

NEPAL ELECTRICITY AUTHORITY

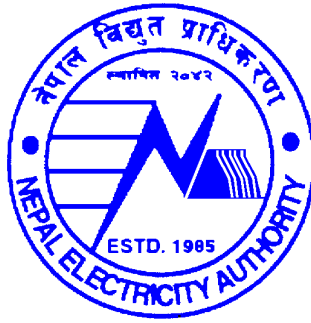
(An Undertaking of Government of Nepal)

DISTRIBUTION AND CONSUMER SERVICE DIRECTORATE

Pokhara Regional Office

Myagdi Distribution Centre

Beni, Myagdi



Replacement of Wooden Pole and Restringing of LT Line at Different Places of Beni Municipality, Babiachour, and Arman

Sealed Quotation No.: **MDC-074/075-01(SQ)**

Issued by:

Nepal Electricity Authority

Distribution and Consumer Services Directorate

Myagdi Distribution Centre

Beni, Myagdi

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2074 Mangsir

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Section I. Invitation for Sealed Quotation

Name of the Office: **Nepal Electricity Authority
Myagdi Distribution Centre
Beni, Myagdi**

Sealed Quotation No: **MDC/074/075-01(SQ)**
Last Date/Time of Purchasing: **2074/09/12 during Office hour**
Last Date/Time of Submission: **2074/09/13 12:00 Noon**
Time of Bid Opening: **2074/09/13 at 14:00**

Date of first Publication: **2074/08/27**

1. The Nepal Electricity Authority (NEA), Myagdi Distribution Centre (MDC), Beni, Myagdi (hereinafter called "the Employer") invites sealed quotations from registered bidders for the **Replacement of Wooden Pole and Restranging of LT Line at Different Places of Beni Municipality, Babiachour and Arman**
2. Eligible Bidders may obtain further information at the office given above.
3. Sealed Quotation Forms may be purchased by eligible bidders on the submission of a written application and accompanied by a bank voucher of the **non-refundable fee** of **Rs.1000.00** deposited in **NEA** Deposit Account No **2901524083790025** at **Machhapuchhre Bank LTD at Beni Myagdi, or** by an account payee bank draft of the same amount issued in favour of **Myagdi Distribution Centre, NEA, Beni ,Myagdi or Paying the amount in Beni Cash Counter**. The bidder must produce an attested copy of the valid Firm Registration Certificate, VAT and PAN Registration Certificates at the time of purchase of Sealed Quotation Form.
4. Sealed Quotations must be submitted to the above office at or before **12:00 hours** local time on or before the dates given above. Documents received after this deadline shall not be accepted.
5. Quotations must be valid for a period of **45 days** after opening of Sealed quotations and must be accompanied by Cash Security or Bank Guarantee, amounting to a **NRs. 48500.00 (inclusive of VAT)**, which shall be **valid for 75 days** after opening of the Sealed Quotations.
6. If bidder wishes to submit the Cash Security, the cash should be deposited in Deposit Account No. **2901524083790025** at Machhapuchhre Bank, Beni Branch and submit the receipt of the deposited amount of cash along with the Sealed Quotation.
7. Sealed Quotations shall be opened in (or without) the presence of Bidders' representatives who choose to attend at **14:00 hours** local time on the date of bid submission at the office of given above.
8. If the last date of submission and opening falls on a government holiday then the next working day shall be considered the last day.
9. Bidders are advised to visit site and assess the actual site conditions before submitting their bid.
10. The Employer reserves the right to accept or reject, wholly or partly any or all the Sealed Quotations without assigning any reason, whatsoever.
11. Bidders intending to purchase the Sealed Quotation Form on behalf of the principals must produce the authorization from their principals.



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Section II. Instructions to Bidders

- 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 of 073/74.
 - 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 **48500.00**. 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.



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- 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..

26 .Additional Securities

The Bidder may be required to provide additional Performance Security if the Employer determines that the rate quoted by the Bidder in the Bill of Quantities, are too low for execution of the contract. In such case, the Employer shall instruct the Bidder to provide additional 8% security for signing of the Contract Agreement. Bidder's failure to do provide additional security shall result in forfeiture of the Bid Security and award of the Contract to the next lowest evaluated Bidder.

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 carryout 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



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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

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 witnesses 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.

Other Definitions

- 1.1.15 "**Retention Money**" means the aggregate of all monies retained by the Employer pursuant to Sub-Clause 10.3
- 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.



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- 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:
- a. where appropriate, at rates in the Contract, or
 - b. in the absence of appropriate rates, the rates in the Contract shall be used as the basis for valuation or
 - c. 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.



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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 Contractor'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.



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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.



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Section V Special Conditions of Contract (SCC)

This SCC forms part of the Agreement

Item	Clause	Data
Documents forming the Contract listed in the order of priority Document 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	Six Month after signing the contract
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	The Centre Chief NEA, Myagdi Distribution Centre
Name and address of Employer's representative (if known)	3.2	N/A
Performance security (if any): Amount: Form:	4.4 4.4	...5.... % of the contract price Security format Attached in section IX
Time for the submission of programme	6.2	Within 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
Period for notifying defects	8.1	365 days* calculated from the date stated in the notice under Sub-Clause 8.1.

* Employer to specify as appropriate



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Percentage of retention	10.3	5% of each payment made to the Contractor
Advance Payment	10.5(a)	10 % of the contract price
Deduction of Advance Payment	10.5(b)	30% of each payment certificate



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Section VI. Technical Specification

SECTION VI A SPECIFICATION STANDARD

- 1.1 The work shall be carried out according to the specifications whether specifically mentioned in it or not. No extra in any form shall be paid unless it is definitely stated as an item in the Bill of Quantities. Whenever the specifications are not given or ambiguous, decision of the Engineer shall be considered as final and binding.

1. General

- 1.1 These Standard Specifications, together with the Construction Standards and Standard Drawings shall govern the performance of the Works and shall be the basis for inspection and acceptance of the Work by NEA MDC.
- 1.2 The Standard Specifications and the Construction Standards and Standard Drawings shall be considered as mutually inclusive, and the conditions stated in each shall supplement the other as appropriate.
- 1.3 All Standard Specifications shall be followed at all times by the Contractor unless specifically accepted in writing by the NEA MDC, or unless some aspects of the work covered by these General Specifications are not required by the Scope of Work.
- 1.4 The Standard Specifications, Construction Standards and Drawings for the construction items shall be as per NEA standards. If any dispute or confusion arises, the NEA standards will govern and must be followed by the concerned parties.

2. Route of Circuits

- 2.1 To the greatest extent practicable, all overhead circuits should be located along streets or travelled ways ordained by the Beni Municipality or required authority as public property, except as required for Service drops and circuits to individual consumers.
- 2.2 To the greatest extent practicable, all facilities should be located on public property, and in no case shall private property be occupied unless specifically authorized by NEA MDC. NEA shall obtain any required permits for occupancy of public or private Right-of-Way.

3. Survey and Staking

- 3.1 All structures should be located at the outer limits of public property along streets or travelled ways. Structures should also be located along streets at property lines of adjacent private property. Structures and stays running parallel or perpendicular to the line route shall not block portions of streets, travelled ways, drives, passages, or gates.
- 3.2 All structures shall be so located as to reduce, to the greatest extent practicable, obstacles to pedestrian and vehicular traffic. Barriers shall be provided in accordance with instructions by the employer. As far as practicable, transformer structures shall be located to reduce visual and noise impact on adjacent residences or businesses.
- 3.3 Where underground facilities are indicated by surface conditions, or where such facilities can be located, structures and stays shall be so located as to avoid conflict with such facilities during construction.
- 3.4 All measuring and staking activity shall be accomplished by personnel with experience in survey procedures, and standard survey equipment acceptable to the employer, shall be used to perform the survey work. Field survey notes covering all survey work shall be produced and maintained and shall be turned over to the NEA MDC at the time of



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completion of the Works. The format of proposed survey notes shall be submitted to NEA for approval.

- 3.5 Survey work shall include centre line and structure location and staking; determination of overhead and site clearings of other structures, wires, and obstacles; area surveys and plotting; and centre-line profiles of terrain; as directed by the NEA MDC.

4. **Technical Documentation**

- 4.1 All technical documentation as specified here in, shall be prepared by the Contractor. The Contractor shall employ skilled drafting personnel to produce all documentation specified. All technical documentation prepared by the Contractor shall be subject to the approval of the NEA MDC prior to acceptance by the NEA MDC of such documentation. All technical documentation shall be prepared in the English language.

- 4.2 Documentation shall be prepared using the following mediums:

- a) Mylar material, with a minimum thickness of 0.127 millimetres, shall be used to produce the base Structure Data Sheet, As-Built Drawings and other drawings specified by the NEA MDC.
- b) Standard drafting vellum shall be used to produce small area plotting, profiles of line-sections and centre-line plotting necessary for the development of Structure Data Sheets and As-built Drawings.

- 4.3 Structure Data Sheets (SDS) shall be prepared in accordance Construction standards. Submission of SDS for approval shall be in the form of A3 photocopy in clearly legible copy. Any unclear or illegible form entry or reproduction shall be rejected. NEA MDC may require any revisions to be made, at their sole discretion, prior to approval of the SDS for construction. An approved and field checked SDS is required for all Construction works invoiced by the Contractor. Field checking of the SDS shall be performed jointly by the Contractor and NEA MDC representative. The SDS and As Built Plan are intended as permanent records for NEA MDC. Any construction performed prior to the Contractor's receipt of approved SDS from NEA MDC shall be completely at the Contractor's risk, and NEA PDC shall have the right to require any correction due to the un-approved construction activities. No extra cost will be borne by NEA for the preparation of SDS.

- 4.4 As-Built Drawings shall be prepared by the Contractor in the general format provided by the NEA MDC. Drawing size shall be approximately 841 x 597 mm overall and the scale shall be 1:10,000, 1:2,000. The NEA MDC shall provide any available environmental background data for inclusion on the various drawings and the Contractor shall record (in ink) all facilities as-built.

- 4.5 The Contractor shall prepare other technical drawings, in the same medium and format as the As-Built Drawings, for As-Built Drawings index sheets, pole maps, and One-Line Diagrams as specified and required by the NEA MDC.

- 4.6 The Contractor shall and prepare and furnish Transformer Record documents, in the format specified by the NEA MDC, for each transformer installed.

5. **Material Storage**

- 5.1 The Contractor shall procure all materials and equipment .All materials and equipment turned in to the NEA MDC reclaimed after demolition of existing facilities if any shall be transported to the NEA MDC warehouse and unloaded in the same manner.

5.2 **Worksite**



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- a) Extended storage of materials along the routes of lines will not be permitted. All small items of material shall be provided to the work crews on a daily basis and no small items of materials may be stored on the worksite overnight.
- b) Construction materials may be spotted at the worksites for a short period prior to installation provided that crating and reel lagging are intact to protect the items. Poles may be spotted at structure locations for short periods prior to setting.
- c) Construction materials placed at the worksites shall be located so that the items are not subject to damage and do not impede pedestrian or vehicular traffic.
- d) Any damage caused by imprudent placement of equipment and materials by the Contractor at the worksites shall be corrected by the Contractor, in a manner acceptable to the NEA MDC, at the Contractor's cost.

5.3 Contractor Storage Facility

- a) The Contractor shall be financially responsible for the secure and proper storage of materials.

6. Excavations

- 6.1 All excavations made for the installation, or demolition, of facilities shall be accomplished in a timely manner according to the scheduled installation. Required excavations shall be opened, material installed, and backfill placed, as specified, in a continuing operation to the greatest extent practicable.
- 6.2 Any excavation left open during discontinuous construction which is accessible to the public or along public thoroughfare, shall be covered or barricaded, and marked by suitable visual means, to prevent a public hazard.
- 6.3 Excavations shall be properly located and sized for the intended use. Pole and stay plate/ anchor excavations shall be correctly sized to retain undisturbed soil to the greatest extent consistent with the means of excavation. Pole holes shall be made by power-driven auger or by manual methods; power-driven shovel equipment shall not be used. Pole holes shall be excavated to the specified depth with no tolerance shallow and tolerance of ten (10) centi meters deep. The bottom of pole holes shall be undisturbed soil, gravel or rock. Stay plate holes shall be excavated by manual methods to specified depth with no disturbed soil in the direction of the anchor rod.
- 6.4 All excavations shall be backfilled with excavated material, or as specified for the installation. Backfill shall be free of foreign materials and shall be well tamped with excess backfill graded over the excavated area to prevent depressions resulting from eventual natural compaction. Large amounts of excess backfill shall be removed from the site by the Contractor if so directed by employer. If so directed by NEA MDC, The Contractor shall provide suitable backfill materials for excavations where existing removed materials is insufficient, or inappropriate, to provide suitable grading of the excavated area.

7. Pole Setting

- 7.1 Poles shall be set in accordance with the appropriate Sections of the Construction Standards and subparagraph 6 above.
- 7.2 Each pole shall be assigned a unique construction number at the time of structure staking for preliminary identification and preparation of structure Data Sheets (SDS).
- 7.3 Subsequent to the preparation and approval of SDS, and prior to provisional acceptance of a given line section, the NEA MDC shall provide the Contractor with unique permanent pole numbers. The Contractor shall then apply the specified permanent pole numbers to each pole with black oil-based paint in neat clear English letters and/or Arabic numerals. Permanent pole numbers shall be applied in letters/numerals five (5) centimetres in height



at a point on the pole 1.6 meters above ground level. Numbers shall be applied on the side of the pole facing the adjacent street or travelled way.

8. **Safety**

- 8.1 The Contractor shall take all measures required to safeguard the public, public and private property from any hazard to life, limb, or property which may arise during the performance of the construction of the works. Such measures shall include, but not be limited to: barricades, signs, newspaper announcements, traffic control by police, or other advisory and control methods deemed appropriate.
- 8.2 The Contractor shall provide his work force with all tools and equipment in sufficient numbers and quality to perform all aspects of the works in a safe manner. The Contractor shall provide protective headgear for all members of his workforce, and shall provide protective clothing as required for specific tasks. The Contractor shall instruct his work force in proper and safe construction techniques and shall continuously monitor compliance with safety instructions throughout the period of the Contract.
- 8.3 The Contractor shall provide, and require use of, protective grounding equipment when:
- a) Work is being performed on lines adjacent, either in extension of, or parallel to, energized circuits.
 - b) Work is being performed on isolated circuits after conductors have been installed.
- 8.4 The Contractor shall maintain all tools and equipment in good working order. All mechanized equipment shall have adequate safety mechanisms and guards in place and be fully operational. Operators of such equipment shall be skilled and fully trained in the operation of such equipment.
- 8.5 The Contractor shall provide and maintain emergency medical supplies to cover with accidents and snakebites for his work force on a readily available basis. The Contractor shall also instruct all supervisory personnel in the action to be taken in the event of serious injury, and the sources and locations of professional medical assistance which shall be employed in such cases.
- 8.6 The Contractor shall apply all accidental insurance policies to his work force for an accident occurring during the working period of the construction.

9. **Tests**

- 9.1 The Contractor shall furnish the electrical test equipment and personnel to perform electrical tests of equipment and circuits, as specified by, and under the supervision of the NEA MDC.
- 9.2 The Contractor shall megger all circuits installed with a motor-driven megger or equivalent instrument. All circuits installed with a motor-driven megger to demonstrate the acceptable insulation characteristics of the line prior to energization and Provisional Acceptance. 11 kV overhead circuits shall be tested at 2500/1000 volts AC.
- 9.3 All tests specified shall be conducted during suitable atmospheric conditions under the supervision and witness of the NEA MDC. All test results shall be documented and signed by both parties.

10. **Tree Cutting and Trimming**

- 10.1 Any tree cutting or tree trimming authorized and directed shall be accomplished by the Contractor under the direct supervision of NEA MDC.



**SECTION VI B
STRUCTURE DATA SHEET (SDS)**

Structure Data Sheets (SDS) shall be prepared to provide details of specific construction information necessary for erection of pole structures with hardware and accessories and conductor installation. The SDS shall be used in conjunction with the area plan drawing to document the works to be performed.

Abbreviations used in the preparation of SDS shall be defined as follows,

<u>Sl. No.</u>	<u>Nomenclatures</u>	<u>Meaning</u>
a.	Pole Construction No.	Number assigned by the Contractor to identify pole on Plan drawing.
b.	Span	Length of conductor span between poles
c.	BK	Angle of line deflection in degrees
d.	Pole	Pole quantity
e.	Frame	The construction Standard Drawing No. for 11 kV system for which the pole is to be framed e.g. CS11-02. The Construction Standard Drawing No. for 33 kV system for which the pole is to be framed e.g. CS33-01.
f.	Stay	The Construction Standard Drawing No. of stay to be installed in different voltage system, e.g., CSG-08.
g.	Conductor	The number and size of conductors in sq. mm in 11 kV system, e.g. 3-100.sq mm.
h.	Conductor (km.)	Running km. length of conductor.

Note :

- a. Information for a single pole location need not be confined to a single row.
- b. All works, whether new or on existing systems, shall be documented on the SDS.
- c. Each SDS shall include the applicable "As Built" Plan Drawing number(s). Similarly each "As Built" Plan Drawing shall include the applicable SDS number(s).



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SECTION VI C



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SECTION VI C

CONSTRUCTION STANDARDS

1.0 GENERAL INSTRUCTIONS

A. General

The general instructions included in this section shall be applied to all 11 kV and 400/230 volt overhead line construction under this NEA MDC. Additional general instructions are included in each section as they are applied specifically to the subject covered in that section.

These construction standards provide basic requirements for new facilities.

The clearances of conductors and structures shall be as per the NEA construction standard . Deviations from these standards may become necessary due to unique or special conditions. In such cases, the directions of the Employer shall be followed.

The safety rules of the NEA shall be strictly observed at all times by the Contractors' and NEA's work forces.

B. Pole numbering

Poles and structures shall be numbered in accordance with a numbering system provided by NEA. Each pole or structure shall be paint stencilled with the assigned number.

2.0 POLES, CROSSARMS, AND STAYS

A. Poles

Poles shall be installed by length and class at locations in accordance with the construction plan.

B. Pole setting

Pole holes shall be dug large enough in diameter to admit a tamping bar all around the periphery of the pole and shall have a uniform dimension as per the type of pole used at the top and bottom. Poles shall be planted in the ground to the depth specified in Table 2. Before planting a pole, the bottom of the hole made for planting the pole, shall be cleaned of free soil and firmly tamped, to prevent the hole from settling.

The stability of a pole, particularly a pole without stay, is greatly influenced by the size of the pole hole, the nature of the soil and the care exercised in back filling and tamping. Two active hand tampers and one slow shoveler shall result in good compaction.

Poles shall be set to stand perpendicular except at terminals, angles and other points of excessive strain where they shall be given a rake not to exceed 10 centimetres against the direction of strain. Poles located at the sides of banks or other locations, where washouts may occur, shall be protected by suitable cribbing, or shall be referred to the Engineer for recommended action.

After the pole is in position and the hole is back filled and tamped, soil shall be piled and packed firmly around the pole. Pole setting shall be inspected prior to acceptance and any back fills that have sunk shall be refilled.

Poles located in shallow river beds shall be protected by gabions as designated by the Employer. Gabions should be approximately 2 metres x 1 metre x metre. Four such gabions are required for each pole.

Set pole and pour 860 mm diameter foundation and level areas around pole and set gabions in pattern shown in CSG-06. It is important to lace adjacent gabions together along the perimeter of all contact surfaces. Fill gabions with hard, durable, clean stone, 100 mm to 200 mm in size in three



layers. Install two connecting wires at each layer. Lace gabion lids securely and make certain that all edges are closed. Fill void between pole and gabion with hard, durable, clean rock 200 mm minimum size.

C. Pole Framing

Pole and structures shall generally be framed in accordance with these standards and the construction structure data sheets. Where special framing requirements are necessary, the Employer shall provide framing instructions for the specific structure.

Each cross-arm shall be attached to the pole by a pole clamp or by machined bolts of sufficient length to pass completely through the holes provided on the pole and cross-arms and receive their full complement of nuts.

Bolts of proper length shall be used. Excess nuts shall not be used to make use of a bolt which would otherwise be too long. The end of a machined bolt NEA PROing more than 3 centimetres beyond the nut shall be cut off to a length of 2 centimetres beyond the nut. Each bolt, when installed, shall have its full complement of nuts.

D. Stays

Stay leads specified in construction documents are defined as the horizontal distance from the centre line of the pole at ground line to the point where the anchor rod should enter the ground assuming the ground to be level. For the correction in stay leads for uneven ground see Drawing.

The Engineer, upon request, may designate the actual location of stay anchor rods on slope of hills. The stay stake indicates the point where the anchor rod enters the ground. The anchor hole shall be dug accordingly.

The attachment of one stay shall not overlap that of another stay when two or more stays are carried to a pole or anchor. Each shall be entirely independent of the other. This does not prevent the use of multiple eye rods for nuts designed for such use.

All stays to be installed on a pole line shall be placed and drawn reasonably tight before the conductors are tensioned. After the conductors are tensioned and sagged to their final position, the stays shall be carefully inspected to see that each is carrying its share of the load on the pole as intended. If multiple stays are not carrying equal strain, the slack stay shall be pulled up until it is sharing load as intended.

Stay anchors must be installed full depth and set to pull against undisturbed soil to develop full tension. An anchor not properly installed will move and allow movement of the top of the pole, thus slacking the conductors. Stay anchors installed in soft or unstable earth shall be placed at specified depth and back filled with 5 cm. maximum size crushed stone placed to a depth of 1 meter from the bottom of the pole.

E. Stay Insulators

Stay insulators shall be installed on all stays in accordance with the construction drawings.

F. Field Modifications

During the erection work at the field there may be necessity to modify galvanised steel hardware and may have to be drilled, reamed, filed or cut. Under such a condition the area of the steel exposed, after these modifications, shall be coated with a zinc-rich paint to protect the steel from corrosion.



3.0 CONDUCTOR

A. Materials

Aluminium conductors refer to an assembly of strands of hard drawn aluminium with steel reinforcements for greater strength which are termed as Aluminium Conductor Steel Reinforced (ACSR) Conductor.

B. Sagging

Conductors shall be sagged in accordance with the sag chart specified by these specifications.

The importance of careful sagging of conductors cannot be over emphasised. Conductors have definite characteristic that control their behaviour resulting from changes of temperature, wind speed and additional load due to ice or wet snow.

Conductors must not be sagged too tightly (less than specified sag) as unspecified extra tensions may result in failure of conductor structure.

Conductors sagged too loosely (more than specified sag) may contact adjacent conductors hardware or any structure. Excess sag can reduce clearance beneath the line with the ground to the point of danger.

C. Sag Charts

Unless otherwise noted, all sag charts are calculated on the basis of 35 kg/sqm wind pressure

Sag is always measured vertically, without wind, when conductors are being installed or re-sagged.

Unless otherwise specified by the Employer for a specific condition, initial or stringing sag shall be applied to the installation of all new unstressed conductor. The initial sag is always less than the final sag.

Sags for the various temperatures shall be furnished by the Engineer in a table form for spans not covered by the sag chart.

In order to ascertain the sag for a given stringing temperature, select the point corresponding to the proper temperature on the scale on the left-hand side of the sag chart. Lay a straight edge so that it passes through this point and the point of the centre scale representing the length of span to be sagged. The straight edge will then indicate the proper stringing sag on the right-hand scale. Interpolate if the temperature of span is not exactly the same as designated on the chart. The low voltage neutral conductor shall be sagged with the same sag as the low voltage phase conductor. If the low voltage conductor, as a group, has less design sag than the high voltage phase conductor installed above it, the low voltage conductor, as a group, shall be installed to the same sag as the high voltage conductors installed above.

D. Stringing

The dynamometers and similar apparatus shall be used for tensioning of conductor to obtain appropriate sagging of conductors.

For stringing of ACSR conductors of all sizes, stringing rollers or roller shall be used to support the conductor as it is pulled out and sagged. Stringing rollers shall be used regardless of size of aluminium conductors, bare or covered.

Stringing rollers shall be suspended at each insulator support position so that the conductor shall roll smoothly over the roller protecting conductor from any physical damage.

Stringing sheaves shall have a diameter at least 20 times the conductor diameter and so finished as to prevent damage of any kind to the conductor as it is pulled through the sheaves.



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Conductor drum shall be located at a sufficient distance from the first structure to avoid excessive bending of the conductor over the sheaves and excessive downward loading on the cross-arms.

Attention shall be paid to the fact that all sag charts contained herein for ACSR conductors are calculated on the basis of non pre-stressed conductor. For this reason, at no time during the stringing or sagging operation, shall conductors of this type be pulled to sags which are less than those shown by the charts.

Special care shall be taken at all times to prevent the conductor from becoming kinked, twisted or abraded in any manner. Where it is necessary to drag conductors on the ground, the conductors shall be protected by covering all stones or other objects which might damage the conductor with boughs or trees or suitable pieces of lumber. These requirements are specially important when ACSR conductor is being handled on river crossing spans. Floats with rollers shall be used to prevent the conductor from dragging along the river bottom.

In stringing conductors across highways, the conductors shall be fully protected from passing vehicles by use of temporary guard structures.

E. Damaged Conductor

Damaged conductors shall be repaired by using a repair sleeve provided that no more than 2 strands of the outer aluminium layer are damaged and further provided that none of the sleeve core strands are damaged. For a conductor damaged in excess of the above conditions, the damaged section of the conductor shall be cut out and a tension splice installed.

When cutting out damaged section of conductor, no more than 1 tension splice shall be permitted in a span and no splice be made within 8 meters of an insulator attachment.

F. Sag Error

Sag error shall not exceed ± 40 mm from the sag.

G. Conductor Attachment

Conductors shall be secured to pin insulators with pre-formed conductor ties or with tie wire. Insulator ties, except at jumper supports in structures, shall be made with pre-formed ties when available.

Conductors shall be connected to dead end assemblies with tension set.

H. Line Splices For Tensioning And Looping

Cleaned and polished contact surfaces are necessary to make conductor splices so that it shall remain free from trouble. Great care shall be taken to completely clean the strands of aluminium conductor. The splicing sleeve must be centred over the conductor ends before compressing to make a splice of required strength.

Sleeve shall be used when splicing ACSR conductors prior to installation. The outer strands of aluminium shall be carefully cleaned with a wire brush to remove all foreign matter till the aluminium shines brightly. The cleaning applies to both new and old conductors. Splicing sleeves for aluminium conductor are supplied by the manufacturer pre-filled with inhibitor compound.

Splices in line conductors shall be so located that the end of the splicing sleeve is at least 30 cm from the end of a suspension or dead end clamp. Non-tension loops, such as between dead ends, shall be spliced with a connector when the conductor are of same metal and size.

1. Connectors

1. Cleaned and polished contact surfaces are necessary to make electrical connections that will be free from trouble.



2. Tap connectors are supplied by manufacturers pre-filled with inhibitor compound. Excess inhibitor compound shall not to be removed but it shall be wiped over the connector as a moisture seal. Connectors shall not be covered or taped.
3. Compression connectors shall be located in such a manner that there shall be at least 30 cm of conductor between the end of the connector and the end of a dead end
4. Connectors shall be installed on non-tensioned portion of the conductor such as loops in preference to the conductor in the span.
5. Connectors installed on conductor shall be located in a span adjacent to the crossing rather than the crossing span when practicable.
6. Aluminium compression connectors, pre-filled with inhibitor compound, shall be compressed on the cleaned area of aluminium conductor. Where necessary, inhibitor compound shall be applied to the cleaned conductor and connector before assembly.
7. Aluminium compression connectors shall be used for connecting aluminium to aluminium conductors.

4.0 CONDUCTOR ACCESSORIES

A. Pre-Formed Ties And Grips

Taps for jumpers and services shall not be made over the legs of ties or dead end grips.

B. Pin Insulator Ties

Pin insulator ties are of 2 types:

- a. **With single top grooves:** Single top ties may be used to turn line angles to 7 degrees where single insulators are permitted. Please refer material list CSG-29, 30 for specific applications.
- b. **With side grooves with specific size of ties for specific conductor in each tie style:** Specific usage is dictated by insulator pin loading and use of single insulators as specified in material list CSG-29, 30.

C. Preformed ties for Stay Wire

Preformed ties for stay wire are right hand lay. Preformed ties for stay wire may be removed and replaced up to 3 times, when initially installed, to permit adjustment of stay tension.

D. Application

When applying ties or grips the manufacturer's identification tag and colour coding shall be checked to insure that the tie or grip is the right unit specified for application on the specific conductor or wire strand.

Preformed ties for stay wire are furnished with two crossover markings. When applying preformed ties on hardware, the grip shall be installed using the crossover point closest to the loop of the grip.

F. Compression Fittings

Full-tension conductor splices and repair sleeves are furnished for all conductors to be installed.

- a. Full Tension Conductor Splice



Full-tension splices for ACSR conductor are provided in a 2/1-piece unit. Full tension conductor splices will develop full conductivity of the conductor and a minimum of 95% of the rated conductor breaking strength. Please see Drawing for splicing instructions.

b. **Repair Sleeves**

Conductor repair sleeves are furnished for all conductors to be used to restore the rated current carrying capacity of conductors with broken strands. Please see material list CSG-M8 for application tables. Repair splices have no tension rating.

G. PG Clamps

PG clamps are furnished in a full range of sizes for application in the non-tension connection in 33 kV and 11 kV circuits. The PG clamps are designed for general use in making tap and jumper connections of various types.

In all applications of PG clamp fittings, the conductor metal shall be wire-brushed to a bright condition to remove surface oxidation on the conductor.

5.0 LINE CONSTRUCTION

A. Arrangement Of Conductor

The standard position of 11 kV phase conductors on the cross-arm in the normal triangular configuration looking from the normal source of power supply shall be seen as:

Red (R) on top of the pole, Yellow (Y) on right hand end of the cross-arm and Blue (B) on left hand end of the cross arm.

B. Attachments To Poles

Bolt holes are provided on poles for cross-arms, cross-arm braces and stay bolts.

C. Conductor Ties

Pre-formed ties and grips shall be used for attaching conductors to structures when available.

If pre-formed materials are not available, the wire shall be soft conductor so that when made up, the tie wire will bind the conductor tightly. No tie wire shall be used for a second time.

Tie wire shall be of the same metal as that of the bare conductor to which the tie is applied.

D. Conductor Support

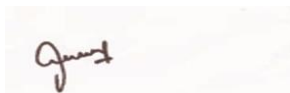
The conductor supports on straight lines shall be carried on the top wire groove of the pin insulator. Conductors shall be attached to the side conductor groove of pin insulator on the outside of angles so that transverse conductor tension will tend to hold the conductor in the insulator groove.

Conductor ties shall not hold a conductor on the insulator when uplift exists. If uplift is found, it is required to consult with the Employer to determine remedial action to be taken.

E. Pole Wiring

All taps or connections passing from one level to another on the pole shall, as far as possible, be vertical. Connections shall have sufficient length so that the line conductors are not moved from normal positions and normal movement is not restricted. Connections shall have at least 30 centimetres clearance from other conductors. Any connection carried from one side of the pole to the other side shall be supported on pin insulators.

6. INSTALLATION OF STAYS



1. Where stays are installed on a line angle structure, line of stay shall bisect the outside line angle.
2. The span of stay extending between poles shall not be greater than 50 meter.
3. Anchor and anchor rods shall be set so that the axis of the rod and line of stay shall be straight. The portion of the anchor rod above the ground shall not be bent at an angle to connect a stay wire. If this occurs, anchor and anchor rod shall be reset. The anchor rod shall not be exposed for more than 15 centimetres above the ground after the anchor is set.
4. If gravel back fill is required to set anchor in soft or unstable soil, gravel back fill shall be designated as "Local Material".
5. If a stay is installed on a pole where low volt conductor is dead ended or double dead ended and extends past stay, a piece of plastic hose slit along the length shall be placed over the stay wire extending from the upper stay attachment to 200 mm below lowest low voltage conductor. After installation, the hose shall be wrapped with plastic tape and the hose shall be secured to the upper stay bolt with tie wire. Plastic hose shall be "Local Material".

7. INSTALLATION CRITERIA

GENERAL INSTRUCTION

1. The line alignment should be as straight as possible to minimise requirements for stays.
2. The basic span shall be maintained within the following limits:-
 - a) For 11 kV – 50 m to 70 m
 - b) For 0.4 kV – 45m to 50 m
3. The entire construction works shall be performed as per the construction units specified. Whenever the construction unit does not cover any specific activity, the Contractor and the PDC shall mutually settle the cost as per the man-hour involvement for the same and according to the labour rate quoted by the Contractor in his Bid.
4. Detailed schedules of material to be used are provided in each structure drawing of the construction standards. It shall be the responsibility of the Contractor to judge the appropriateness of the listed material according to the site conditions. If there is any need for addition/reduction or deviation from the listed material size/quantity, the Contractor shall ask the MDC for the approval of the same.
5. All types of line clearances shall be maintained as per the construction standards provided to the Contractor. Deviations from the standards may be allowed only for unique or special conditions.
6. Safety rules of the NEA shall be strictly observed at all times by the MDC and the Contractor and their personnel. Special care shall be taken to maintain the optimum conductor sag to provide adequate safety to the construction and the property or people.
7. All fastenings (e.g. preformed ties, nut bolts, stays etc.) shall be so installed that the constructed line components shall not fail to remain within the safety margin while maximum working load is applied.
8. If the Contractor requires clarification of any construction standard or unit or he feels any doubt in his interpretation of construction activities he should clarify the points with the MDC in writing and the decision thus made shall be valid for further work.



9. HV Insulators: The Contractor shall use HV pin insulators in the alignment of the line where the break angle does not exceed the limits provided hereafter.

S.No.	Conductor Size in sq. mm.	Minimum Break Angle in Degrees
1	30 (Weasel)	7

In the case where the break angle exceeds the above values the Contractor shall make dead-end at the angle structure and use disc insulator fittings.

10. Stays:- The Contractor, in general case, shall install at least one stay for the supports in the following cases:
1. Dead end structure
 2. Tee-off (Tap) structure

For conditions different from the above, the Contractor shall provide calculations showing the number of stays necessary and get approval from MDC prior to installation.



SECTION VII DRAWINGS

The purpose of drawings is to specify locations, dimensions, materials to be used, stages of manufacturing, and other characteristics of the Goods and Related Services.

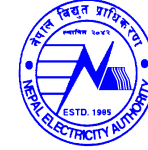
1. The Bidder is instructed to go through and follow the Standard Construction procedures and the Drawings as per the NEA standards.
2. Any deviations from NEA standards will not be accepted.
3. The contractor must produce the drawings and the hole patterns of poles, channels and other construction material as if required while preparing the SDS. The design, drawings and hole patterns must be approved by NEA MDC before construction actually starts.



A handwritten signature in blue ink, appearing to be 'Jana', is written on a light-colored rectangular background.

Section VIII. Bill of Quantities

NEPAL ELECTRICITY AUTHORITY
MYAGDI DISTRIBUTION CENTRE
BENI, MYAGDI



PRICE SCHEDULE

Sealed Quotation No : MDC 074/75 -01 (SQ), Replacement of Wooden Pole and Re-stringing of LT Line at Different Places of Beni Municipality, Babiachour and Arman

S.N.	Description	Unit	Qty.	Unit Rate (Rs.)		Amount (RS.)
				In figure	In words	
A.	<u>MATERIAL COST</u>					
1	8 m Steel Tubular pole (folding type 2 pcs)	Nos.	145	Provided By NEA		
2	D iron Shackle Insuletor	Nos.	0			
3	Guy insulator (Stay insulator)	Nos.	18			
4	Stay set	Set	18			
5	Stay wire	kg	90			
6	Nut Bolt (5/8*6/7")	kg	76			
7	0.03 sq.inch ACSR Weasel Conductor	Km	0.5			
	Sub-Total of Material Cost (A)					



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B.	LABOUR COST			In figure	In words	Amount (RS.)
1	Erection of 8/9m.Steel Pole	Nos.	145			
2	Dismantling of Wooden Pole	Nos	145			
3	Dismantling & Re Stringing of 0.03 ACSR Conductor LT	Km.	18.95			
4	Stay Installation	set	18			
5	Transportation of Hardware, Poles, Conductor etc. by Tractor at Site	LOT				
6	Transportation of Hardware, Poles, Conductor etc. by Man at Site (L.S.)	LOT				
	Sub Total of Labour Charge (B)					
(C)	Total Cost (A+B)					
(D)	VAT @ 13 % :-					
(E)	GRAND TOTAL :-					
	GRAND TOTAL IN WORDS :-					

Name of Construction Firm :

Signature :



Signature of NEA Official :

Stamp :



Handwritten signature or mark.

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 95 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, nd denominated in Nepali Rupees.

