 24.2,
- c) if it is proved later that the bidder/contractor had committed substantial defect in implementation of the contract or had not substantially fulfilled his obligations under the contract or the completed work is not of the specified quality as per the contract ,
- d) if convicted by a court of law in a criminal offence which disqualifies the bidder from participating in the contract.
- e) if it is proved that the contract agreement signed by the bidder was based on false or misrepresentation of bidder's qualification information,
- f) other acts mentioned in the Bidding Data

29.2 A firm declared blacklisted and ineligible by the GON shall be ineligible to bid for a contract during the period of time determined by the PPMO.

Section III. Sample Forms of Bid, Eligibility Information, Letter of Acceptance and Agreement

Notes on Forms of Bid, Eligibility Information, Letter of Acceptance and Agreement

The Agreement shall incorporate any corrections or modifications to the bid resulting from corrections of errors, acceptable deviations or any other mutually-agreeable changes allowed for in the General Conditions.

The bid which the contractor has submitted to the Employer becomes part of the contract documents.

All the information with regard to the preparation of bid to meet the Employer's requirements shall be provided before issuing the bidding documents.

The contractor shall provide the remaining information by completing the form.

Bid

We have examined the documents listed in Instruction to Bidders, Clause 4 and offer to execute the Works in conformity with the Contract for the sum of (in words) (in figures) or such other sum as may be ascertained under the contract.

This bid shall remain binding until _____ [date]. This bid and your written acceptance of it shall constitute a binding contract between us.

We understand that the Employer is not bound to accept the lowest or any offer received for the Works.

Signature _____ Date: _____

Name : _____ Authorised to sign on behalf of (organisation name): _____

Designation: _____

Office Stamp of the Organisation: _____

Eligibility Information

1. Eligibility Requirements:

All Bidders shall submit following documents as pre- requisites for eligibility:

- a. Constitution or legal status of Bidder: [attach copy]
- b. Up to date Registration Certificate: [attach copy]
- c. Pan Registration Certificate: [attach copy]
- d. Up to date Tax Returns/ Clearance: [attach copy]
- e. Power of Attorney: [attach copy]
- f. Place of registration: [insert]
- g. A written declaration made by the Bidder stating that the Bidder is not ineligible to participate in the bid; has no conflict of interest in the bid procurement proceedings and has not been punished for the profession or business related offence.
- h. Principal Place of business: [insert]

Letter of Acceptance

[Letterhead of the Employer]

Date: _____

To: *[name and address of the contractor]*

This is to notify you that your Quotation (Bid) dated *[date]* for execution of the *[name of the Contract and identification number, as given in the Invitation for Quotation]* for the Contract Price of *[insert the amount in Nepalese Rupees in numbers and words]* as corrected and modified¹ in accordance with the Instructions to Bidders is hereby accepted by our Agency.

You are hereby instructed to contact our office *[Office address]* to sign the formal agreement on *[date]* at *[time]*. As per the Instructions to Bidders you are also required to submit Performance Security, as specified in the Section VIII Sample Forms of Securities, , consisting of a Bank Guarantee in an approved format or cash deposit voucher in favour of the Employer in the Employer's Bank account *[enter account details]*.

The Employer shall forfeit the bid security, in case you fail to furnish the Performance Security and to sign the contract.

Please convey our unconditional acceptance by signing on the original of this letter and submit the required Performance Security at the time of formal agreement.

Authorised Signature: _____

Name: _____

Designation: _____

¹ Delete "corrected and" or "and modified" if not applicable. See Notes on Standard Form of Agreement, next page.

Agreement

This Agreement, made the [day] day of [month], [year] between [name and address of Employer] (hereinafter called "the Employer") and [name and address of contractor] (hereinafter called "the contractor") of the other part.

Whereas the Employer is desirous that the contractor execute [name and identification number of contract] (hereinafter called "the Works") and the Employer has accepted the bid for _____ [insert the amount in Nepalese Rupees in numbers and words] by the contractor for the execution and completion of such Works and the remedying of any defects therein.

Now this Agreement witness eth as follows:

1. In this Agreement, words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to, and they shall be deemed to form and be read and construed as part of this Agreement.
2. In consideration of the payments to be made by the Employer to the contractor as hereinafter mentioned, the contractor hereby covenants with the Employer to execute and complete the Works and remedy any defects therein in conformity in all respects with the provisions of the Contract.
3. The Employer hereby covenants to pay the contractor in consideration of the execution and completion of the Works and the remedying of defects wherein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

In Witness whereof the parties thereto have caused this Agreement to be executed the day and year first before written.

The Common Seal of _____

was hereunto affixed in the presence of: _____

Signed, Sealed, and Delivered by the said _____

in the presence of: _____

Binding Signature of Employer _____

Binding Signature of Contractor _____

Section IV. General Conditions of Contract (GCC)

1. General Provisions

- 1.1 **Definitions** In the Contract as defined below, the words and expressions defined shall have the following meanings assigned to them, except where the context requires otherwise:
- The Contract**
- 1.1.1 “**Contract**” means the Agreement signed between the Employer and the contractor and the other documents listed in the Special Conditions of Contract (SCC).
 - 1.1.2 “**Specification**” means the document as listed in the SCC, and any variation to such document.
 - 1.1.3 “**Drawings**” means the Employer’s drawings of the Works as listed in the SCC, and any variation to such drawings.
 - 1.1.4 “**Bill of Quantities**” means the priced and completed bill of quantities forming part of the Tender.
 - 1.1.5 “**Bid or Quotation**” means the contractor’s priced offer to the Employer for the execution and completion of the Works and the remedying of any defects therein in accordance with the provisions of the Contract, as accepted by the Letter of Acceptance.
 - 1.1.6 “**Letter of Acceptance**” means the formal acceptance by the Employer of the **bid** or Tender.
- Persons**
- 1.1.7 “**Employer**” means the person named in the Agreement and the legal successors in title to this person, but not (except with the consent of the contractor) any assignee.
 - 1.1.8 “**Contractor**” means the person named in the Agreement and the legal successors in title to this person, but not (except with the consent of the Employer) any assignee.
 - 1.1.9 “**Party**” means either Employer or the contractor.
- Date, Times and Periods**
- 1.1.10 “**Commencement Date**” means the date stated in the SCC after the date the Agreement comes into effect or any other date agreed between the Parties.
 - 1.1.11 “**Day**” means a calendar day.
 - 1.1.12 “**Time for Completion**” means the time for completing the Works as stated in the SCC (or as extended under Sub-Clause 6.3), calculated from the Commencement Date.
- Money and Payments**
- 1.1.13 “**Cost**” means all expenditure properly incurred (or to be incurred) by the contractor, whether on or off the Site, including overheads and similar charges, but does not include profit.
 - 1.1.14 “**Contract Price**” means the sum stated in the Letter of Acceptance as payable to the contractor and adjusted with any Variation Orders and Other Adjustments upon completion of the works and the remedying of any defects therein in accordance with the provisions of the Contract.

- 1.1.15 "**Retention Money**" means the aggregate of all monies retained by the Employer pursuant to Sub-Clause 10.3
- Other Definitions**
- 1.1.16 "**Contractor's Equipment**" means all apparatus, machinery, vehicles, facilities and other things required for the execution of the Works but does not include Materials or Plant.
- 1.1.17 "**Country**" means Nepal.
- 1.1.18 "**Employer's Liabilities**" means those matters listed in Sub-Clause 5.1.
- 1.1.19 "**Materials**" means things of all kinds (other than Plant) intended to form or forming part of the permanent work.
- 1.1.20 "**Plant**" means the machinery and apparatus intended to form or forming part of the Permanent Works.
- 1.1.21 "**Site**" means the places provided by the Employer where the Works are to be executed, and any other places specified in the Contract as forming part of the Site.
- 1.1.22 "**Variation**" means any change which is a result of unforeseen circumstances that arise as a result of instruction by the Employer/ Engineer under Sub-Clause 9.1.
- 1.1.23 "**Works**" means all the work and design (if any) to be performed by the contractor including temporary work and any Variation.
- 1.1.24 "**Permanent Works**" means the permanent works to be executed (Including Plant) in accordance with the Contract.
- 1.1.25 "**Temporary Works**" means all temporary works of every kind (other than contractor's Equipment) required in or about the execution and completion of the Works and the remedying of any defects therein.
- 1.1.26 "**Adjudication**" means the procedure to be adopted by the contractor and the Employer in solving the dispute if it is not solved amicably pursuant to Sub-Clause 13.1.
- 1.2 Interpretation** Words importing persons or parties shall include firms and organisations. Words importing singular or one gender shall include plural or the other gender where the context requires.
- 1.3 Priority of Documents** The documents forming the Contract shall to be taken as mutually explanatory of one another. If an ambiguity or discrepancy is found in the documents, the Employer shall issue any necessary instructions to the contractor, and the priority of the documents shall be in accordance with the order as listed in the SCC.
- 1.4 Law** The law of the Contract is stated in the SCC.
- 1.5 Communications** Where provision is made for the giving or issue of any notice, instruction, or other communication by any person, unless otherwise specified such communication shall be written in the language stated in the SCC as shall not be unreasonably withheld or delayed.
- If a notice given pursuant to Sub Clause 1.5 fails to be delivered due to failure to trace the address of the party then the notice shall be

published as public notice in a National daily newspaper and when the notice is so published then the notice shall be considered to be delivered to the concerned party.

- 1.6 Statutory Obligations** The contractor shall comply with the laws of the countries where activities are performed. The contractor shall give all notices and pay all fees and other charges in respect of the Works.

2. The Employer

- 2.1 Provision of Site** The Employer shall provide the Site and right of access thereto at the times stated in the SCC.

- 2.2 Permits and Licenses** The Employer shall, if requested by the contractor, assist him in applying for permits, licences or approvals which are required for the Works.

- 2.3 Employer's Instructions** The contractor shall comply with all instructions given by the Employer in respect of the Works including the suspension of all or part of the Works.

- 2.4 Approvals** No approval or consent or absence of comment by the Employer or the Employer's representative shall affect the contractor's obligations.

3. Employer's Representatives

- 3.1 Authorised Person** One of the Employer's personnel shall have authority to act for him. This authorised person shall be as stated in the SCC, or as otherwise notified by the Employer to the contractor.

- 3.2 Employer's Representative** The Employer may also appoint a firm or individual to carry out certain duties. The appointee may be named in the SCC, or notified by the Employer to the contractor from time to time. The Employer shall notify the contractor of the delegated duties and authority of this Employer's representative.

4. The Contractor

- 4.1 General Obligations** The contractor shall carry out the Works properly and in accordance with the Contract. The contractor shall provide all supervision, labour, Materials, Plant and contractor's Equipment which may be required. All Materials and Plant on Site shall be deemed to be the property of the Employer.
During continuance of the of the contract, the contractor and his sub-contractors shall abide at all times by all labour laws, including child labour related enactments, and rules made there under.

A child who has not attained the age of fourteen years shall not be employed in any work as a labourer.

- 4.2 Contractor's Representative** The contractor shall submit to the Employer for consent the name and particulars of the person authorised to receive instructions on behalf of the contractor.

- 4.3 Subcontracting** The contractor shall not subcontract the whole of the Works. The contractor shall not subcontract any part of the Works without the consent of the Employer.

- 4.4 Performance Security** As stated in the SCC, the Contractor shall deliver to the Employer no later than the date specified in the Letter of Acceptance.

5. Employer's Liabilities

- 5.1 Employer's Liabilities** In this Contract, Employer's Liabilities mean:
- a. war, hostilities (whether war be declared or not), invasion, act of foreign enemies, within the Country,
 - b. rebellion, terrorism, revolution, insurrection, military or usurped power, or civil war, within the Country,
 - c. riot, commotion or disorder by persons other than the contractor's personnel and other employees, affecting the Site and/or the Works.

- d. use or occupation by the Employer of any part of the Works, except as may be specified in the Contract,
- e. design of any part of the Works by the Employer's personnel or by others for whom the Employer is responsible,
- f. any operation of the forces of nature affecting the Site and/or the Works, which was unforeseeable or against which an experienced contractor could not reasonably have been expected to take precautions
- g. a suspension under Sub-Clause 2.3 unless it is attributable to the contractor's failure,
- h. any failure of the Employer,
- i. physical obstructions or physical conditions, other than climatic conditions, encountered on the Site during the performance of the Works, which obstructions or conditions were not reasonably foreseeable by an experienced contractor and which the contractor immediately notified to the Employer,
- j. any delay or disruption caused by any Variation,
- k. any change to the law of the Contract after the date of the contractor's offer as stated in the Agreement,
- l. losses arising out of the Employer's right to have the permanent work executed on, over, under, in or through any land, and to occupy this land for the permanent work, and
- m. damage which is an unavoidable result of the contractor's obligations to execute the Works and to remedy any defects.

6. Time for Completion

- 6.1 Execution of the Works** The contractor shall commence the Works on the Commencement Date and shall proceed expeditiously and without delay and shall complete the Works within the Time for Completion.
- 6.2 Programme** The contractor shall submit to the Employer a programme for the Works within the time stated in the SCC
- 6.3 Extension of Time** The contractor shall be entitled to an extension to the Time for Completion if he is or shall be delayed by any of the Employer's Liabilities. The contractor shall submit an application to the Employer for extension of time, stating the causes for delay, 7 days before the expiry of the Contract completion date. On receipt of an application from the contractor, the Employer shall consider all supporting details provided by the contractor and shall extend the Time for Completion as appropriate.
- 6.4 Liquidated Damages for Delay** If the contractor fails to complete the Works within the Time for Completion, the contractor's liability to the Employer for such failure shall be to pay the amount stated in the SCC for each day for which he fails to complete the Works.

7. Taking-Over

- 7.1 Completion** The contractor may notify the Employer when he considers that the Works are complete.
- 7.2 Taking-Over Notice** The Employer shall notify the contractor when he considers that the contractor has completed the Works stating the date accordingly. Alternatively, the Employer may notify the contractor that the Works, although not fully complete, are ready for taking over, stating the date accordingly.
- The Employer shall take over the Works upon the issue of this notice. The contractor shall promptly complete any outstanding work and, subject to Clause 8, clear the Site.

8. Remedying Defects

8.1 Remedying Defects The Employer may at any time prior to the expiry of the period stated in the SCC, notify the contractor of any defects or outstanding work. The contractor shall remedy at no cost to the Employer any defects due to the contractor's design, materials, plant or workmanship not being in accordance with the Contract.

Failure to remedy any defects or complete outstanding work within a reasonable time of the Employer's notice shall entitle the Employer to carry out all necessary work at the contractor's cost.

8.2 Uncovering and Testing The Employer may give instruction as to the uncovering and/or testing of any work. Unless as a result of any uncovering and/or testing it is established that the contractor's design, materials, plant or workmanship are not in accordance with the Contract, the Contractor shall be paid for such uncovering and/or testing as a Variation in accordance with Sub-Clause 9.2.

9. Variations and Claims

9.1 Right to Vary The Employer may instruct Variations.

9.2 Valuation of Variations Variations shall be valued as follows:

- where appropriate, at rates in the Contract, or
- in the absence of appropriate rates, the rates in the Contract shall be used as the basis for valuation or
- at appropriate new rates, as may be agreed or which the Employer considers appropriate.

9.4 Right to Claim If the contractor incurs cost as a result of any of the Employer's Liabilities, the contractor shall be entitled to the amount of such cost. If as a result of any of the Employer's Liabilities, it is necessary to change the Works, this shall be dealt with as a Variation.

9.5 Variation and Claim Procedure The contractor shall submit the Employer an itemised make-up of the value of Variations and claims within 7 days of the instruction or of the event giving rise to the claim. The Employer shall check and if possible agree the value. In the absence of agreement, the Employer shall determine the value.

10. Contract Price and Payment

10.1 Valuation of the Works The Contract Bill of Quantities and the approved Variation quantities shall be used to calculate the valuation of the works completed. The contractor shall be paid for the quantity of work done at the rate in the Bill of Quantities or rate agreed pursuant to clause 9.2 for varied works.

10.2 Payments Certificates The Contractor shall submit to the Employer monthly statements of the estimated value of the works completed less the cumulative amount certified previously. The Employer shall check the Contractor's monthly statement and certify the amount to be paid to the Contractor

10.3 Payments The Employer shall pay to the contractor the amount certified less retention at the rate stated in the SCC within 30 days of the date of each certificate.

- 10.4 Payment of Retention** One half of the retention shall be repaid by the Employer to the contractor within 30 days upon expiry of Defects Liability Period-and the Employer has certified that the notified defects have been corrected. The remainder of the retention shall be paid by the Employer to the contractor within 7 days after submission of evidence document from the concerned Internal Revenue Office that the contractor has submitted his Income Returns
- 10.5 Advance Payment**
- a. The Employer may make advance payment to the contractor of the amounts stated in the SCC within 30 days, against 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. The Guarantee shall remain effective until the advance payment has been repaid, but the amount of the Guarantee shall be progressively reduced by the amounts repaid by the contractor. Interest will not be charged on the advance payment.
 - b. The advance payment shall be repaid by deducting proportionate amounts from payments otherwise due to the contractor, following the schedule of completed percentages of the Works as indicated in SCC
- 10.6 Local Taxation & Value Added Tax**
- a. The prices quoted by the Contractor shall include all taxes that may be levied in accordance to the laws and regulations in being in Nepal.
 - b. The Contract is not exempted from value added tax. The Contractor shall pay VAT in the concerned VAT office within time frame specified in VAT regulation.

11. Termination of Contract

- 11.1 Default by Contractor** If the contractor abandons the Works, refuses or fails to comply with a valid instruction of the Employer or fails to proceed expeditiously and without delay or is, despite a written complaint, in breach of the Contract, the Employer may give notice referring to this Sub-Clause and stating the default.

If the contractor has not taken all practicable steps to remedy the default within 15 days after the contractor's receipt of the Employer's notice, the Employer may, by a second notice given within a further 22 days, terminate the Contract. The Contractor shall then demobilize from the Site leaving behind Materials and Plant and any contractor's Equipment which the Employer instructs in the second notice to be used until the completion of the Works.

- 11.2 Default by Employer** If the Employer fails to pay in accordance with the Contract, or is, despite a written complaint, in breach of the Contract, the contractor may give notice referring to this Sub-Clause and stating the default. If the default is not remedied within 7 days after the Employer's receipt of this notice, the contractor may suspend the execution of all or parts of the Works.

If the default is not remedied within 30 days after the Employer's receipt of the contractor's notice, the contractor may, by a second notice given within a further 22 days, terminate the Contract. The contractor shall then demobilise from the Site.

- 11.3 Insolvency** If a Party is declared insolvent under any applicable law, the other Party may by notice terminate the Contract immediately. The contractor shall then demobilise from the Site leaving behind, in the case of the contractor's insolvency, any contractor's Equipment which the Employer

instructs in the notice is to be used until the completion of the Works.

**11.4 Termination
by
Convenience**

Notwithstanding the above, the Employer shall be entitled to terminate the Contract in public interest, at any time at the Employer's convenience, by giving notice of such termination to the contractor.

**11.5 Payment
upon
Termination**

After termination, the contractor shall be entitled to payment of the unpaid balance of the value of the Works executed and of the Materials and Plant reasonably delivered to the Site, adjusted by the following:

- a. any sums to which the contractor is entitled under Sub-Clause 9.4,
- b. any sums to which the Employer is entitled,
- c. if the Employer has terminated under Sub-Clause 11.1 or 11.3, the Employer shall be entitled to a sum equivalent to 20% of the value of those parts of the Works not executed at the date of the termination,
- d. if the contractor has terminated under Sub-Clause 11.2 or 11.4, the contractor shall be entitled to the Cost of his suspension and demobilisation together with a sum equivalent to 10% of the value of those parts of the Works not executed at the date of termination

The net balance due shall be paid or repaid within 30 days of the notice of termination.

12. Risk and Responsibility

**12.1 Contract
or's Care
of the
Works**

The contractor shall take full responsibility for the care of the Works from the Commencement Date until the date of the Employer's notice under Sub-Clause 7.2. Responsibility shall then pass to the Employer. If any loss or damage occurs to the Works during the above period, the contractor shall rectify such loss or damage so that the Works conform to the Contract.

**12.2 Force
Majeure**

If a Party is or shall be prevented from performing any of its obligations by Force Majeure, the Party affected shall notify the other Party immediately. If necessary, the contractor shall suspend the execution of the Works and, to the extent agreed with the Employer, demobilise the contractor's Equipment.

If the event continues for a period of 90 days, either Party may then give notice of termination which shall take effect 30 days after the giving of the notice.

After termination, the contractor shall be entitled to payment of the unpaid balance of the value of the Works executed and of the Materials and Plant reasonably delivered to the Site, adjusted by the following:

- a. any sums to which the contractor is entitled under Sub-Clause 9.4,
- b. the Cost of his suspension and demobilisation,
- c. any sums to which the Employer is entitled.

The net balance due shall be paid or repaid within 30 days of the notice of termination.

13. Resolution of Disputes

13.1 Adjudication

If any dispute shall arise out of or in connection with the Contract,

including any valuation or other decision of the Employer, then the parties shall attempt to settle such dispute amicably. However if the dispute is not settled amicably then the dispute shall be referred to the Adjudicator. The adjudicator shall be any person agreed by the Parties. In case of disagreement the Employer shall request Nepal Council of Arbitration (NEPCA) for appointment of the Adjudicator.

13.2 Amicable Settlement

If either Party is dissatisfied with the decision of the adjudicator attempt shall be made to resolve the dispute amicably.

14. Conduct of Bidders

14.1 The Bidder shall be responsible to fulfil his obligations as per the requirement of the Contract Agreement, Bidding documents, GoN's Procurement Act and Regulations.

14.2 The Bidder shall not carry out or cause to carry out the following acts with an intention to influence the implementation of the procurement process or the procurement agreement :

- h) give or propose improper inducement directly or indirectly,
- i) distortion or misrepresentation of facts
- j) engaging or being involved in corrupt or fraudulent practice
- k) Interference in participation of other prospective bidders.
- l) coercion or threatening directly or indirectly to cause harm to the person or the property of any person to be involved in the procurement proceedings,
- m) collusive practice among bidders before or after submission of bids for distribution of works among bidders or fixing artificial/uncompetitive bid price with an intention to deprive the Employer the benefit of open competitive bid price..
- n) contacting the Employer with an intention to influence the Employer with regards to the bid or interference of any kind in examination and evaluation of the bids during the period after opening of bids up to the notification of award of contract

15. Blacklisting Bidder

15.1 Without prejudice to any other right of the Employer under this Contract, GoN, Public Procurement Monitoring Office may blacklist a bidder for his conduct up to three years on the following grounds and seriousness of the act committed by the bidder:

- g) if it is proved that the bidder committed acts pursuant to the Sub - Clause 14.2,
- h) if the bidder fails to sign an agreement pursuant to Instruction to Bidders Sub - Clause 24.2,
- i) if it is proved later that the bidder/contractor had committed substantial defect in implementation of the contract or had not substantially fulfilled his obligations under the contract or the completed work is not of the specified quality as per the contract ,
- j) if convicted by a court of law in a criminal offence which disqualifies the bidder from participating in the contract.
- k) if it is proved that the contract agreement signed by the bidder was based on false or misrepresentation of bidder's qualification information,
- l) other acts mentioned in the Bidding Data

15.2 A firm declared blacklisted and ineligible by the GON shall be ineligible to bid for a contract during the period of time determined by the PPMO.

Section V Special Conditions of Contract (SCC)

This SCC forms part of the Agreement

[Note: with the exception of the items for which the Employer's requirements have been inserted, the Bidder shall complete the following information before submitting his bid.]

Item	Clause	Data
Documents forming the Contract listed in the order of priority Document (delete if not applicable) a. The Agreement b. Special Conditions of Contract c. General Conditions of Contract d. The Technical Specifications e. The Drawings f. The Bill of Quantities g.(if any) h.(if any)	1.1.1	Document Identification
Time for Completion	1.1.12	45 days after contract agreement
Law of Contract	1.4	Applicable Law of Nepal
Language	1.5	English or [in Nepali version]
Provision of Site	2.1	On the commencement date*
Authorised person	3.1
Name and address of Employer's representative (if known)	3.2
Performance security (if any): Amount: Form:	4.4 4.4	<p>i) If bid price of the bidder selected for acceptance is up to 15 (fifteen) percent less than the approved cost estimate, the performance security amount shall be 5 (five) percent of the bid price.</p> <p>ii) For the bid price less than 15 percent of the cost estimate, the performance security amount shall be determined as follows:</p> <p>Performance Security Amount = [(0.85 x Cost Estimate – Bid Price) x 0.5] + 5% of Bid Price.</p> <p>The Bid Price and Cost Estimate shall be inclusive of Value Added Tax. Security format Attached in section IX</p>
Time for the submission of programme	6.2	7 days of the commencement date
Liquidated Damages for Delay	6.4	0.05% of the Contract Price per day up to a maximum of 10%* of sum stated in the Agreement

* Employer to specify as appropriate

Item	Clause	Data
Period for notifying defects	8.1	365 days* calculated from the date stated in the notice under Sub-Clause 8.1.
Percentage of retention	10.3	5% of each payment made to the Contractor
Advance Payment	10.5(a)	Not applicable of the contract price
Deduction of Advance Payment	10.5(b)	Not applicable % of each payment certificate

Note: The attached drawings of partition can be changed within the specified quantity if necessary.

Section VI. Specification

CHAPTER 1: GENERAL REQUIREMENT

1.1 Requirement of Conditions of Contract and Specification

The requirement of the condition of the contract and the specification apply to all works under the contract.

1.2 Scope of the Works

- a. The Contractor has to arrange for labours to transport special equipment's which are used for Re-establishment of Instruments as Thermo hygrograph Recorder, Manual Rain gauge, staff gauge, Construction Works, Fencing Works, Maintenance Works. Discharge measurement and luggage of the people involving in discharge measurement work.
- b. The contractor is also responsible for making insurance for people of DHM for mountaineering.
- c. The contractor has to manage all logistic support such as camping, meal and clothing specially required for travelling at mountain above 3000m above sea level.
- d. The contractor has to clear site where station exist and also clear the site of discharge measurement.
- e. Has to manage for general medicines of first aid require at high altitude.

1.2.1 Major Works

The major works are described below; however, the works described in the Bill of Quantities shall govern.

- a) Establishment of Thermo hygrograph Recorder in Panchmukhi Base Camp (3800m) Humla.
- b) Fencing Work: size 10m *10m for meteorological station in Panchmukhi Base camp.
- c) Re-establishment of Manual Rain Gauge.
- d) Maintenance of Staff gauge in panchmukhi khola Daldung Humal.
- e) Discharge Measurement by using Current Meter.

1.2.2 Drawings: Drawing is applicable for fencing works.

Not Applicable

CHAPTER 2: SITE WORK

- 2.01 Site Inspection by the Contractor
The contractor is recommended to carefully examine the site and to ascertain himself the nature there of and the type of the materials to be excavated.
- 2.02 Investigation of the Site by the contractor
The contractor may make any sub-surface exploration he desires prior to the contract agreement. Limited sub-soil investigation have been mad the by the engineer. However the engineer makes no guarantee of the accuracy of the information. Its corrections shall not effect the provisions of the contract.
- 2.03 Clearance of the Site
The contractor shall clear the parts of the site subsequently to be occupied by the works and shall maintain them clear of vegetation.
The contractor shall not clear the site of any structure without prior written permission of the engineer.
Prior to the general clearance of site the contractor shall clear the site to the extent required by the engineer's representative for checking the works and setting out of the works.
The contractor shall fill and make good with appropriate materials those cavities and losses of soil which result from clearing the parts of the site not subsequently to be occupied by the works.
- 2.04 Disposal of the vegetation and plants
The contractor shall dispose of the vegetation and plants obtained from the site clearance sub-clause 2.03 above as approved by the engineer. The disposal shall not be made in any instance to the river or lake or any other place which may cause pollution to the air, soil and water.

CHAPTER 3 : EARTHWORK

- 3.01 Earthwork in any materials
The Contractor shall by make excavation in any materials for the several parts of the works and shall dispose of the excavated materials as ordered by the site Engineer.
- 3.02 Excavation to Dimensions
Excavation shall be to the dimensions and depth indicated on the drawing or to such lesser or greater depths as the site Engineer may deem necessary and so instruct the Contractor. Bottom of all excavation for foundation shall be in sound soil. Bearing for all foundations unless noted otherwise shall be levelled.

CHAPTER: 4 CONCRETE

- 4.01 Standard and Codes of Practices
All concrete work shall be carried out accordance with British Standard Code of Practice 110 or IS 456 unless otherwise specified herein.
- 4.02 **Cement for Concrete**
a) **Cement**
The cement used shall be ordinary Portland cement and shall conform in all respects with B.S. 12 or IS 269. White or colored cement shall be of approved quality and chemical composition shall conform with IS 269.
b) **Packing**
The cement shall be packed in six-ply paper bags or as approved in plastic bags of approved quality and the net mass of each bag shall be not less than 50 kg. The permissible tolerance on the mass of cement supplied in bags shall be +2.5% bag with an over tolerance of +0.5 % per 10 tones wagon load of bagged cement.
c) **Delivery of cement and storage**
The cement shall be delivered in the manufactures sealed and branded bags in quantities to insure that there is no suspension or interruption of the concrete work and stored separately in dry weatherproof. Well-ventilated stores raised above ground level and shall at all times be carefully protected from moisture. The cement shall be stored in such manner that each consignment may be easily inspected and identified and used in the order of its delivery.
- 4.03 **Aggregate**
a) **Supply and Classification**
The Contractor shall make his own arrangements for procuring, crushing, grading and delivering aggregate for the works as required from sources to be approved by the Engineer's Representative.
Coarse aggregate shall be supplied in the following primary sizes:

Size designation	Nominal size range
10	5 mm to 10 mm
20	5 mm to 20 mm
40	20 mm to 40 mm

Aggregates shall be graded to produce a workable dense concrete.
- d) **Coarse Aggregates**
Coarse aggregate shall consist of natural gravel crushed rock. Friable and flaky pieces such as mica and shale shall not be present, Coarse aggregates shall be well graded and to the satisfaction of the Engineer's Representation.

e) **Fine Aggregates**

Fine aggregates shall consist of natural sand or mixture of natural sand and crushed gravel or crushed rock. The Engineer's Representative permit the addition of crushed gravel or crushed rock fine aggregate to the natural sand only where in his opinion it is impracticable to obtain the required fine aggregate grading otherwise than by such addition.

4.04 4.05 **Curing and protection**

The Contractor shall for not less than 7 days protect the concrete from the harmful effects of frost, wind, sun, high and low temperatures, rapid temperature changes, premature loading, deflection, impact, running water and aggressive groundwater,. Protruding steel shall be kept cool.

All exposed concrete surface be kept continuously moist for not less than 7 days after casting, by watering, by covering with hessian or sacking which shall be kept fully saturated at all times or by other methods approved by the Engineer.

4.06 Cover to Reinforcement

The cover reinforcement shall be at least 50 mm unless shown otherwise on the Drawings, Cover shall be maintained by the use of concrete blocks or approved spacers. Concrete spacer blocks shall be made from cement, sand and small aggregate to match the mix proportions of the surrounding concrete as far as in practicable to ensure comparable strength, durability and appearance. The cost of spacer blocks and chairs shall be included in the contract rates for concrete.

CHAPTER 5: MASONRY

MATERIALS

5.01 a) **Cement for mortar**

Cement for masonry mortar and grout shall be ordinary Portland cement in accordance with the requirements. All cement for mortar for exposed face work shall be of a uniform colour as approved by the Engineer and confirm BS 12 IS 269.

5.02 b) Sand and water for mortar

Sand and water used shall be in accordance with the requirements and sand for exposed face work shall be of a uniform colour as approved by the Engineer.

5.03 c) **Workability of mortars**

The mortar shall be of a readily workable consistency with only enough water to obtain a plastic condition suitable for trowling.

CHAPTER : 6 Stone Masonry

a) Stone masonry

Stone shall be thoroughly soaked in water before use and shall be set in a full bed of mortar and grouted in every course. Solid stone masonry shall be in English or other approved bond. The course shall be laid level and with parallel meat and regular joints.

b) Wetting of stone

stone shall be well wetted for a minimum of three hours in advance of being laid or as required so that the rate of absorption when laid does not exceed 1 cc/square centimetre per minute . The method of wetting shall be such that each bricks be nearly saturated but surface remain dry when laid.

c) Scaffolding

The Contractor is responsible for providing, erecting and dismantling and removing safe scaffolding wherever required.

d) Protecting and curing

Protecting and curing of stone work shall be carried out in accordance with the directions of the Engineer or at least 7 days. The water used for curing shall be clean.

Chapter: 7 Plaster works

a) Mix of plaster:

Plaster mix shall be in accordance with the requirement as mention in bidding document.

b) Preparation of surface to be plastered

The surface to be plastered shall be brushed clean mortar joint of brick masonry or hollow concrete walls or any other surface to be plastered shall be raked to a depth of approximately 12mm, and the surface brushed down with a stiff brush and thoroughly wetted. The surface shall be free of all dust, loose materials, grease etc.

c) Curing of the plaster works

moist curing shall be accomplished by keeping the plaster uniformly damp by suitable means. Moist curing shall start during application and continue for not less than 7 days.

Chapter : 8 PAINTING WORK

The brand of the paint should be specified and readymade paint of the required colour be used. The paint should be enamel and double coat the paint should be applied with brushes evenly and smoothly.

Chapter : 9 Cement pointing works

a) Mix of cement tipkar materials :

Plaster mix materials shall be in accordance with the requirement as mention in bidding document.

b) Preparation of surface to be plastered

The surface to be plastered shall be brushed clean mortar joint of stone masonry or hollow concrete walls or any other surface to be plastered shall be raked to a depth of approximately 12mm, and the surface brushed down with a stiff brush and thoroughly wetted. The surface shall be free of all dust, loose materials, grease etc.

c) Curing of the plaster works

moist curing shall be accomplished by keeping the plaster uniformly damp by suitable means. Moist curing shall start during application and continue for not less than 7 days.

Chapter 10 : Fencing

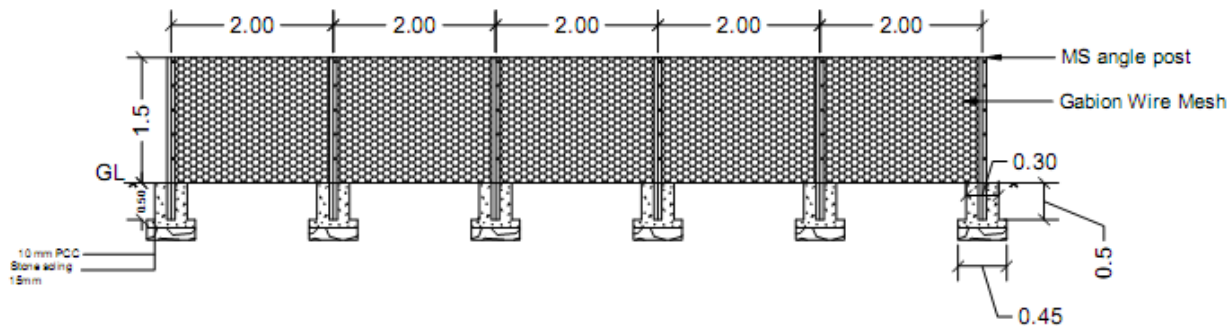
a) Iron angle pole must be good Quality which Length must be 2m size 2''*2''as must be drawing design. And Poles should be enamel painting.

Gabion net must be good quality and Galponised. size of net hole must be 2''*2'' Height of Gabion net must be 1.5 m .

Fixing the one meter staff gauge at Hydrometric Station for Khumbu Station

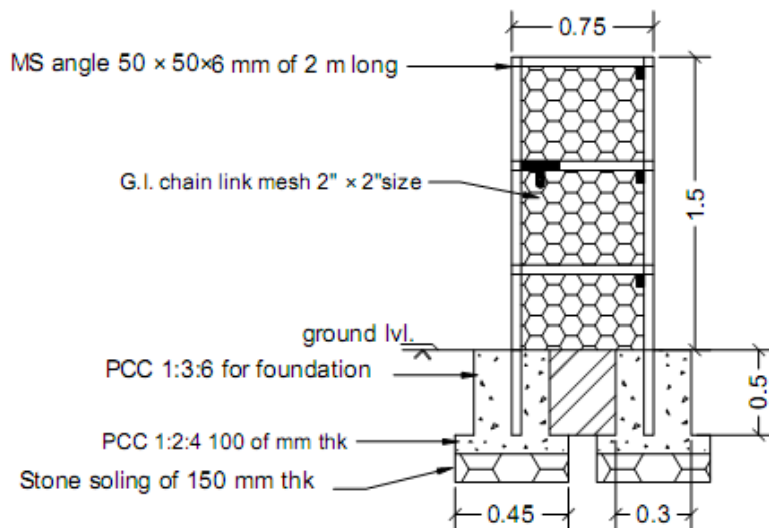
Particular of Works	Quantity	Unit	Rate(Rs.)	Amount (Rs.)
Fixing the one meter Staff Gauge				
<u>Labour</u>				
• Skilled labour	1	no		
• Unskilled labour	1	no		
<u>Materials</u>				
• Cement	10	kg		
• Nut bolt 12" long 16 mm diameter	3	no		
• Sal wood	0.0083	m3		
• lead	2	kg		
• 1.5" screw nail	10	no		
• Mseal	1	pckt		
• Gauge plate	1	no		
• Transportation the construction materials of staff gauge from Jiri to Dingboche by Porter. Total weight =30 kg Total kosh= 59 ,6 kosh = 1 days , 10days *1man=10 days up.	10	md		

Total Rs.



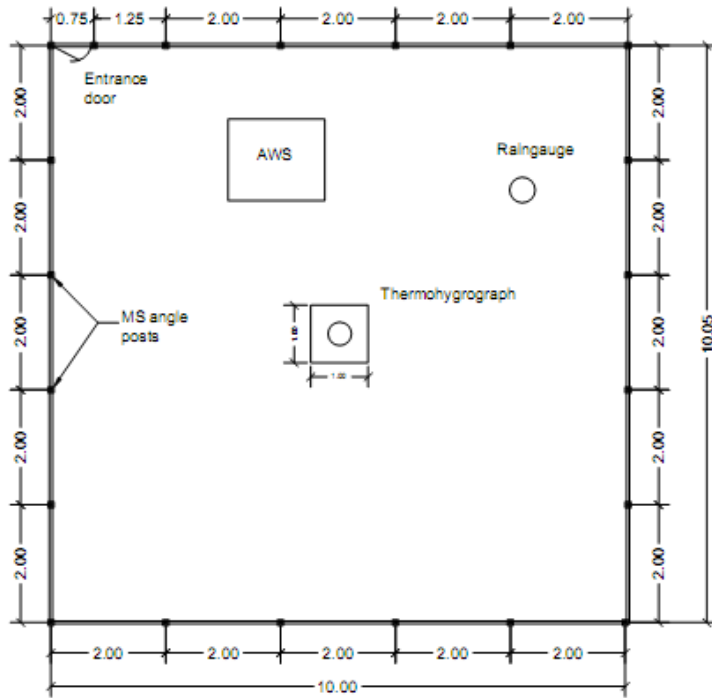
Isometric side view / Section

Project Title	Drawing Title :	Scale :	Drawn by	Approved by :
Installation of snow station at Humla	Wire Mesh fencing,section view Date : 2073/07/25	NTS	Er. Nirakar Thapa	

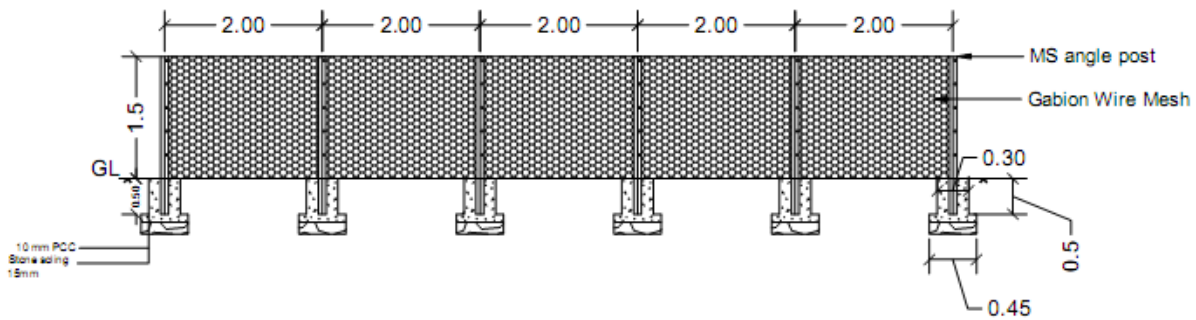


Section for fencing entrance door

Project Title	Drawing Title :	Scale :	Drawn by	Approved by :
Installation of snow station at Khumbu	Wire Mesh fencing,door section Date 2073/07/25	NTS	Er. Nirakar Thapa	



Project Title	Drawing Title :	Scale :	Drawn by	Approved by :
Installation of snow station at Khumbu	Wire Mesh Fencing, civil works plan layout Date : 2073/07/25	NTS	Er. Nirakar Thapa	



Isometric side view / Section

Project Title	Drawing Title :	Scale :	Drawn by	Approved by :
Installation of snow station at Khumbu	Wire Mesh fencing, section view Date : 2073/07/25	NTS	Er. Nirakar Thapa	

Section VIII. Bill of Quantities

Government of Nepal
Ministry of Population & Environment
Department of Hydrology & Meteorology
Snow, Water Quality and Environment Section

Project No: 01

PROJECT NO : 01 Bill Quantity: Maintenance of 1 m and 2 m staff Gauge in Panchmukhi khola khola at Daldung Humla Station ,Re establishment of Thermo-hygrograph Recorder Stand Set & Screen box , Fencing Work in Meteorological Stationand Discharge measurement work Panchmukhi khola at Daldung Humla Station.(3800)

S.no	Particulars of Works	Quantity	Unit	Rate Rs.	In words	Amount Rs.	Remarks
1	For Staff Gauge						
a	Site Clearence	2	md				
b	Hard Rock drilling work by using chisel for staff Gauge	4	no				
c	Sal Wood	0.83	cft.				
d	15mm/20cm Long Nut Bolt with washer	6	no				
e	Metallic Gauge Plate						From DHM store
f	Lead	2	Kg				
g	Levelling Pipe	8	m				
h	Drilling Bits	1	no				

i	Packing Materials	L.S					
2	For Thermohygrograph Recorder and Screen box ,Stand set.	1	set				From DHM store
a	Transportation Thermohygrograph Recorder, screen box and stand set from kathmandu To site Humla station. Total 114 kg	1	set				
b	Tension wire (3mm)	20	m				
c	Boulder Grip	8	no				
d	Stay Rod	4	no				
3	Transportation Manual Raingauge from kathmandu to site. Total 30 kg	1	set				
4	Earth Excavation Works	26.93	m3				
5	P.C.C Works (1:2:4)	1.47	m3				
6	Stonte Masonry 1:3 (Cement:Sand)	0.432	m3				
7	Painting Works (Enamel)	11.1	m2				
8	Dry stone Works	0.729	m3				
9	For Fencing Work of Meteorological Station						
a	(50mm*50mm*6mm) size of Iron Angle Poles.	42	m				

b	60mm*60mm size of Gavion Net 10 gauge	60	m2				
c	1.52m*0.76m Iron angle Gate	1	set				
d	lock for gate	1	no				
e	Sign Board (3' *2')	1	no				
10	Discharge measurement works.	1	set				
11	Transportation :						
a	Transportation of the trekking equipments 2sets, from Kathmandu to Nepalgunj by bus .	L.S					
b	Transportation of the trekking equipments 2sets, from Nepalgunj to Simikot by Plane.	30	kg				
c	Transportation of the Trekking Equipments Simikot to Panchmukhi base Camp Station by Porter Total 30 Kg. 1md*2days up= 2 md.	2					
d	Transportation of the Trekking Equipments Panchmukhi base Camp Station to simikot by Porter Total 30 Kg. 1md*2days up= 2 md.	2					
e	Transportation of the trekkering Equipments from simikot to Nepalgunj by Plane. Total 30 kg	30	kg				
f	Transportation of the trekkering Equipments from Nepalgunj and Kathmndu by Bus. Total 30 kg	L.S					

Total Rs:

Project No :02

Bill Quantity: Re-Establishment of 1 m to 3 m staff Gauge in imja khola at Dingboche Khumbu Station and Re establishment of staff gauge 1 m to 3 m in Imja khola Pangboche Station. ,Re establishment of Thermo-hygrograph Recorder Stand Set & Screen box, Fencing works of Meteorological Station at Dingboche Khumbu Station.(4320m)							
S.no	Particulars of Works	Quantity	Unit	Rate Rs.	in Words	Amount Rs.	Remarks
1	For Staff Gauge						
a	Re-Establishment of staff Gauge 1m to 3m Staff Gauge In Imja Khola Dingboche station.	3	m				
b	Re establishment of Staff Gauge 1m to 3m Staff Gauge In Imja Khola Pangboche Station	3	m				
2	For Thermo-hygrograph Recorder and Screen box ,Stand set	1	set				(From DHM store)
a	Transportation Thermo-hygro graph Recorder, screen box and stand set from kathmandu To site Khumbu station.	1	set				
b	Tension wire (3mm)	20	m				
c	Boulder Grip	8	no				
d	Stay Rod	4	no				
3	Manual Rain gauge	1	set				(From DHM store)
a	Transportation Manual Rain gauge from kathmandu to site.	1	set				

S.no	Particulars of Works	Quantity	Unit	Rate Rs.	in Words	Amount Rs.	Remarks
4	Earth Excavation Works	20.16	m3				
5	P.C.C Works	1.24	m3				
6	1:3 Cement Motar Works	0.015	m3				
7	Dry stone Works	0.36	m3				
8	Painting Works	11.1	m2				
9	For Fencing Work of Meteorological Station						
a	(50mm*50mm*6mm) size of Iron Angle Poles 2 m long.	42	m				
b	2"*2" size of Gavion Net 10 gauge	60	m2				
c	5'*2.5 feet Iron angle Gate	1	set				
d	Lock for Fencing gate	1	no				
e	Sign Board (3' *2')	1	no				

S.no	Particulars of Works	Quantity	Unit	Rate Rs.	in Words	Amount Rs.	Remarks
10	Transportation :						
a	Transportation of the trekking equipments 2sets, from Kathmandu to jiri by bus . Total =60 kg.	L.S					
b	Transportation of the trekking equipments 2sets, from Jiri to Dingboche by Porter. Total =59 kosh , 6 kosh =1md Tharefore total weight =60 kg =2md *10 dys up.	10	md				
c	Transportation of the trekking equipments 2sets, from Dingboche to Jiri by Porter. Total =59 kosh , 6 kosh =1md Tharefore total weight =35 kg =1md *10 dys down= 10 md.	10					
e	Transportation of the trekking Equipments from Jiri to KTM by Bus. Total 35 kg	1					

Total Rs:

Government of Nepal
Ministry of Population & Environment
Department of Hydrology & Meteorology
Snow, Water Quality and Environment Section

Abstract Cost: Fencing Works , Re establishment of Equipments and Supply of labour for Discharge measurement in Humla station (Panchamukhi Base Camp 3800m) and Khumbu Station (Dingboche 4320m).

S.no	Particulars of Works	Quantity	Unit	Rate Rs.	Amount Rs.	Remarks
1	<i><u>PROJECT No: 01 (Humla station):</u></i> <i>Maintinane of 1 m and 2 m staff Gauge in Panchmukhi khola khola at Daldung Humla Station ,Re establishment of Thermo-hygrograph Recorder Stand Set & Screen box , Fencing Work in Meteorological Stationand Discharge measurement work Panchmukhi khola at Daldung Humla Station.(3800). Total Cost</i>	1				
2	<i><u>PROJECT NO : 02(Khumbu Station) :</u></i> <i>Re-Establishment of 1 m to 3 m staff Gauge in imja khola at Dingboche Khmbu Station and Re establishment of staff gauge 1 m to 3 m in Imja khola Pangboche Station. ,Re establishment of Thermo-hygrograph Recorder Stand Set & Screen box, Fencing works of Meteorological Station at Dingboche Khumbu . Station.(4320m) Total Cost</i>	1				

Total Rs

Vat 13%

Grand Total Rs