NEPAL ELECTRICITY AUTHORITY

(A Government of Nepal Undertaking)

Distribution and Consumer Services Directorate
Kathmandu Regional Office

National Competitive Bidding (NCB)

TENDER NO: KRO-074/75-01

BID DOCUMENTS
FOR
SUPPLY AND DELIVERY OF
GALVANIZED STAY SETS AND HARDWARES

Nepal Electricity Authority
Kathmandu Regional Office
Durbar Marga, Kathmandu, Nepal
Tel. : + 977 (01) 4153156
Fax : + 977 (01) 4153223

December 2017

Abbreviations

BDS..... Bid Data Sheet
BD ..... Bidding Document
DCS..... Delivery and Completion Schedule
DP …… Development Partner
EQC ..... Evaluation and Qualification Criteria
GCC ..... General Conditions of Contract
GoN ..... Government of Nepal
ICC..... International Chamber of Commerce
IFB ..... Invitation for Bids
Incoterms..... International Commercial Terms
ITB ..... Instructions to Bidders
LGRS ..... List of Goods and Related Services
PAN …….. Permanent Account Number
PPMO …… Public Procurement Monitoring Office
SBD..... Standard Bidding Document
SBQ..... Schedule of Bidder Qualifications
SCC……. Special Conditions of Contract
SS ..... Schedule of Supply
TS..... Technical Specifications
UNCITRAL ……. United Nations Commission on International Trade Law
VAT …… Value Added Tax

Table of Contents

Invitation for Bids

PART 1 – Bidding Procedures

Section I. Instructions to Bidders 1-1

Section II. Bid Data Sheet 2-1

Section III. Evaluation and Qualification Criteria 3-1

Section IV. Bidding Forms 4-1

PART 2 – Supply Requirements

Section V. Schedule of Supply 5-1

PART 3 – Conditions of Contract and Contract Forms

Section VI. General Conditions of Contract 6-1

Section VII. Special Conditions of Contract 7-1

Section VIII. Contract Forms 8-1

Re-invitation For Bids
(First date of Publication- December 13, 2017)

1. Nepal Electricity Authority (NEA), Kathmandu Regional Office, Distribution and Consumer Services Directorate invites wax sealed tenders from reputable Manufacturers, registered contractor and Supplier for

S.No.	Tender No.	Description of Job	Last date of Bid Submission	Bid bond Amount NRs.	Price of Document NRs.
1.	KRO/074/75-01	Supply and Delivery of galvanized Stay sets and hardwares	January 12, 2018	9,500,00.00	5,000.00

2. Interested eligible Bidders may obtain further information pertaining to bid & e-bidding from NEA website www.eproc.nea.org.np for their reference.
3. A complete set of Bid Documents may be purchased during office hours on all working days by any interested Bidder from **December 13, 2017** onwards upon submission of a written application to the address given below accompanied by a bank voucher of the amount (non refundable) towards the cost of the Bid Documents deposited in NEA Current Account Number **K 32114 C** at Kumari Bank Limited, Putalisadak, Kathmandu,Nepal or by an account payee bank draft of the same amount issued in favour of NEA. The Bid documents shall be available for sale up to one day before the last date of Bid submission.
4. Bidders must produce an attested copy of the certificates of VAT registration and PAN registration at the time of purchase of the Bid Documents.
5. All Bids accompanied by a bid bond in amount & validity period (120 days from the last date of bid submission) must be delivered before 12:00 hours local time on or before **January 12, 2018**. The Bids shall be opened at 14:00 hours local time on the last date of the Bid submission, in the presence (or without presence) of the authorised representatives of the Bidders who choose to be present. If the specified dates of Bid submission and opening fall on a public holiday, Bid submission and opening shall be done on the next working day.
6. NEA shall not be responsible for any costs or expenses incurred by Bidders in connection with the preparation or submission of Bids.
7. NEA reserves the right to accept or reject any Bid, partly or wholly, or cancel the Bids altogether, without assigning any reason whatsoever.
8. Interested eligible Bidders may obtain further information from the Office given below:

Nepal Electricity Authority
Kathmandu Regional Office
Ratnapark, Kathmandu
Tel: 00977 1 4153156; Fax: 00977 1 4153223

Section I. Instructions to Bidders

Section I. Instructions to Bidders

Table of Contents

A. General 1-4

1. Scope of Bid 1-4
2. Source of Funds 1-4
3. Fraud and Corruption 1-5
4. Eligible Bidders 1-8
5. Eligible Goods and Related Services 1-10

B. Contents of Bidding Document 1-10

6. Site Visit
7 Sections of the Bidding Document 1-10
8 Clarification of Bidding Document/Pre-Bid Meeting 1-11
9 Amendment of Bidding Document 1-12

C. Preparation of Bids 1-12

10. Cost of Bidding 1-12
11. Language of Bid 1-12
12. Documents Comprising the Bid 1-12
13. Bid Submission Sheet and Price Schedules 1-13
14. Alternative Bids 1-13
15. Bid Prices and Discounts 1-13
16. Currencies of Bid 1-16
17. Documents Establishing the Eligibility of the Bidder 1-17
18. Documents Establishing the Conformity of the Goods and Related Services to the Bidding Document 1-17
19. Documents Establishing the Qualifications of the Bidder 1-18
20. Period of Validity of Bids 1-19
21. Bid Security 1-19
22. Format and Signing of Bid 1-21

D. Submission and Opening of Bids 1-21

23. Sealing and Marking of Bids 1-21
24. Deadline for Submission of Bids 1-22

25. Late Bids 1-22
26. Withdrawal and Modification of Bids 1-22
27. Bid Opening 1-23

E. Evaluation and Comparison of Bids 1-25

28. Confidentiality 1-25
29. Clarification of Bids 1-25
30. Deviations, Reservations, and Omissions 1-26
31. Determination of Responsiveness 1-26
32. Nonmaterial Nonconformi-ties 1-26
33. Correction of Arithmetical Errors 1-27
34. Conversion to Single Currency 1-28
35. Margin of Preference 1-28
36. Evaluation of Bids 1-28
37. Comparison of Bids 1-29
38. Post-qualification of the Bidder 1-29
39. Purchaser's Right to Accept Any Bid, and to Reject Any or All Bids 1-30

F. Award of Contract 1-30

40. Award Criteria 1-30
41. Purchaser's Right to Vary Quantities at Time of Award 1-30
42. Notification of Intention to Award 1-30
43. Performance Security 1-31
44. Signing of Contract 1-32
45. Complaint and Review 1-32
46. Provision of PPA and PPR

.

Section I. Instructions to Bidders

A. General

1. Scope of Bid

1.1 The Purchaser **indicated in the BDS** issues this Bidding Document for the supply of Goods and Related Services incidental thereto as specified in Section V, Schedule of Supply. The name, identification, and number of lots of the National Competitive Bidding (NCB) are provided in the **BDS**.

1.2 Throughout this Bidding Document :

(a) the term "in writing" means communicated in written form with proof of receipt;

(b) if the context so requires, singular means plural and vice versa; and

(c) "day" means calendar day.

2. Source of Funds

2.1 DP Funded: The GoN has applied for or received financing (hereinafter called "funds") from the Development Partner (hereinafter called "the DP") **indicated in the BDS** toward the cost of the project **named in the BDS**. The GoN intends to apply a portion of the funds to eligible payments under the contract(s) for which this Bidding Document is issued.

Or

GoN Funded: In accordance with its annual program and budget, approved by the GoN, the implementing agency **indicated in the BDS** plans to apply a portion of the allocated budget to eligible payments under the contract(s) for which this Bidding Document is issued.

2.2 DP Funded: Payment by the DP will be made only at the request of the GoN and upon approval by the DP in accordance with the terms and conditions of the financing agreement between the GoN and the DP (hereinafter called the "Loan Agreement"), and will be subject in all respects to the terms and conditions of that Loan Agreement. No party other than the GoN shall derive any rights from the Loan Agreement or have any claim to the funds.

3. Fraud and Corruption

3.1 The Government of Nepal (GoN) requires that the procuring entities as well as bidders, suppliers, and contractors and their sub-contractors under GoN/DP-financed contracts, shall adhere to the highest standard of ethics during the procurement and execution of such contracts. In this context , the Purchaser;

(a) defines, for the purposes of this provision, the terms set forth below as follows:

(i) "corrupt practice" means the offering, giving, receiving, or soliciting, directly or indirectly, anything of value to influence improperly the actions of another party;

(ii) "fraudulent practice" means any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;

(iii) "coercive practice" means impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;

(iv) "collusive practice" means an arrangement between two or more parties designed to achieve an improper purpose, including influencing improperly the actions of another party.

(v) "obstructive practice" means:

(aa) deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a GoN/DP investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or

(bb) acts intended to materially impede the exercise of the GoN's/DP's inspection and audit rights provided for under sub-clause 3.5 below.

(cc) will reject bid(s) if it determines that the bidder has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;

(dd) will sanction a firm or individual, including declaring ineligible, for a stated period of time, to be awarded a GoN/DP-financed contract if it at any time determines that the firm has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for, or in executing, a GoN/DP-financed contract.

3.2 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 in corrupt or fraudulent practice or involving in such act,

(d) interference in participation of other competing 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 bids or interference of any kind in examination and evaluation of the bids during the period from the time of opening of the bids until the notification of award of contract.

3.3 PPMO on the recommendation of the Purchaser may **blacklist** a Bidder for a period of one (1) to three (3) years for its conduct including the following grounds and seriousness of the act committed by the bidder:

(a) if convicted by a court of law in a criminal offence which disqualifies the Bidder from participating in the contract,

(b) if it is established that the contract agreement signed by the Bidder was based on false or misrepresentation of Bidder's qualification information,

3.4 A bidder declared blacklisted and ineligible by the GoN, Public procurement Monitoring Office (PPMO) and/or the DP in case of DP funded project, shall be ineligible to bid for a contract during the period of time determined by the GoN, PPMO and/or the DP.

3.5 The Supplier shall permit the GoN/DP to inspect the Supplier's accounts and records relating to the performance of the Supplier and to have them audited by auditors appointed by the GoN/DP, if so required by the GoN/DP.

3.6 DP Funded: In pursuance of the fraud and corruption policy, the DP.

(a) will reject a proposal if it determines that the bidder recommended for award has directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;

(b) will cancel the portion of the loan/ credit/ grant allocated to a contract if it determines at any time that representative(s) of the GoN or of a beneficiary of the fund engaged in corrupt, fraudulent, collusive, or coercive practices during the procurement or the execution of that contract, without the GoN having taken timely and appropriate action satisfactory to the DP to address such practices when they occur.

4. Eligible Bidders

4.1 A Bidder may be a natural person, private entity, government-owned entity (subject to ITB 4.4) or any combination of them with a formal intent to enter into an agreement or under an existing agreement in the form of a Joint Venture (JV). In the case of a JV:

(a) all parties to the JV shall be jointly and severally liable; and

(b) a JV shall nominate a Representative who shall have the authority to conduct all businesses for and on behalf of any and all the parties of the JV during the bidding process and, in the event the JV is awarded the Contract, during contract execution.

4.2 A Bidder shall not have a conflict of interest. All Bidders found to have a conflict of interest shall be disqualified. A Bidder may be considered to be in a conflict of interest with one or more parties in this bidding process if, including but not limited to:

(a) have controlling shareholders in common; or

(b) receive or have received any direct or indirect subsidy from any of them; or

(c) have the same legal representative for purposes of this Bid; or

(d) have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the Bid of another Bidder, or influence the decisions of the Purchaser regarding this bidding process; or

(e) a Bidder participates in more than one bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all Bids in which it is involved. However, this does not limit the inclusion of the same subcontractor, not otherwise participating as a Bidder, in more than one bid; or

(f) a Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the goods and services that are the subject of the bid.

4.3 A Bidder that is under a declaration of ineligibility by the GoN/DP in accordance with ITB 3, at the date of the deadline for bid submission or thereafter, shall be disqualified. The list of debarred firms is available at the electronic address specified in the BDS.

4.4 Government-owned enterprises in Nepal shall be eligible only if they can establish that they (i) are legally and financially autonomous, (ii) operate under the principles of commercial law, and (iii) are not dependent agencies of the Purchaser.

4.5 Bidders shall provide such evidence of their continued eligibility satisfactory to the Purchaser, as the Purchaser shall reasonably request.

4.6 Firms shall be excluded in any of the cases, if

(a) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, the Purchaser's country prohibits any import of goods or Contracting of works or services from that country or any payments to persons or entities in that country.

(b) DP Funded: as a matter of law or official regulation, Nepal prohibits commercial relations with that country, provided that the DP is satisfied that such exclusion does not preclude effective competition for the supply of goods or related services required;

(c) DP Funded: a firm has been determined to be ineligible by the DP in relation to their guidelines or appropriate provisions on preventing and combating fraud and corruption in projects financed by them.

4.7 **DP Funded:** A bidder and all parties constituting the Bidder shall have the nationality of an eligible country as defined by the concerned DP.

4.8 Domestic Bidders shall be eligible only if the bidder has obtained Permanent Account Number (PAN), Value Added Tax (VAT) registration certificate(s) and Tax clearance certificate or proof of submission of income return **as stated in BDS** from the Inland Revenue office. Foreign Bidders shall be eligible only if the bidder submits the documents indicated in the BDS at the time of bid submission and a declaration to submit the document(s) indicated in the BDS at the time of contract agreement.

5. Eligible Goods and Related Services

5.1 **DP Funded:** If so required in the **BDS**, all goods and related services to be supplied under the contract and financed by DP, shall have as their country of origin an eligible country of the DP.

5.2 For purposes of this clause, "origin" means the place where the goods are mined, grown, or produced, or the place from which the related services are supplied.

5.3 The origin of goods and services is distinct from the nationality of the Bidder.

6. Site Visit

6.1 For goods contracts requiring installation/ commissioning networking or similar services at site, the Bidder, at the Bidder's own responsibility and risk, is encouraged to visit and examine the Site and obtain all information that may be necessary for preparing the Bid and entering into a contract for the supply of goods and related services.

6.2 The Bidder should ensure that the Purchaser is informed of the visit in adequate time to allow it to make appropriate arrangements.

6.3 The costs of visiting the Site shall be at the Bidder's own expense.

B. Contents of Bidding Document

7. Sections of the Bidding Document

7.1 The Bidding Document consist of Parts 1, 2, and 3, which include all the Sections indicated below, and should be read in conjunction with any Addenda issued in accordance with ITB 8.

PART 1 Bidding Procedures

- Section I. Instructions to Bidders (ITB)
- Section II. Bid Data Sheet (BDS)
- Section III. Evaluation and Qualification Criteria
- Section IV. Bidding Forms

PART 2 Supply Requirements

- Section V. Schedule of Supply

PART 3 Conditions of Contract and Contract Forms

- Section VI. General Conditions of Contract (GCC)
- Section VII. Special Conditions of Contract (SCC)
- Section VIII. Contract Forms

7.2 The Invitation for Bids issued by the Purchaser is not part of the Bidding Document.

7.3 The Purchaser is not responsible for the completeness of the Bidding Document and its addenda, if they were not obtained directly from the Purchaser.

7.4 The Bidder is expected to examine all instructions, forms, terms, and specifications in the Bidding Document. Failure to furnish all information or documentation required by the Bidding Document may result in the rejection of the Bid.

8. Clarification of Bidding Document/Pre -Bid Meeting

8.1 A prospective Bidder requiring any clarification of the Bidding Document shall contact the Purchaser in writing at the Purchaser's address indicated in the **BDS**. The Purchaser will respond in writing to any request for clarification, provided that such request is received within the time limit specified in the **BDS** prior to the deadline for submission of Bids. The Purchaser shall forward copies of its response to all Bidders who have acquired the Bidding Document directly from it, including a description of the inquiry but without identifying its source. Should the Purchaser deem it necessary to amend the Bidding Document as a result of a clarification, it shall do so following the procedure under ITB **9** and **24.2.**

8.2 The purchaser may organize a pre-bid meeting of Bidders at least fifteen (15) days before the deadline for submission of Bids at the place, date and time as specified in the **BDS** to provide information relating to Bidding Documents, Technical specifications and the like matters. Should the purchaser deem it necessary to amend the Bidding Document as a result of a clarification, it shall do so following the procedure under ITB 9 and ITB **24.2.**

9. Amendment of Bidding Document

9.1 At any time prior to the deadline for submission of the Bids, the Purchaser may amend the Bidding Document by issuing addenda.

9.2 Any addendum issued shall be part of the Bidding Document and shall be communicated in writing to all who have obtained the Bidding Document directly from the Purchaser.

9.3 To give prospective Bidders reasonable time in which to take an addendum into account in preparing their Bids, the Purchaser may, at its discretion, extend the deadline for the submission of the Bids, pursuant to ITB **24.2**

C. Preparation of Bids

10. Cost of Bidding

10.1 The Bidder shall bear all costs associated with the preparation and submission of its Bid, and the Purchaser shall not be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

11. Language of Bid

The Bid, as well as all correspondence and documents relating to the Bid exchanged by the Bidder and the Purchaser, shall be written in the language **specified in the BDS**. Supporting documents and printed literature that are part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages in the language **specified in the BDS**, in which case, for purposes of interpretation of the Bid, such translation shall govern.

12. Documents Comprising the Bid

12.1 The Bid shall comprise the following:

(a) Bid Submission Sheet and the applicable Price Schedules, in accordance with ITB Clauses **13**, **15, and 16;**

(b) Bid Security, in accordance with ITB **21;**

(c) alternative bids, if permissible, in accordance with ITB **14;**

(d) written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with ITB **22;**

(e) **doc**umentary evidence in accordance with ITB **17** establishing the Bidder's eligibility to bid;

(f) documentary evidence in accordance with ITB Clauses **18** and **31,** that the Goods and Related Services conform to the Bidding Document;

(g) documentary evidence in accordance with ITB **19** establishing the Bidder's qualifications to perform the contract if its Bid is accepted; and

(h) any other document **required in the BDS**.

13. Bid Submission Sheet and Price Schedules

13.1 The Bidder shall submit the Bid Submission Sheet using the form furnished in **Section IV, Bidding Forms**. This form must be completed without any alterations to its format, and no substitutes shall be accepted. All blank spaces shall be filled in with the information requested.

13.2 The Bidder shall submit the Price Schedules for Goods and Related Services, according to their origin as appropriate, using the forms furnished in **Section IV, Bidding Forms**.

14. Alternative Bids

14.1 Unless otherwise **indicated in the BDS**, alternative bids shall not be considered.

15. Bid Prices and Discounts

15.1 The prices and discounts quoted by the Bidder in the Bid Submission Sheet and in the Price Schedules shall conform to the requirements specified below.

15.2 All items in the Schedule of Supply must be listed and priced separately in the Price Schedules. If a Price Schedule shows items listed but not priced, their prices shall be assumed to be included in the prices of other items. Items not listed in the Price Schedule shall be assumed not to be included in the Bid, and provided that the Bid is substantially responsive, the corresponding adjustment shall be applied in accordance with ITB **32.3**

15.3 The price to be quoted in the Bid Submission Sheet shall be the total price of the Bid excluding any discounts offered.

15.4 The Bidder shall quote any unconditional discounts and the methodology for their application in the Bid Submission Sheet.

15.5 The terms EXW, CIF, CIP, and other similar terms shall be governed by the rules prescribed in the current edition of Incoterms, published by The International Chamber of Commerce, at the date of the Invitation for Bids or **as specified in the BDS.**

15.6 Prices shall be quoted as specified in each Price Schedule included in **Section IV, Bidding Forms**. The disaggregation of price components is required solely for the purpose of facilitating the comparison of Bids by the Purchaser. This shall not in any way limit the Purchaser's right to contract on any of the terms offered. Prices shall be entered in the following manner:

(a) For Goods manufactured in Nepal :

(i) the price of the goods quoted EXW (ex works, ex factory, ex warehouse, ex showroom, or off-the-shelf, as applicable), including all customs duties, Value Added Tax and other taxes already paid or payable on the components and raw material used in the manufacture or assembly of goods quoted ex works or ex factory, or on the previously imported goods of foreign origin quoted ex warehouse, ex showroom, or off-the-shelf;

(ii) Value Added Tax and all other taxes applicable in Nepal and payable on the Goods if the Contract is awarded to theBidder;and

(iii) the price for inland transportation, insurance, and other local services required to convey the Goods to their final destination (Project Site) specified in the **BDS.**

(b) For Goods manufactured outside Nepal, to be imported:

i. the price of the goods quoted CIF (named port of destination), or CIP(border point),or CIP(named place of destination), named place of destination as specified in the BDS;

ii. the price for inland transportation, insurance, and other local services required to convey the Goods from the named place of destination to their final destination (Project Site) specified in the **BDS;**

iii. in addition to the CIP prices specified in (b)(i) above, the price of the Goods to be imported may be quoted FCA (named place of destination) or CPT (named place of destination), if so specified in the **BDS;**

(c) For Goods manufactured outside Nepal, already imported:

[For previously imported Goods, the quoted price shall be distinguishable from the original import value of these Goods declared to customs and shall include any rebate or mark-up of the local agent or representative and all local costs except import duties and taxes, which have been and/or have to be paid by the Purchaser. For clarity the bidders are asked to quote the price including import duties, and additionally to provide the import duties and the price net of import duties which is the difference of those values.]

(i) the price of the Goods, including the original import value of the Goods; plus any mark-up (or rebate); plus any other related local cost, and custom duties and other import taxes already paid or to be paid on the Goods already imported.

(ii) the custom duties and other import taxes already paid (need to be supported with documentary evidence) or to be paid on the Goods already imported;

(iii) the price of the Goods, obtained as the difference between (i) and (ii) above;

(iv) any sales and other taxes which will be payable on the Goods if the contract is awarded to the Bidder; and

(v) the price for inland transportation, insurance, and other local services required to convey the Goods from the named place of destination to their final destination (Project Site) specified in the **BDS.**

(d) For Related Services, other than inland transportation and other services required to convey the Goods to their final destination, whenever such Related Services are specified in the Schedule of Requirements:

(i) the local currency cost component of each item comprising the Related Services; and

(ii) the foreign currency cost component of each item comprising the Related Services,

inclusive of all custom ruties, Value Added Tax and other taxes aplicable in the Purchaser's country ,payable on the related services ,if the contract is awarded to the Bidder.:

15.7 Prices quoted by the Bidder shall be fixed during the Bidder's performance of the Contract and not subject to variation on any account, unless otherwise **specified in the BDS**. A Bid submitted with an adjustable price quotation shall be treated as nonresponsive and shall be rejected. However, if in accordance with the **BDS**, prices quoted by the Bidder shall be subject to adjustment during the performance of the Contract, a Bid submitted with a fixed price quotation shall not be rejected, but the price adjustment shall be treated as zero.

If so indicated pursuant to ITB 1.1, Bids are being invited for individual contracts (lots) or for any combination of contracts (packages). Unless otherwise indicated in the **BDS**, prices quoted shall correspond to 100% of the items specified for each lot and to 100% of the quantities specified for each item of a lot. Bidders wishing to offer any price reduction for the award of more than one Contract shall specify the applicable price reductions in accordance with ITB **15.4,** provided the bids for all lots are submitted and opened at the same time.

16. Currencies of Bid

16.1 Bid prices shall be quoted in the following currencies:

(a) Bidders may express their bid price in any fully convertible currency. If a Bidder wishes to be paid in a combination of amounts in different currencies, it may quote its price accordingly but shall use no more than three currencies in addition to the Nepalese currency.

(b) All expenditures that are to be incurred in Nepal for i) inland transportation and related costs, ii) all taxes, and iii) local currency cost component of related services other than inland transportation and other services should be expressed in the Bid in Nepalese currency and will be payable in Nepalese currency.

17. Documents Establishing the Eligibility of the Bidder

17.1 To establish their eligibility in accordance with ITB 4, Bidders shall:

(a) complete the eligibility declarations in the Bid Submission Sheet, included in **Section IV, Bidding Forms**; and

(b) if the Bidder is an existing or intended JV in accordance with ITB **4.1 ,** submit a copy of the JV Agreement, or a letter of intent to enter into such an Agreement. The respective document shall be signed by all legally authorized signatories of all the parties to the existing or intended JV, as appropriate.

17.2 Bidders, applying for eligibility for domestic proference as indicated in ITB 35 shall submit the cirtification of country of origion issued by authorized agency to satisfy the offered goods are produced in Nepal as described in section III, Evaluation and Qualification Criteria.

18. Documents Establishing the Conformity of the Goods and Related Services to the Bidding Document

18.1 To establish the conformity of the Goods and Related Services to the Bidding Document, the Bidder shall furnish as part of its Bid the documentary evidence that the Goods and Related Services conform to the requirements specified in **Section V, Schedule of Supply**.

18.2 The documentary evidence may be in the form of literature, drawings or data, and shall consist of a detailed item-by-item description of the essential technical and performance characteristics of the Goods and Related Services, demonstrating substantial responsiveness of the Goods and Related Services to those requirements, and if applicable, a statement of deviations and exceptions to the provisions of **Section V, Schedule of Supply**.

18.3 The Bidder shall also furnish a list giving full particulars, including available sources and current prices of spare parts,

special tools, etc., necessary for the proper and continuing functioning of the Goods during the period **specified in the BDS** following commencement of the use of the goods by the Purchaser.

18.4 Standards for workmanship, process, material, and equipment, as well as references to brand names or catalogue numbers specified by the Purchaser in the Section V, Schedule of Supply, are intended to be descriptive only and not restrictive. The Bidder may offer other standards of quality, brand names, and/or catalogue numbers, provided that it demonstrates, to the Purchaser's satisfaction, that the substitutions ensure substantial equivalence or are superior to those specified in **Section V, Schedule of Supply**.

19. Documents Establishing the Qualifications of the Bidder

19.1 The documentary evidence of the Bidder's qualifications to perform the contract, if its bid is accepted, shall establish to the Purchaser's satisfaction that the Bidder meets each of the qualification criterion specified in **Section III, Evaluation and Qualification Criteria.**

19.2 If so required in the **BDS**, a Bidder that does not manufacture or produce the Goods it offers to supply shall submit the Manufacturer's Authorization using the form included in **Section IV, Bidding Forms** to demonstrate that it has been duly authorized by the manufacturer or producer of the Goods to supply these Goods in Nepal and take care of the warranty provided.

19.3 If so **required in the BDS**, a Bidder that does not conduct business within Nepal shall submit evidence that it will be represented by an Agent in the country equipped and able to carry out the Supplier's maintenance, repair and spare parts-stocking obligations prescribed in the Conditions of Contract and/or Technical Specifications.

19.4 A foreign Bidder wishing to have or already having a local agent shall state the following:

a. Name and address of the Agent/Representative,

b. The Agent/Representative providing type of services,

c. Amount of commission if the Agent/Representative is entitled to get such payment and if it participates in the procedure of payment,

d. Other agreement with Agent/Representative, if any,

e. Bidder shall certify in the Letter of Authorization as follows:

"We certify that the statement and disclosure made by us on the above are complete and true to the best of our knowledge and belief",

If the agent has not been appointed:

f. Source of information about tender invitation,

g. The remuneration given to the individual or firm/company or organization to work on its behalf for submitting tender, representation in the bid opening and other required action in connection with the tender,

h. Transfer or handover an evidence of foreign currency exchanged which required to be submitted with the tender.

i. If the bank account of any Nepali citizen has been used for the exchange of foreign currency specify the name of the individual and his address. If the foreign currency has been exchanged by self then the certificate of currency exchange.

19.5 If a foreign Bidder in its Bid, has not provided the information mentioned in ITB **19.4** or has submitted its bid stating that the Bidder does not have a local agent and later it is proved that the bidder has a local agent or it is proved that the commission mentioned in the Bid is less than the commission received by the local agent then the Purchaser shall initiate proceedings to blacklist such bidder in accordance with ITB **3.3**.

20. Period of Validity of Bids

20.1 Bid shall remain valid for a period **specified in the BDS** after the bid submission deadline date prescribed by the purchaser. A bid valid for a shorter period shall be rejected by the purchaser as nonresponsive.

20.2 In exceptional circumstances, prior to the expiration of the bid validity period, the Purchaser may request Bidders to extend the period of validity of their Bids. The request and the responses shall be made in writing. If a Bid Security is requested in accordance with ITB **21**, it shall also be extended for a corresponding period. A Bidder may refuse the request without forfeiting its Bid Security. A Bidder granting the request shall not be required or permitted to modify its Bid.

21. Bid Security

21.1 Unless otherwise ***specified in the BDS***, the Bidder shall furnish as part of its bid, in original form, a Bid Security ***as specified in the BDS***.

21.2 If a bid security is specified pursuant to ITB **21.1**, the bid security shall be in any of the following forms at the Bidder's option:

(a) **original copy of an unconditional bank guarantee from reputed commercial foreign bank or;**

(b) **original copy of an unconditional bank guarantee from "A" class commercial bank in Nepal or;**

(c) **original copy of cash** deposit voucher in the Purchaser's Account as ***specified in BDS***.

In case of a bank guarantee, the Bid Security shall be submitted using the Bid Security Form included in ***Section IV, Bidding Forms.*** The form must include the complete name of the Bidder. The Bid Security shall be valid for minimum thirty (30) days beyond the end of the validity period of the bid. This shall also apply if the period for bid validity is extended.

A bid security issued by foreign bank must be counter – guaranteed by an "A" class commercial bank in Nepal acceptable to the Purchaser.

21.3 If a bid Security is required in accordance with ITB 21.1, any Bid not accompanied by an enforceable and compliant Bid Security in accordance with ITB 21.2, shall be rejected by the Purchaser as nonresponsive. In case of e- Submission, if the scanned copy of an acceptable bid security letter is not uploaded with the electronic bid then bid shall be rejected.

21.4 If a Bid Security is specified pursuant to ITB **21.1**, the Bid Security of unsuccessful Bidders shall be returned within three (3) days upon the successful Bidder furnishing of the signed Contract Agreement and the Performance Security pursuant to ITB **43**.

21.5 If a Bid Security is specified pursuant to ITB **21.1**, the Bid Security of the successful Bidder shall be returned as promptly as possible once the successful Bidder has signed the Contract Agreement and furnished the required Performance Security.

21.6 The Bid Security may be forfeited:

(a) If a Bidder requests for withdrawl or modification of its bid as against of the ITB clause 26.3 during the period of bid validity specified by the Bidder on the Bid

Submission form except as provided in ITB **20.2.**

(b) if the successful Bidder fails to:

(i) sign the Contract in accordance with ITB **44**; or

(ii) furnish a Performance Security in accordance with ITB **43**.

21.7 The Bid Security of a JV must be in the name of the JV that submits the bid. If the JV has not been legally constituted at the time of bidding, the Bid Security shall be in the names of all future partners as named in the letter of intent mentioned in ITB **17.1.**

22. Format and Signing of Bid

22.1 The Bidder shall prepare one original of the documents comprising the Bid as described in ITB 12 and clearly mark it "ORIGINAL." In addition, the Bidder shall submit copies of the Bid, in the number ***specified in the BDS*** and clearly mark them "COPY." In the event of any discrepancy between the original and the copies, the original shall prevail.

22.2 The original and all copies of the Bid shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Bidder. This authorization shall be attached with the Bid.

22.3 Any amendments such as interlineations, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the Bid.

D. Submission and Opening of Bids

23. Submission, Sealing and Marking of Bids

23.1 Bidders may always submit their bids by mail or by hand or by courier. When so ***specified in the BDS***, Bidders have the option of submitting their bids electronically. Bidders submitting bids electronically shall follow the electronic bid submission procedures ***specified in the BDS***.

23.2 Bidders submitting bids by mail or by hand or by courier shall enclose the original and each copy of the Bid, including alternative bids, if permitted in accordance with ITB **14**, in separate sealed envelopes, duly marking the envelopes as "ORIGINAL", and "COPY." These envelopes containing the original and the copies shall then be enclosed in one single envelope. The rest of the procedure shall be in accordance with ITB **23.3** and **23.4**.

23.3 The inner and outer envelopes shall:

(a) bear the name and address of the Bidder;

(b) be addressed to the Purchaser in accordance with ITB **24.1**;

(c) bear the specific identification of this bidding process pursuant to ITB 1.1 and any additional identification marks as specified in the **BDS**; and

(d) bear a warning "NOT TO OPEN BEFORE THE TIME AND DATE FOR BID OPENING", in accordance with ITB **27.1.**

23.4 If all envelopes are not sealed and marked as required, the Purchaser will assume no responsibility for the misplacement or premature opening of the bid.

24. Deadline for Submission of Bids

24.1 Bids must be received by the Purchaser at the address and no later than the date and time ***indicated in the BDS***.

24.2 The Purchaser may, at its discretion, extend the deadline for the submission of Bids by amending the Bidding Document in accordance with ITB 9, in which case all rights and obligations of the Purchaser and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.

25. Late Bids

25.1 The Purchaser shall not consider any Bid that arrives after the deadline for submission of Bids, in accordance with ITB **24**. Any Bid received by the Purchaser after the deadline for submission of Bids shall be declared late, rejected, and returned unopened to the Bidder.

26. Withdrawal and Modification of Bids

26.1 A bidder may withdraw, or modify its bid after it has been submitted either in hard copy or bye-Submission. Procedures for withdrawal or modification of submitted bids are as follows:

(i) Bids submitted in hard Copy

a) Bidders may withdraw or modify its bids by sending a written notice in a sealed envelope,duly signed by an authorized representative, and shall include a copy of the authorization in accordance with ITB 20.2 before 24 hours prior to the last deadline of submission of bid.

The corresponding modification of the bid must accompany the respective written notice. All notices must be:

(aa) prepared and submitted in accordance with ITB 20 and ITB 21 ,and in addition, the respective envelopes shall be clearly marked "WITHDRAWAL", "MODIFICATION;" and

(bb) received by the Employer 24 hours prior to the deadline prescribed for submission of bids, in accordance with ITB 22.

ii) E-submitted bids.

a) Bidder may submit modification or withdrawal prior to the deadline prescribed for submission of bids through e-GP system by using the forms and instructions provided by the system. Once a Bid is withdrawn, bidder shall not able to submit another bid for the same bid.

26.2 Bids requested to be withdrawn in accordance with ITB **26.1** shall be returned unopened to the Bidders.

26.3 In Case of bids submitted in hard copy no bid shall be withdrawn or modified in the interval between 24 hours prior time of the deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the Letter of Bid or any extension thereof.

In Case of the esubmitted bids no bids shall be withdrawn or modified in the interval between deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the bid submission form or any extension thereof.

26.4 Sealed envelope pursuant to ITB **26.1** shall be opened only on the date and time of opening of bid.

27. Bid Opening

27.1 The Purchaser shall conduct the bid opening in public in the presence of bidder or its representative who chose to attend at the address, date and time specified in the **BDS**. The Purchaser shall download the e-submitted bid files. The e-procurement system allows the Purchaser to download the e-submitted bid files (report) only after bid opening date and time after login simultaneously by at least two members of the Bid opening committee.

Electronically submitted bid shall be opened at first in the same time and date as specified above. Electronic Bids shall be opened one by one and read out. The e- submitted bids must be readable through open standards interfaces. Unreadable and or partially submitted bid files shall be considered incomplete.

27.2 Before opening the bids the purchaser shall separate the envelopes of the bids received after the deadline of bid submission, the envelopes containing an application given for "WITHDRAWAL",or "MODIFICATION" of bids and the envelopes of bids duly registered. The bids received after the deadline of submission shall be returned to the concerned bidder unopened. Then envelopes marked "WITHDRAWAL" shall be opened first, read out, and recorded, and the envelope containing the corresponding Bid shall not be opened, but returned to the Bidder. If the withdrawal notice is not accompanied by a copy of the valid authorization pursuant to ITB **22.2**, the withdrawal shall not be permitted and the corresponding Bid will be opened. Next Envelopes marked "MODIFICATION" shall be opened, read out, and recorded with the corresponding Bid. No Bid shall be modified unless the corresponding "Modification" Notice contains a valid authorization to request the modification and is read out and recorded at bid opening. Only envelopes that are opened, read out, and recorded at bid opening shall be considered further.

27.3 All other envelopes shall be opened one at a time, and the following read out and recorded: the name of the Bidder and whether there is a modification; the Bid Prices (per lot if applicable), any discounts and alternative offers; the presence of a Bid Security, if required; if there is discrepancy between figure and words, description of such discrepancy; whether the bid form is signed by the bidder or his agent; and any other details as the Purchaser may consider appropriate. Only discounts and alternative offers read out and recorded at bid opening shall be considered for evaluation. No Bid shall be rejected at bid opening except for late bids, in accordance with ITB **25.1.**

27.4 The Purchaser shall prepare a record of the bid opening that shall include, as a minimum: the name of the Bidder and whether there is a withdrawal or modification; the Bid Price, per

lot if applicable, any discounts and alternative offers if they were permitted; and the presence or absence of a Bid Security. The Bidders' representatives who are present shall be requested to sign the record. The omission of a Bidder's signature on the record shall not invalidate the contents and effect of the record. A copy of the record shall be distributed to all Bidders who submitted bids in time, and posted on line when electronic bidding is permitted. The Bidders' representatives who are present shall also be requested to sign an attendance sheet.

E. Evaluation and Comparison of Bids

28. Confidentiality

28.1 Information relating to the examination, evaluation, comparison, and post-qualification of Bids, and recommendation of contract award, shall not be disclosed to Bidders or any other persons not officially concerned with such process until publication of the Contract award; thereafter, information will be disclosed in accordance with ITB **44. 2**.

28.2 Any attempt by a Bidder to influence the Purchaser in the examination, evaluation, comparison, and post-qualification of the Bids or Contract award decisions may result in the rejection of its Bid.

28.3 Notwithstanding ITB **28.2,** from the time of bid opening to the time of Contract award, if any Bidder wishes to contact the Purchaser on any matter related to the bidding process, it should do so in writing.

29. Clarification of Bids

29.1 To assist in the examination, evaluation, comparison and post-qualification of the Bids, the Purchaser may, at its discretion, ask any Bidder for a clarification of its Bid. Any clarification submitted by a Bidder with regard to its Bid and that is not in response to a request by the Purchaser shall not be considered. The Purchaser's request for clarification and the response shall be in writing. No change in the prices or substance of the Bid shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Purchaser in the evaluation of the Bids, in accordance with ITB **33**.

30. Deviations, Reservations, and Omissions

30.1 During the evaluation of bids, the following definitions apply:

(a) "Deviation" is a departure from the requirements specified in the Bidding Document;

(b) "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the Bidding Document; and

(c) "Omission" is the failure to submit part or all of the information or documentation required in the Bidding Document.

31. Determination of Responsiveness

31.1 The Purchaser's determination of the responsiveness of a Bid is to be based on the contents of the Bid itself, as defined in ITB 12.

31.2 A substantially responsive bid is one that meets the requirements of the Bidding Document without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that,

(a) if accepted, would:

(i) affect in any substantial way the scope, quality, or performance of the Goods and Related Services specified in **Section V, Schedule of Supply**; or

(ii) limits in any substantial way, inconsistent with the Bidding Document, the Purchaser's rights or the Bidder's obligations under the proposed Contract; or

(b) if rectified, would unfairly affect the competitive position of other Bidders presenting substantially responsive bids.

31.3 The Purchaser shall examine the technical aspects of the bid in particular, to confirm that all requirements of **Section V, Schedule of Supply** have been met without any material deviation or reservation.

32. Non-material Non-conformities

32.1 Provided that a Bid is substantially responsive, the Purchaser may waive any non-conformity in the bid that does not constitute a material deviation, reservation or omission.

32.2 Provided that a Bid is substantially responsive, the Purchaser may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify non-material non-conformities or omissions in the Bid related to documentation requirements. Requesting information or documentation on such nonconformities shall not be related to any aspect of the price of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.

32.3 Provided that a Bid is substantially responsive, the Purchaser shall rectify non-material nonconformities or omissions. To this effect, the Bid Price shall be adjusted, for comparison purposes only, to reflect the price of the missing or non-conforming item or component. The adjustment shall be made using the method indicated in **Section III, Evaluation and Qualification Criteria.**

32.4 If minor differences are found such as in technical specification, description, feature which do not make the bid to be rejected, then the cost, which is calculated to the extent possible due to such differences, shall be included while evaluating bid.

32.5 If the value is found fifteen percent more than the quoted amount of the bidder on account of minor differences pursuant to ITB 32.4, such bid shall be considered ineffective in substance and shall not be considered for evaluation.

33. Correction of Arithmetical Errors

33.1 Provided that the Bid is substantially responsive, the Purchaser shall correct arithmetical errors on the following basis:

(a) if there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected, unless in the opinion of the Purchaser there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price shall be corrected;

(b) if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and

(c) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (a) and (b) above.

33.2 If the Bidder that submitted the lowest evaluated Bid does not accept the correction of errors, its Bid shall be rejected and its bid security shall be forfeited..

34. Conversion to Single Currency

34.1 For evaluation and comparison purposes, the price quoted in different currency (ies) of the bid shall be converted into Nepalese Rupees using the selling exchange rates established by Nepal Rastra Bank and on the date of bid opening.

35. Domestic Preference

35.1 Unless otherwise **specified in the BDS**, domestic preference shall be a factor in bid evaluation.

36. Evaluation of Bids

36.1 The Purchaser shall evaluate each Bid that has been determined, up to this stage of the evaluation, to be substantially responsive.

36.2 To evaluate a Bid, the Purchaser shall only use all the criteria and methodologies defined in this Clause and in **Section III, Evaluation and Qualification Criteria.** No other criteria or methodology shall be permitted.

36.3 To evaluate a Bid, the Purchaser shall consider the following:

(a) evaluation will be done for Items or Lots, as **specified in the BDS;** the bid price as quoted in accordance with ITB **15**;

(b) price adjustment for correction of arithmetic errors in accordance with ITB **33.1;**

(c) price adjustment due to discounts offered in accordance with ITB **15.4**; and

(d) price adjustment due to application of the evaluation criteria specified in the BDS from amongst those set out in **Section III, Evaluation and Qualification Criteria.** These criteria may include factors related to the characteristics, performance, and terms and conditions of purchase of the Goods and Related Services which shall be expressed to the extent practicable in monetary terms to facilitate comparison of bids unless otherwise **specified in Section III Evaluation and Qualification Criteria.**

(e) price adjustment due to the application of a margin of preference in accordance with ITB clause **35**.

36.4 The Purchaser's evaluation of a bid will exclude and not take into account:

(a) in the case of Goods offered from within Nepal, all sales tax and all other taxes, applicable in Nepal and payable on the Goods if the Contract is awarded to the Bidder;

(b) in the case of Goods offered from outside Nepal, all customs duties, sales tax, and other taxes, applicable in Nepal and payable on the Goods if the Contract is awarded to the Bidder; and

(c) any allowance for price adjustment during the period of performance of the Contract, if provided in the Bid.

36.5 The Purchaser's evaluation of a bid may require the consideration of other factors, in addition to the Bid Price quoted in accordance with ITB Clause 15. These factors may be related to the characteristics, performance, and terms and conditions of purchase of the Goods and Related Services. The effect of the factors selected, if any, shall be expressed in monetary terms to facilitate comparison of bids, unless otherwise specified in Section III, Evaluation and Qualification Criteria. The factors, methodologies and criteria to be used shall be as specified in ITB 36.3 (d).

36.6 If so specified in the BDS, these Bidding Documents shall allow Bidders to quote separate prices for one or more lots, and shall allow the Purchaser to award one or multiple lots to more than one Bidder. The methodology of evaluation to determine the lowest-evaluated lot combinations is specified in Section III, Evaluation and Qualification Criteria.

37. Comparison of Bids

37.1 The Purchaser shall compare all substantially responsive bids to determine the lowest-evaluated bid, in accordance with ITB **36.**

38. Post-qualification of the Bidder

38.1 The Purchaser shall determine to its satisfaction whether the Bidder that is selected as having submitted the lowest evaluated and substantially responsive Bid is qualified to perform the Contract satisfactorily.

38.2 The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB **19.**

38.3 An affirmative determination shall be a prerequisite for award of the Contract to the Bidder. A negative determination shall result in disqualification of the Bid, in which event the Purchaser shall proceed to the next lowest evaluated bid to make a similar determination of that Bidder's capabilities to perform satisfactorily.

39. Purchaser's Right to Accept Any Bid, and to Reject Any or All Bids

39.1 The Purchaser reserves the right to accept or reject any Bid, and to annul the bidding process and reject all Bids at any time prior to Contract award, without thereby incurring any liability to the Bidders.

F. Award of Contract

40. Award Criteria

40.1 The Purchaser shall select for awarding the Contract to the Bidder whose offer has been determined to be the lowest evaluated Bid and is substantially responsive to the Bidding Document, provided further that the Bidder is determined to be qualified to perform the Contract satisfactorily.

41. Purchaser's Right to Vary Quantities at Time of Award

41.1 At the time the Contract is awarded, the Purchaser reserves the right to increase or decrease the quantity of Goods and Related Services originally specified in **Section V, Schedule of Supply,** provided this does not exceed the percentages **indicated in the BDS**, and without any change in the unit prices or other terms and conditions of the Bid and the Bidding Document.

42. Notification of Intention to Award

42.1 The Purchaser shall notify the concerned Bidder whose bid has been selected in accordance with ITB **40.1** within seven days of the selection of the bid, in writing that the Purchaser has intention to accept his/her bid and the information regarding name, address and bid amount of the selected bidder shall be given to all other bidders using the "Letter of Intention" form included in Section VIII. **Contract Forms**

42.2 If no bidder submits an application pursuant to ITB **45.1** within a period of seven days of providing the notice under ITB **42.1**, the Purchaser shall accept the bid selected in accordance with ITB **40.1** prior to the expiry of bid validity period, and notification of award shall be communicated to the bidder to furnish the performance security and sign the contract within fifteen days.

42.3 If the bidder whose bid is accepted fails to sign the contract as stated in ITB39.1, the Public Procurement Monitoring Office shall blacklist the bidder on recommendation of the Public Entity.

43. Performance Security

43.1 Within fifteen (15) days of the receipt of notification of award from the Purchaser, the successful Bidder shall furnish the Performance Security in accordance with the *GCC,* using for that purpose the Performance Security Form included in Section VIII, Contract Forms, or another form acceptable to the Purchaser.

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.

43.2 Failure of the successful Bidder to submit the above-mentioned Performance Security or sign the Contract Agreement shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security. In that event the Purchaser may award the Contract to the next lowest evaluated Bidder whose offer is substantially responsive and is determined by the Purchaser to be qualified to perform the Contract satisfactorily.

44. Signing of Contract

44.1 The successful Bidder shall sign the contract in the form included in **section VIII** after the submission of performance security in accordance with ITB **43**.

44.2 At the same time, the Purchaser shall affix a public notice on the result of the award on its notice board and make arrangement to post the notice into its website, if it has; and if it does not have, into the website of the Public Procurement Monitoring Office, the contract award results_identifying the bid and lot numbers and the following information: (i) name of each Bidder who submitted a Bid; (ii) bid prices as read out at Bid Opening; (iii) name and evaluated prices of each Bid; (iv) name of bidders whose bids were rejected and the reasons for their rejection; and (v) name of the winning Bidder, and the Price it offered, as well as the duration and summary scope of the Contract awarded.

44.3 The Purchaser shall promptly respond in writing to any unsuccessful Bidder who, within thirty days from the date of issuance of notification of award in accordance with ITB **42.2**, requests in writing the grounds on which its bid was not selected.

45. Complaint and Review

45.1 If a Bidder,, is not satisfied with the procurement process or Client's decision provided as per ITB 42.1 and believes that the Client has committed an error or breach of duty which has or will result in loss to him then the Bidder may give an application for review of the decision to the Office Chief of the procuring entity (Purchaser) with reference to the error or breach of duty committed by the Client. The complaint application should be given within 7 days of receipt of the information regarding the issue of intention to accept letter by the Client. Application, for review of Client's decision, filed after the deadline shall not be processed

45.2 The Office chief of the Procuring Entity (Purchaser shall), within five (5) days after receiving the complaint application, give its decision with reasons, in writing pursuant to ITB **45.1:**

(a) whether to suspend the procurement proceeding and the procedure for further proceedings to be adopted; or
(b) whether or not to reject a complaint application.

45.3 If the Bidder, who has submitted the complaint application, is not satisfied with the decision of the Office Chief in accordance with ITB **45.2**, or the decision by the Office Chief is not given within five (5) days of receipt of the complaint application

pursuant to ITB **45.1**, then the applicant , within seven (7) days of receipt of such decision, may file an application with relevant supporting documents to the Public Procurement Review Committee of the GoN, stating the reason of its disagreement on the decision of the Office Chief provided that its bid amount is above the amount **specified in the BDS.**. Together with the review application, the applicant shall furnish a guarantee, in the form of cash or Bank guarantee equivalent to zero point five percent (0.5%) of its quoted bid amount, with the validity period of at least ninety (90) days from the date of the filing of the review application.

45.4 Late application filed after the deadline pursuant to ITB **45.3** shall not be processed

45.5 The Public Procurement Review Committee, shall give its decision within 30 days after receiving the review application filed pursuant to ITB 45.3 on the basis of i) the information and comments received from the Purchaser, ii) evidence, documents submitted along with the application by the applicant, and iii) information received on inquiring both the parties regarding the matter**.**

45.6 If the claim made by the Bidder pursuant to ITB **45.3** is justified, the Review Committee shall return the security deposit to the applicant, pursuant to ITB **45.3,** within seven (7) days of the Public Procurement Review Committee's decision.

45.7 If the claim made by the Bidder pursuant to ITB **45.3** is rejected by the Review Committee, the security deposit submitted by the Bidder pursuant to ITB **45.3** shall be forfeited.

46. Provision of PPA and PPR

46.1 If any provisions of this document are inconsistent with Public Procurement Act (PPA), 2063 or Public Procurement Regulations (PPR), 2064, the provisions of this document shall be void to the extent of such inconstancy and the provisions of PPA and PPR shall prevail.

Section II. Bid Data Sheet

Section II. Bid Data Sheet

A. Introduction	
ITB 1.1	Name of the Purchaser**: Kathmandu regional Office, Nepal Electricity Authority (NEA)**
	Name and identification number of the contract: **KRO-074/75-01**
ITB 2.1	Name of the Project: NA Name of the DP: NA Implementing Agency: (NEA) Funding : GON/NEA
ITB 2.1	Name of Contract/s: **Supply and Delivery of galvanized stay sets and hardwares**
ITB 4.3	A list of debarred firms is available at http:\\www.ppmo.gov.np and www.nea.org.np
ITB 4.8	Tax clearance certificate or proof of submission of income return for 2015/16 The foreign Bidder shall declare to submit following documents at the time of contract agreement: Power of Attorney and Legal Registration of Company Resident foreign bidder shall submit PAN/VAT certificate and tax clearance certificate at the time of bid submission.
ITB 5.1	Bidders from the following countries are not eligible: NA
B. Bidding Document	
ITB 8.1	For **clarification purposes** only, the Purchaser's address is: Attention: **The Director** Name of the Purchaser: **Kathmandu regional Office** Address: **Ratnapark, Kathmandu** Country: **Nepal** Telephone: **+ 977 (01) 4153156** Facsimile Number: **+ 977 (01) 4153223**
ITB 8.1	The purchaser will respond in writing to any request for clarification provided that such request is received no later than 10 days prior to the deadline date for submission of bid.
ITB 8.2	A Pre-Bid meeting shall not be organized.

C. Preparation of Bids	
ITB 11.1	The language of the Bid is: English
ITB 12.1 (h)	The Bidder shall submit the following additional documents with its Bid: a.) Joint Venture Authorization/ Agreement (if any) b.) Power of Attorney c.) Manufacturer's Authorization d.) Type Test Certificates e.) End User's Certificate f.) ISO 9001:2000 g.) Other documents as needed
ITB 14.1	Alternative Bids: Not permitted
ITB 15.5	The Incoterms edition is: 2010
ITB 15.6 (b) i	For Goods offered from outside the Purchaser's country, the Bidder shall quote prices using the following Incoterm: CIP-Hetauda, Nepal.
ITB 15.6 (b) ii and (c) (v)	Final Destination: **Kathmandu regional Office** at kathmandu, Nepal.
ITB 15.6 (b) (iii)	In addition to the CIP price specified in ITB 14.6 (b)(i), the price of the Goods manufactured outside Nepal shall be quoted: NA
ITB 15.7	The prices quoted by the Bidder shall not be adjustable. If prices shall be adjustable, the methodology is specified in Section III Evaluation and Qualification Criteria.
B 18.3	Period of time the Goods are expected to be functioning (for the purpose of spare parts): NA
ITB 19.2	A Manufacturer's Authorization letter is required for all the items listed in Section V Schedule of Requirements.
ITB 19.3	The Bidder is not required to include with its bid, evidence that it will be represented by an Agent in the country.
ITB 20.1	The bid validity period shall be 90 days.
ITB 21.1	The bidder shall furnish a bid security, from "A" class commercial bank with a minimum of **NRs. 2.13 Million** (or equivalent amount in US$), which shall be valid for 30 days beyond the validity period of the bid.
ITB 21.2	If the Bidder wishes to submit the Bid Security in the form of cash, the cash should be deposited in Deposit Account No.: NEA Current Account number

	K 32114 C at Kumari Bank limited, Putalisadak, Kathmandu and submit the receipt of the deposited amount of cash along with the bid. or If the Bidder wishes to submit the Bid Security in the form of unconditional bank guarantee, the bidder should submit the original copy of the guarantee along with the bid. Bid Security issued by foreign Bank must be counter– guaranteed by an "A" class commercial Bank in Nepal.
D. Submission and Opening of Bids	
ITB 22.1	In addition to the original of the Bid, the number of copies is: ”One”
ITB 23.1	Bidders shall have the option of submitting their bids electronically.
ITB 23.1	If bidders submit their bids electronically, the electronic bidding submission procedures shall be: as specified below.
ITB 23.3 (c)	The inner and outer envelopes shall bear the following additional identification marks: IFB title: **KRO-074/75-01**: **Supply and Delivery of galvanized stay sets and hardwares** IFB Number: **KRO-074/75-01**
ITB 24.1	For bid submission purposes only, the Purchaser’s address is : **Nepal Electricity Authority** **Kathmandu regional Office** Address: **Ratnapark, Kathmandu** Country: **Nepal** Telephone: **+ 977 (01) 4153156** Facsimile Number: **+ 977 (01) 4153223** Electronic Mail Address: **ktmro@nea.org.np**
ITB 24.1	The deadline for bid submission is: Date: **January 12, 2018** Time: **12:00 hrs.** (Nepal Standard Time)

ITB 24.1	If the last date of purchasing, submission and opening of Bid falls on a government holiday then the next working day shall be considered as the last day without any change in the time and place as fixed.
ITB 27.1	The bid opening shall take place at: **Nepal Electricity Authority** **Kathmandu regional Office** **Durbar Marga, Kathmandu,Nepal** **Tel. : + 977 (01) 4153156** **Fax : + 977 (01) 4153223** **Date: January 12, 2018** **Time: 14:00 hrs. Local Time**
ITB 27.1	If electronic bid submission is permitted in accordance with ITB 22.1, the specific bid opening procedures shall be: as specified below
E. Evaluation, and Comparison of Bids	
ITB 35.1	Domestic preference shall be a bid evaluation factor. **The methodology for calculating the margin of preference and criteria for its application shall be as specified in Section III. Evaluation & qualification criteria.**
ITB 36. 3 (a)	Evaluation will be done for *Items.* Bids will be evaluated for each item and the Contract will comprise the item(s) awarded to the successful Bidder.
ITB 36.3(d)	The adjustments shall be determined using the following criteria, from amongst those set out in Section III, Evaluation and Qualification Criteria: *[refer to Schedule III, Evaluation and Qualification Criteria; insert complementary details if necessary*] *(a)* Deviation in Delivery schedule: *No* (b) *Deviation in payment schedule: No* (c) the cost of major replacement components, mandatory spare parts, and service: *No* (d) the availability of spare parts in Nepal and after-sales services for the equipment offered in the bid *:No* (e) the projected operating and maintenance costs during the life of the equipment:No (f) the performance and productivity of the equipment offered; *No*

ITB 36.6	Bidders *shall not* be allowed to quote separate prices for one or more lots.

F. Award of Contract	
ITB 41.1	The maximum percentage by which quantities may be increased is: 0-15% The maximum percentage by which quantities may be decreased is: 0-15%
ITB 45.3	No application can be submitted before the Review Committee for review against the decision made by the Office Chief of the Procuring Entity (Purchaser) for the bid amount up to the equivalent value of Nepalese Rupees 30,000,000 (thirty million)
ITB 45.3	The Bidder, filing application pursuant to ITB 45.1, shall have to furnish a cash amount or Bank guarantee equal to 0.5% of its bid price.

Special Instruction to Bidders for e-Bidding

A) Bid submission procedures through electronically (e-submission) only:

i. Interested eligible bidders shall, either purchase the hard copy of the bidding document directly from the Employer's office as specified in the Invitation for Bid (IFB) or may download the necessary parts of the bidding documents from e-procurement section in NEA's web site http://www.eproc.nea.org.np. In case, the bidders choose to download the bidding documents, prepare the bids on downloaded documents, and submit their bids electronically. The Bidders shall be required to deposit the non refundable fee for the bidding document (as specified in the bid notice) in the bank account specified in the IFB and electronic scanned copy (*.pdf format) of the bank deposit voucher shall also be submitted along with the electronic bid files.

ii. The Bidder shall fill the following documents and forms (in hard copy of issued bid documents), signed by the authorized representative with seal of the company.

a) Bill of Quantity (BOQ) with rate, amount, b) Forms of Bid, Qualification Information

The Bidder shall then scan the completed original documents, forms in PDF formats with appropriate filename shown if the table below.

S.No.	Document	PDF File name	Requirement	Remarks
1	Form of Bid	Bid form -1	Mandatory	
2	Bid Security (Bank Guarantee)	Bid security-2	Mandatory	
3	Company registration,	Company reg-3	Mandatory	All firms in case of JV
4	VAT/PAN registration,	VAT reg-4	Mandatory for National firms	All firms in case of JV
5	Tax clearances certificate,	Tax-5	Mandatory for National firms	All firms in case of JV
6	Power of Attorney of Bid signatory	Power of att-6	Mandatory	
7	Joint venture agreement	JV doc-7	Mandatory	
8	Qualification Information	Qualifications-8	Mandatory	
9	BOQ with rate, amount and total amount	BOQ-9	Mandatory	
10	Manufacturers Authorization	Authorization -10	Not Mandatory	NA

11	Technical Data Sheet	TDS-11	Not Mandatory	NA
12	Certification Documents	Certifications-12	Not Mandatory	NA
13	Declaration Form	Declaration-13	Mandatory	

Note: **Mandatory** *means the mentioned files shall be included in e-submission and non-submission of such file shall be considered as non-responsive bid.*

iii. For e-submission purpose the Bidder shall, at first, register in the e-procurement section NEA's web site http://www.eproc.nea.org.np .

iv. After preparing all the required bidding documents in PDF, scan the files as specified in (ii).

v. The Bidder shall upload the PDF bid files and submit the complete bid online through e-procurement section of NEA's website http://www.eproc.nea.org.np within the specified date and time.

vi. The e-procurement system will accept the e-submission of bid from the date after publishing of notice and will automatically disallow the e-submission of bid after the deadline for submission of bid, as specified above.

vii. The standard time for e-submission is Nepalese Standard Time as set out in the server of MIS Department of NEA.

viii. When a bidder submits his bid in hard copy, the e-procurement section does not allow the bidder to submit his Substitution or Modification or Withdrawal through e-procurement section of NEA's web site.

ix. Bidders may submit his Substitution or Modification or Withdrawal either in hard copy or through e-submission.

x. For Substitution of Bid, the Bidder shall follow similar steps as specified in ITB Clause -22 with a Substitution letter in PDF file.

xi. For Modification or Withdrawal of bid, the Bidder is required to submit PDF scan copy of their Modification or Withdrawal letter and a written Power of Attorney of the signatory for Modification/ Withdrawal, duly signed by Authorized Representative/s of the Firm / all authorized Joint Venture partners.

xii. When a Bidder submits electronic bid by downloading the bidding documents from the NEA's webpage it is assumed that the Bidder prepares his bid by studying and examining all the Bidding documents including specifications and conditions of contract.

xiii. In case the Bidder choose to download the bidding documents and deposit the cost of bidding documents (as specified in the bid notice), such deposited amount shall be verified by the office during bid evaluation process. The bid shall be considered as non-responsive and shall not be evaluated if the specified cost for bidding document is not deposited in the Employer's Revenue account.

xiv. Proposed facility for submission of bid electronically through e-submission is to increase transparency, non-discrimination, equality of access, and open competition. The Bidders shall be fully responsible to use the e-submission facility in e-procurement section of NEA's website http://www.eproc.nea.org.np in specified procedures and in no case the Employer shall be held liable for Bidder's inability to use this facility.

B) Requirements and Conditions for e-submission of bid:

i. The Bidder shall submit his bid electronically in PDF files in the manner as specified above, and additional submission of hard copy of "original plus one copy of bid" is not mandatory.

ii. In case, if both the electronic bid and original bid in hard copy are submitted to the Employer within the bid submission deadline, the Bidder's electronic bid and original bid in hard copy will be accepted for evaluation provided the facts and figures in hard copy confirm to the PDF files in electronic bid. If there is any discrepancy in fact and figures between the electronic bid and original bid in hard copy, it will be treated as two separate bids from one Bidder and hence, both the electronic bid and original bid in hard copy shall be disqualified. However, for electronically submitted bid in PDF files, the Bidder shall be required to submit documents/clarifications as specified in ITB clause within 3 days.

iii. In case of e-submission of bid, the Bidder shall be required to submit the original completed Bid consisting of Forms of Bid, Qualification Information, Special Conditions of Contract, Bill of Quantities, Supplementary Information and other clarifications for verification purpose upon notification to do so from the Employer within 3 days.

iv. In addition to electronically submitted PDF files, the Bidder shall be required to submit documents and clarifications as required by the Employer. Non-submission of such documents and or clarifications by the Bidder within specified time may cause forfeiture of Bid Security.

v. In case of major discrepancy found between electronically submitted PDF bid files and documents/ clarifications provided by the Bidder, the bid shall not be considered for further evaluation.

vi. The Bidder shall attach the Bid Security Guarantee in the format attached in the Bid Document. The Bid Security may be forfeited

a. if the Bidder does not respond to and/or submit the documents and or clarifications when requested by the Employer.

b. if major discrepancy is found between e-submitted bid information and documents/clarifications provided by the Bidder during verification process as requested by the Employer.

C) Bid Opening process for e-submitted bid

i. Electronically submitted bid shall be opened first at the Bid opening time.

ii. The e-procurement system allows the Employer to download and open the e-submitted bid files from the bidders only after the time for opening the bids.

iii. The e-submitted bids must be readable through open standards interfaces. Unreadable and or partially submitted bid files (not complying with the ITB Clauses) shall be considered incomplete and rejected for further bid evaluation.

iv. After opening of e-submitted bids files, all files shall be printed and recorded at the time of bid opening.

v. In case of "WITDRAWAL" or "MODIFICATION" or "SUBSTITUTION" by the Bidder through e-submission, the e-submitted PDF files under "WITDRAWAL" or "MODIFICATION" or "SUBSTITUTION" shall be opened and read out first. Bids for which acceptable notice of "WITDRAWAL" or "SUBSTITUTION" has been submitted pursuant to ITB Clause shall not be opened.

D) Bid Evaluation and Comparison process for e-submitted bid

i. In case of e-submitted bids, the Employer evaluates the bid based on the information as per electronically submitted bid files. For clarification/ verification purpose, the Employer may request the Bidder to submit documents/ clarifications.

ii. In case, the Bidder could not substantiate or provide evidence to prove the information provided in e-submitted bid through documents/clarifications, the bid shall not be considered for further evaluation and respective ITB Clause for forfeiture of bid security shall be applicable.

E) Qualification Information

In case of e-Bidding, the Bidder is required to submit the documents to prove minimum qualification requirements only and not the detail documents.

F) Bid Security Format

Form of Bid security shall include the provision as ‘This Bank Guarantee shall not be withdrawn or released merely upon return of the original Guarantee by the Bidder unless notified by the Employer for the release of the Guarantee’.

Nepal Electricity Authority

Declaration Form (for E-bidding)

S.No	Description		Status			
			Issued to (as applicable)	**Issued by (as applicable)**	**Date of Issue**	**No. of Pages**
1	Notarized Power of Attorney from the Company to Sign on Company's behalf (For Single Bidder)					
2	Joint Venture Agreement; ***If any***					
3	Notarized Power of Attorney to Sign the Bid on Company's behalf (Each Partner in case of JV)					
4	Notarized Power of Attorney to Sign the Bid (On Behalf of JV)					
5	Registration Certificate of the Bidder (and each partners in case of JV)					
6	Bid Bond					
7	Price Schedule					
8	Bid Forms					
9	Qualification Forms					
10	Complete Certified Audited Report of the Bidder (and each partner in case of JV)	First Year				
		Second Year				
		Last Year				
11	Performance(or user) Certificate/s (Bidder)	1				
		2				
		3				
		4				
		.				
		.				
12	Manufacturer's Authorization/s	1				
		2				
		3				
		4				
		.				
		.				

13	Power of Attorney from the Company to Issue the Manufacturers Authorization on Company's behalf					
14	Business License of Manufacturer/s	1				
		2				
		3				
		4				
		.				
		.				
15	User Certificate/s (Manufacturer)	1				
		2				
		3				
		4				
		.				
		.				
16	ISO Certificate/s	1				
		2				
		3				
		4				
		.				
		.				
17	Type Test Report/s (if required as per specification)	1				
		2				
		3				
		4				
		.				
		.				
18	Technical Data Sheet	1				
		2				
		3				
		4				
		.				
		.				
19	Other Certification (as per requirements)	1				
		2				
		3				
		4				

Section III. Evaluation and Qualification Criteria

Section III. Evaluation and Qualification Criteria

Table of Criteria

Evaluation Criteria

Scope

Multiple Contracts

Technical Criteria

Economic Criteria

Domestic preference

Evaluation Criteria

1. Scope

1.1 Local Handling and Inland Transportation

If the Purchaser wishes to consider during bid evaluation the costs for inland transportation, insurance, and other services within Nepal incidental to delivery of the goods to their final destination, then

a) the Purchaser must define these service items in Section V, Schedule of Supply, List of Goods and Related Services; and

b) Bidders must be required to quote for these service items as part of their bid price in the PRICE SCHEDULE FOR RELATED SERVICES TO BE OFFERED FROM OUTSIDE AND WITHIN NEPAL provided in Section IV, Bidding Forms.

In such case, the following provision should be used:

Costs for inland transportation, insurance, and other incidental costs for delivery of the goods from the EXW premises, or port of entry, or border point to Project Site as defined in Section V, Schedule of Supply, shall be quoted in the PRICE SCHEDULE FOR RELATED SERVICES TO BE OFFERED FROM OUTSIDE AND WITHIN NEPAL provided in Section IV, Bidding Forms. These costs will be taken into account during bid evaluation. If a Bidder fails to include such costs in its Bid, then these costs will be estimated by the Purchaser on the basis of published tariffs by the rail or road transport agencies, insurance companies, or other appropriate sources, and added to EXW or CIF or CIP price.

1.2 Minor Omissions or Missing Items: Not Applicable

2. Multiple Contracts: NA

3. Technical Criteria

These criteria should specify the minimum technical level that the Goods and Related Services shall have in order to comply with the Section V, Schedule of Supply. Whenever possible, these criteria should be evaluated on a pass–fail system.

4. Economic Criteria: NA

4.1 Adjustment for Deviations from the Terms of Payment: NA

4.2 Adjustment for Deviations in the Delivery and Completion Schedule : NA

4.3 Operating and Maintenance Costs: NA

4.4 Spare Parts: NA

4.5 Performance and Productivity of the Goods : NA

4.6 Specific additional Criteria: NA

Other specific additional criteria to be considered in the evaluation, and the evaluation method shall be detailed in BDS sub douse 36.3(d)

5. Domestic Preference

The purchaser will grant a margin of preference to goods manufactured in Nepal, The nationality of the manufacturer or supplier is not a condition for such eligibility. The methods and stages set forth hereunder shall be followed in the evaluation and comparison of bids. Insert **one** of the following adjustment methods.

4.7 Method A

1. For comparison, responsive bids shall be classified in one of the following three groups:

1. Group A: bids exclusively offering goods manufactured in for which (i) labor, raw material, and component from within Nepal account for 30 percent or more of the EXW price of the product offered, and (ii) the production facility in which those goods will be manufactured or assembled has been engaged in manufacturing/ assembling such goods at least since the time of bid submission. the national bidder or manufacturer or supplier shall submit the certificate of country of origin from the institution/ office authorized by GoN, failing of which Domestic preference shall not be provided.

(a) Group B: all other bids offering goods manufactured in Nepal.

(b) Group C: bids offering goods manufactured outside Nepal that have been already imported or that will be directly imported.

2. The price quoted for goods in bids of groups A and B shall include all duties and taxes paid or payable on the basic materials or component purchased in the domestic market or imported, but shall exclude the value added tax and similar taxes on the finished product. The

price quoted for goods in bids of group C shall be on CIF or CIP (place of destination), which is exclusive of customs duties and other import taxes already paid or to be paid.

3. In the first step, all evaluated bids in each group shall be compared to determine the lowest bid in each group. Such lowest evaluated bids shall be compared with each other and if, as a result of this comparison, a bid from group A or group B is the lowest, it shall be selected for the award.

4. If as a result of the comparison under paragraph three above, the lowest evaluated bid is a bid from group C, the lowest evaluated bid from group C shall be further compared with the lowest evaluated bid from group A after adding to the evaluated price of goods offered in the bid from group C, for the purpose of this further comparison only, an amount equal to fifteen (15%) percent of the CIF or CIP bid price. The lowest evaluated bid determined from this last comparison shall be selected.

Qualification Criteria

Failure to fulfill any of the requirements specified in Qualification Requirements given below shall result in disqualification of the Bid.

1. Power of Attorney

The Bid shall include a notarized power of attorney authorizing the signatory of the bid to commit the Bid on behalf of the Bidder.

2. Legal Status

2.1 If the Bidder is not a Joint Venture (JV), following requirements shall apply:

The Bidder shall be a manufacturer or supplier legally registered for at least five (5) years for conducting business similar to the one for which the Bid is invited. A notarized copy of legal registration certificate shall be submitted along with the Bid.

2.2 If the Bidder is a JV, following requirements shall apply:

(a) Original of joint venture agreement legally binding on all JV partners shall be included in the Bid. The joint venture agreement shall bear the seal of the entities and signatures of personnel authorized by the respective entities forming the joint venture. All such authorization documents shall also be included in the Bid. These Authorization documents shall be on the original letterhead of the entity with stamp/seal of the entity.

(b) The number of joint venture partners shall not exceed three (3).

(c) The partners of the JV shall be manufacturers or suppliers. Each of the partners of JV shall be legally registered for at least five (5) years for conducting business similar to the one for which the Bid is invited.

(d) Notarized copies of legal registration certificates for each JV partners shall be submitted along with the Bid.

3. Financial Capacity of the Bidder

3.1 Financial Statements

The Bidder including joint venture partners, if any, shall submit audited financial statements (Balance Sheet and Profit and Loss Account) for the last three (3) fiscal years. Balance sheet and Profit & Loss Account sheet shall be signed and sealed by the registered auditor(s).

3.2 Line of Credit

In the event that the working capital of the Bidder (including each of the JV partner in the case of JV) is to be supplemented with the line of credit from a Bank, the Bidder shall submit original letter of the Bank pledging unequivocally that the Bank will provide required financial support in case the Bidder is awarded the contract. The amount of line of credit shall be clearly mentioned in the Bank letter. The bid title and the bid number shall also be mentioned in the Bank letter.

3.3 If the Bidder is not a JV, following requirements shall apply:

(a) Annual Turnover

The Bidder shall have Average Annual Turnover (defined as the total payments received by the Bidder averaged over last three consecutive years period) of not less than **NRS 19 Million**.

(b) Availability of Financial Resources (Working Capital)

The Bidder shall have Working Capital (defined as total current assets less total current liabilities) of at least **Nrs 12.6 Million** in the last Fiscal Year.

If the Bidder's Working Capital is inadequate, the Bidder shall supplement Working Capital with Banker's letter confirming the availability of a line of credit such that aggregate of the Bidder's Working Capital for the last fiscal year and the line of credit shall not be less than the required amount.

3.4 If the Bidder is a JV, following requirements shall apply:

(a) The Average Annual Turnover and Working Capital of the lead partner shall not be less than 51% of the amount stated above in sub-clause 3.3 (a) & (b) respectively.

(b) The Average Annual Turnover and Working Capital of other partners shall not be less than 10% of the amount stated in sub-clauses 3.3 (a) and (b) respectively.

(c) Aggregate Annual Turnover and aggregate Working Capital (with line of credit facilities) of all the JV partners shall not be less than the values specified in sub-clauses 3.3 (a) and (b) respectively.

4. Manufacturing Experience

4.1 In case the Bidder is not a manufacturer of the Goods offered, the Bidder shall submit manufacturer's certificate authorizing the Bidder to supply the manufacturers' Goods. This certificate shall bear details of the Goods that the manufacturer will be supplying under the authorization. The authorization shall be on the manufacturer's original letterhead with seal/stamp of the manufacturer.

4.2 The manufacturer of Goods to be supplied under this Bid shall hold valid quality ISO certificate as required by the specifications and a copy of ISO certificate shall be included in the Bid.

4.3 Type test certificate, if applicable, shall be included in the Bid and shall bear a date that is not earlier than five years from the last date of Bid submission. The type test certificate shall have been issued by a reputed independent laboratory.

4.4 The Bidder shall submit at least two numbers of end user certificates showing that the manufacturer has successfully completed the supply of at least twice the bid quantity of offered items as a main supplier over last five (5) years period ending on the last

date of bid submission. Out of supplied quantity, a minimum of half the bid quantity of offered goods shall have been in operation satisfactorily to the end users for at least One (1) year. The end user certificates shall be on the letterhead of the end user with valid address for correspondence and signed by or on behalf of the end user.

5. Miscellaneous

The Bidder or any of the Joint Venture partners shall not be on the blacklist circulated by Public Procurement Monitoring Office, Government of Nepal or Nepal Electricity Authority.

Section IV. Bidding Forms

Table of Forms

1.Bid Submission Form 2

2.Bidder Information Form 4

3. Joint Venture Partner Information Form 5

4. Financial Situation Form 6

5. Average Annual Turnover Form..... 7

6. Financial Resources Form..... 8

7. Pending Litigation Form 9

8. Specific Experience Form 10

9. Bid Security (Bank Guarantee) 11

10.Manufacturer's Authorization 12

11.Price Schedule Forms 12

1. Bid Submission Form

[The Bidder shall fill in this Form in accordance with the instructions indicated No alterations to its format shall be permitted and no substitutions shall be accepted.]

Date: *[insert date (as day, month and year) of Bid Submission]*
ICB No.: *[insert number of bidding process]*
Invitation for Bid No.: *[insert No of IFB]*
Alternative No.: *[insert identification No if this is a Bid for an alternative]*

To: *[insert complete name of Purchaser]*

We, the undersigned, declare that:

(a) We have examined and have no reservations to the Bidding Documents, including Addenda No.: *[insert the number and issuing date of each Addenda];*

(b) We offer to supply in conformity with the Bidding Documents and in accordance with the Delivery Schedules specified in the Schedule of Requirements the following Goods and Related Services *[insert a brief description of the Goods and Related Services];*

(c) The total price of our Bid, excluding any discounts offered in item (d) below, is: *[insert the total bid price in words and figures, indicating the various amounts and the respective currencies];*

(d) The discounts offered and the methodology for their application are:

Discounts. If our bid is accepted, the following discounts shall apply. *[Specify in detail each discount offered and the specific item of the Schedule of Requirements to which it applies.]*

Methodology of Application of the Discounts. The discounts shall be applied using the following method: *[Specify in detail the method that shall be used to apply the discounts];*

(e) Our bid shall be valid for the period of time specified in ITB Sub-Clause 20.1, from the date fixed for the bid submission deadline in accordance with ITB Sub-Clause 24.1, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;

(f) If our bid is accepted, we commit to obtain a performance security in the amount of …..percent of the Contract Price for the due performance of the contract.

(g) We, including any subcontractors or suppliers for any part of the contract, have nationality from eligible countries *[insert the nationality of the Bidder, including that of all parties that comprise the Bidder, if the Bidder is a JV, and the nationality each subcontractor and supplier]*

(h) We have no conflict of interest in accordance with ITB Sub-Clause 4.2;

(i) Our firm, its affiliates or subsidiaries—including any subcontractors or suppliers for any part of the contract—has not been declared ineligible in accordance with ITB Sub-Clause 4.3;

(j) The following commissions, gratuities, or fees have been paid or are to be paid with respect to the bidding process or execution of the Contract: *[insert complete name of each Recipient, its full address, the reason for which each commission or gratuity was paid and the amount and currency of each such commission or gratuity]*

Name of Recipient	Address	Reason	Amount

(If none has been paid or is to be paid, indicate "none.")

(k) We understand that this bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed.

(l) We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.

Signed: *[insert signature of person whose name and capacity are shown]*
In the capacity of *[insert legal capacity of person signing the Bid Submission Form]*

Name: *[insert complete name of person signing the Bid Submission Form]*

Duly authorized to sign the bid for and on behalf of: *[insert complete name of Bidder]*

Dated on _____ day of _____, _____ *[insert date of signing]*

2. Bidder Information Form

[The Bidder shall fill in this Form in accordance with the instructions indicated below. No alterations to its format shall be permitted and no substitutions shall be accepted.]

Date: *[insert date (as day, month and year) of Bid Submission*]
ICB No.: *[insert number of bidding process]*

Page _____ of_ _____ pages

1. Bidder's Legal Name *[insert Bidder's legal name]*
2. In case of JV, legal name of each party: *[insert legal name of each party in JV]*
3. Bidder's actual or intended Country of Registration: *[insert actual or intended Country of Registration]*
4. Bidder's Year of Registration: *[insert Bidder's year of registration]*
5. Bidder's Legal Address in Country of Registration: *[insert Bidder's legal address in country of registration]*
6. Bidder's Authorized Representative Information Name: *[insert Authorized Representative's name]* Address: *[insert Authorized Representative's Address]* Telephone/Fax numbers: *[insert Authorized Representative's telephone/fax numbers]* Email Address: *[insert Authorized Representative's email address]*
7. Attached are copies of original documents of: *[check the box(es) of the attached original documents]* ☐ Articles of Incorporation or Registration of firm named in 1, above, in accordance with ITB Sub-Clauses 4.1 and 4.2. ☐ In case of JV, letter of intent to form JV or JV agreement, in accordance with ITB Sub-Clause 4.1. ☐ In case of government owned entity from the Purchaser's country, documents establishing legal and financial autonomy and compliance with commercial law, in accordance with ITB Sub-Clause 4.5.

3. Joint Venture Partner Information Form

[The Bidder shall fill in this Form in accordance with the instructions indicated below].
Date: *[insert date (as day, month and year) of Bid Submission*]
ICB No.: *[insert number of bidding process]*

Page _____ of_ _____ pages

1. Bidder's Legal Name: *[insert Bidder's legal name]*
2. JV's Party legal name: *[insert JV's Party legal name]*
3. JV's Party Country of Registration: *[insert JV's Party country of registration]*
4. JV's Party Year of Registration: *[insert JV's Part year of registration]*
5. JV's Party Legal Address in Country of Registration: *[insert JV's Party legal address in country of registration]*
6. JV's Party Authorized Representative Information Name: *[insert name of JV's Party authorized representative]* Address: *[insert address of JV's Party authorized representative]* Telephone/Fax numbers: *[insert telephone/fax numbers of JV's Party authorized representative]* Email Address: *[insert email address of JV's Party authorized representative]*
7. Attached are copies of original documents of: *[check the box(es) of the attached original documents]* ☐ Articles of Incorporation or Registration of firm named in 2, above, in accordance with ITB Sub-Clauses 4.1 and 4.2. ☐ In case of government owned entity from the Purchaser's country, documents establishing legal and financial autonomy and compliance with commercial law, in accordance with ITB Sub-Clause 4.5.

4. Financial Situation Form

Each Bidder or member of a JV must fill in this form

Financial Data for Previous 3 Years (in NRS)		
Year 1:	**Year 2:**	**Year 3:**

Information from Balance Sheet

Total Assets			
Total Liabilities			
Net Worth			
Current Assets			
Current Liabilities			

Information from Income Statement

Total Revenues			
Profits Before Taxes			
Profits After Taxes			

❑ Attached are copies of financial statements (balance sheets including all related notes, and income statements) for the last three or above years, as indicated above, complying with the following conditions?

- Historic financial statements must be audited by a certified accountant.
- Historic financial statements must be complete, including all notes to the financial statements.
- Historic financial statements must correspond to accounting periods already completed and audited (no statements for partial periods shall be requested or accepted).

5. Average Annual Turnover Form

The information supplied should be the Annual Turnover of the Bidder in terms of the amounts billed to clients for each year for work in progress or completed to NRs at the end of the period reported Each Bidder or member of a JV must fill in this form

Annual Turn over Data for the Last 3 Years	
Year	**Amount (in Nrs)**
Average Annual Turnover	

6. Financial Resources Form

Specify proposed sources of financing, such as liquid assets, unencumbered real assets, lines of credit, and other financial means, available to meet the total cash flow requirements of the subject contract

Financial Resources		
No.	**Source of financing**	**Amount (in Nrs)**
1		
2		
3		

Note:

The letter from the Bank must be unconditional.

7. Pending Litigation Form

Each Bidder or member of a JV must fill in this form

Year	Matter in Dispute	Value of Pending Claim in NRs	Value of Pending Claim as a Percentage of Net Worth

8. Specific Experience Form

Bidder's Legal Name: _____ Date: _____
IFB No.:

Page _____ of _____ pages

Similar Contract	**Information**		
Contract Identification	_____		
Award date			
Completion date			
Role in Contract	☐ Contractor	☐ Management Contractor	☐ Subcontractor
Total Contract amount	_____		Currency____
Description of the Works performed by the Bidder			
If partner in a JV or subcontractor, specify participation of total Contract amount	_____%	_____	Currency____
Purchaser's Name:	_____		
Purchaser's Address:			
Purchaser's Telephone/fax number:			
Purchaser's E-mail			

The Bidder shall complete this form for each contract completed/in progress

9. Bid Security (Bank Guarantee)

[The Bank shall fill in this Bank Guarantee Form in accordance with the instructions indicated.]

_____
[Bank's Name, and Address of Issuing Branch or Office]

Beneficiary: _____ *[Name and Address of Purchaser]*

Date: _____

BID GUARANTEE No.: _____

We have been informed that *[name of the Bidder]* (hereinafter called "the Bidder") has submitted to you its bid dated (hereinafter called "the Bid") for the execution of *[name of contract]* under Invitation for Bids No. *[IFB number]* ("the IFB").

Furthermore, we understand that, according to your conditions, bids must be supported by a bid guarantee.

At the request of the Bidder, we *[name of Bank]* hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of *[amount in figures]* (*[amount in words]*) upon receipt by us of your first demand in writing accompanied by a written statement stating that the Bidder is in breach of its obligation(s) under the bid conditions, because the Bidder:

(a) has withdrawn its Bid during the period of bid validity specified by the Bidder in the Form of Bid; or

(b) having been notified of the acceptance of its Bid by the Purchaser during the period of bid validity, (i) fails or refuses to execute the Contract Form, if required, or (ii) fails or refuses to furnish the performance security, in accordance with the Instructions to Bidders.

This guarantee will expire: (a) if the Bidder is the successful bidder, upon our receipt of copies of the contract signed by the Bidder and the performance security issued to you upon the instruction of the Bidder; or (b) if the Bidder is not the successful bidder, upon the earlier of (i) our receipt of a copy of your notification to the Bidder of the name of the successful bidder; or (ii) twenty-eight days after the expiration of the Bidder's Bid.

Consequently, any demand for payment under this guarantee must be received by us at the office on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 758.

_____
[signature(s)]

10. Manufacturer's Authorization

[The Bidder shall require the Manufacturer to fill in this Form in accordance with the instructions indicated. This letter of authorization should be on the letterhead of the Manufacturer and should be signed by a person with the proper authority to sign documents that are binding on the Manufacturer. The Bidder shall include it in its bid, if so indicated in the BDS.]

Date: *[insert date (as day, month and year) of Bid Submission]*
ICB No.: *[insert number of bidding process]*
Alternative No.: *[insert identification No if this is a Bid for an alternative]*

To: *[insert complete name of Purchaser]*

WHEREAS

We *[insert complete name of Manufacturer]*, who are official manufacturers of *[insert type of goods manufactured]*, having factories at [insert full address of Manufacturer's factories], do hereby authorize *[insert complete name of Bidder]* to submit a bid the purpose of which is to provide the following Goods, manufactured by us *[insert name and or brief description of the Goods]*, and to subsequently negotiate and sign the Contract.

We hereby extend our full guarantee and warranty in accordance with Clause 27 of the General Conditions of Contract, with respect to the Goods offered by the above firm.

Signed: *[insert signature(s) of authorized representative(s) of the Manufacturer]*
Name: *[insert complete name(s) of authorized representative(s) of the Manufacturer]*
Title: *[insert title]*
Duly authorized to sign this Authorization on behalf of: *[insert complete name of Bidder]*
Dated on _____ day of _____, _____ *[insert date of signing]*

11. Price Schedule Forms

*[The Bidder shall fill in these Price Schedule Forms in accordance with the instructions indicated. The list of line items in column 1 of the **Price Schedules** shall coincide with the List of Goods and Related Services specified by the Purchaser in the Schedule of Requirements.]*

Job:-Supply and delivery of stay sets and hardware (Tender no:KRO/074/75-01)

S.No	Description	Unit	Per unit Weight(kg)	Quantity	Unit price with VAT(NRs)	Amount
A	**Cross Arm Channel (mm)**					
1	100*50*6.4*5*300	Nos	2.92	6684		
2	100*50*7.5*5*300	Nos	3.40	1356		
3	100*50*6.4*5*1200	Nos	11.67	7116		
4	100*50*7.5*5*1900	Nos	21.53	960		
5	100*50*6.4*5*2348	Nos	22.86	1140		
6	100*50*6.4*5*2390	Nos	23.25	1150		
7	100*50*6.4*5*1700	Nos	16.53	1308		
8	100*50*7.5*5*3300	Nos	37.40	234		
B	**Flat Cross Arm Brace (mm)**					
1	40*6*660	Nos	1.94	8088		
2	40*6*760	Nos	2.24	1440		
3	40*6*374	Nos	1.10	540		
C	**H-pole Bracing Angle (mm)**					
1	40*40*5*2071	Nos	12.19	382		
2	40*40*5*2719	Nos	16.01	190		
3	40*40*5*2416	Nos	14.22	125		
4	40*40*5*2868	Nos	16.89	125		
D	**Transformer Platform (mm)**					
1	100*50*7.5*5*2490	Nos	75.50	1384		

E	**Bolt With Washer and Nuts (mm)**					
1	13*51	Nos		13822		
2	16*203	Nos		13884		
3	16*305	Nos		4896		
4	16*305 (double arming)	Nos		1819		
F	**Stay Set**					
1	16 mm dia	per set		3324		
2	19mm dia	per set		1266		
G	**stay wire**					
1	7/2.6 mm	per meter		23676		
2	7/4 mm	per meter		7680		
H	**Pole clamp (Rectangular)**					
1	PC1	Nos	1.54	1722		
2	PC2	Nos	1.54	828		
3	PC3	Nos	1.54	570		
4	PC4	Nos	1.54	120		
5	PC5	Nos	1.54	120		
6	PC6	Nos	1.54	180		
I	**Pole clamp (Tubular)**					
1	TC1	Nos	2.59	2178		
2	TC2	Nos	2.59	2100		
3	TC3	Nos	2.59	1296		
4	TC7	Nos	2.59	300		
5	TC4	Nos	2.59	180		
6	TC5	Nos	2.59	180		
	Total					

Total amount in words:-

Prices are to be quoted inclusive of all custom duties, sales and other similar taxes applicable in Nepal and payable on the Related Services, if the Contract is awarded to the Bidder.

Section V. Schedule of Supply

Contents

1. List of Goods and Delivery Schedule 2

2. Technical Specifications 3

NEPAL ELECTRICITY AUTHORITY
Distribution and Consumer Service Directorate
Kathmandu Regional Office
List of Goods and Delivery Schedule

S.No	Description	Unit	TOTAL
A	**Cross Arm Channel (mm)**		
1	100*50*6.4*5*300	Nos	6684
2	100*50*7.5*5*300	Nos	1356
3	100*50*6.4*5*1200	Nos	7116
4	100*50*7.5*5*1900	Nos	960
5	100*50*6.4*5*2348	Nos	1140
6	100*50*6.4*5*2390	Nos	1150
7	100*50*6.4*5*1700	Nos	1308
8	100*50*7.5*5*3300	Nos	234
B	**Flat Cross Arm Brace (mm)**		
1	40*6*660	Nos	8088
2	40*6*760	Nos	1440
3	40*6*374	Nos	540
C	**Bracing Angle (mm)**		
1	40*40*5*2071	Nos	382
2	40*40*5*2719	Nos	190
3	40*40*5*2416	Nos	125
4	40*40*5*2868	Nos	125
D	**Transformer Platform (mm)**		
1	100*50*7.5*5*2490	Nos	1384
E	**Bolt With Washer and Nuts (mm)**		
1	13*51	Nos	13822
2	16*203	Nos	13884
3	16*305	Nos	4896
4	16*305 (double arming)	Nos	1819
F	**Stay Set**		
1	16 mm dia	per set	3324
2	19mm dia	per set	1266
G	**stay wire**		
1	7/2.6 mm	per meter	23676
2	7/4 mm	per meter	7680
H	Pole clamp (Rectangular)		
1	PC1	Nos	1722
2	PC2	Nos	828
3	PC3	Nos	570
4	PC4	Nos	120
5	PC5	Nos	120
6	PC6	Nos	180
I	Pole clamp (Tubular)		
1	TC1	Nos	2178
2	TC2	Nos	2100
3	TC3	Nos	1296
4	TC7	Nos	300
5	TC4	Nos	180
6	TC5	Nos	180

Delivery Schedule:

Supply and delivery of galvanized stay sets and hardwares	**Lot-wise Quantity to be Delivered (from the Date of Contract)**			
	Lot:1 (30 days)	**Lot:2 (60 days)**	**Lot:3 (80 days)**	**Lot:4(100 days)**
	30 % of Quantity specified in Table above for the respective Delivery Site	30 % of Quantity specified in Table above for the respective Delivery Site	20 % of Quantity specified in Table above for the respective Delivery Site	20 % of Quantity specified in Table above for the respective Delivery Site

Delivery Schedule Required By NEA: The complete delivery must be made at the specified delivery site within 100 (hundred) days from the date of signing the contract agreement.

Section VI. General Conditions of Contract

The GCC contain standard provisions that have been designed to remain unchanged and **to be used without modifying their text**. The GCC clearly identify the provisions that may normally need to be specified for a particular bidding process and require that such specification be introduced **through the SCC**.

The GCC are a Contract document and, therefore, are a part of the Contract.

Section VI. General Conditions of Contract

Table of Clauses

1. Definitions 6-3
2. Contract Documents 6-4
3. Fraud and Corruption 6-4
4. Interpretation 6-5
5. Language 6-6
6. Joint Venture, Consortium or Association 6-7
7. Notices 6-7
8. Governing Law 6-7
9. Settlement of Disputes 6-7
10. Scope of Supply 6-7
11. Delivery 6-8
12. Supplier's Responsibilities 6-8
13. Purchaser's Responsibilities 6-8
14. Contract Price 6-8
15. Terms of Payment 6-8
16. Taxes and Duties 6-9
17. Performance Security 6-9
18. Copyright 6-9
19. Confidential Information 6-9
20. Subcontracting 6-10
21. Specifications and Standards 6-11
22. Packing and Documents 6-11
23. Insurance 6-11
24. Transportation 6-11
25. Inspections and Tests 6-12
26. Liquidated Damages 6-13
27. Warranty 6-13
28. Patent Indemnity 6-14
29. Limitation of Liability 6-15
30. Change in Laws and Regulations 6-15
31. Force Majeure 6-15
32. Change Orders and Contract Amendments 6-16
33. Extensions of Time 6-16
34. Termination 6-17
35. Assignment 6-18

1. Definitions

1.1 The following words and expressions shall have the meanings hereby assigned to them:

(a) "Contract" means the Agreement entered into between the Purchaser and the Supplier, together with the Contract Documents referred to therein, including all attachments, appendices, and all documents incorporated by reference therein.

(b) "Contract Documents" means the documents listed in the Agreement, including any amendments thereto.

(c) "Contract Price" means the price payable to the Supplier as specified in the Agreement, subject to such additions and adjustments thereto or deductions therefrom, as may be made pursuant to the Contract.

(d) "Day" means calendar day.

(e) "Delivery" means the transfer of the Goods from the Supplier to the Purchaser in accordance with the terms and conditions set forth in the Contract.

(f) "Completion" means the fulfillment of the Related Services by the Supplier in accordance with the terms and conditions set forth in the Contract.

(g) "GCC" means the General Conditions of Contract.

(h) "GoN" means the Government of Nepal.

(i) "Goods" means all of the commodities, raw material, machinery and equipment, and/or other materials that the Supplier is required to supply to the Purchaser under the Contract.

(j) "Purchaser's Country" is the country of Nepal .

(k) "Purchaser" means the entity purchasing the Goods and Related Services, as specified in the SCC.

(l) "Related Services" means the services incidental to the supply of the goods, such as insurance, installation, training and initial maintenance and other similar obligations of the Supplier under the Contract.

(m) "SCC" means the Special Conditions of Contract.

(n) "Subcontractor" means any natural person, private or government entity, or a combination of the above, including its legal successors or permitted assigns, to whom any part of the Goods to be supplied or execution of any part of the Related Services is subcontracted by the Supplier.

(o) "Supplier" means the natural person, private or government entity, or a combination of the above, whose bid to perform the Contract has been accepted by the Purchaser and is named as such in the Agreement, and includes the legal successors or permitted assigns of the Supplier.

(p) "The Site," where applicable, means the place named in the SCC.

2. Contract Documents

2.1 Subject to the order of precedence set forth in the Agreement, all documents forming the Contract (and all parts thereof) are intended to be correlative, complementary, and mutually explanatory.

3. Fraud and Corruption

3.1 Public procurement act, 2063 requres that public Entities, Bidders, Supplies, Contractors and consultant under Public contract to serve the hightest standerd of ethics during the procurement and execution of such contract.

3.2 If the Purchaser determines at any time that the Supplier has engaged in corrupt, fraudulent, collusive, coercive or obstructive practices, in competing for or in executing the Contract, then the Purchaser may, after giving 15 days notice to the Supplier, terminate the Supplier's employment under the Contract and the provisions of Clause 34.1 shall apply.

(a) For the purposes of this provision, the terms set forth below as follows:

(i) "corrupt practice" means the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of a public official in the procurement process or in contract execution; and

(ii) "fraudulent practice" means a misrepresentation or omission of facts in order to influence a procurement process or the execution of a contract;

(iii) "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of the Borrower, designed to establish bid prices at artificial, non competitive levels; and;

(iv) "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the procurement process or affect the execution of a contract;

(v) "obstructive practice" means

(aa) deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a GoN/DP investigation into allegations of a corrupt,

fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or

(bb) acts intended to materially impede the exercise of the GoN/DP's inspection and audit rights provided for under ITB Clause 3.5 and GCC Clause 25.

3.3 Without prejudice to any other rights of the Purchaser under this Contract, on the recommendation of the Purchaser, Public Procurement Monitoring Office may **blacklist** a Bidder/Supplier for its conduct for a period of one (1) to three (3) years including on the following grounds and seriousness of the act committed by the bidder:

(a) if it is established that the Supplier has committed acts specified in ITB 3.2,

(b) if it is established later that the Bidder has committed substantial defect in implementation of the contract or has not substantially fulfilled its obligations under the contract or the completed work is not of the specified quality as per the contract.

3.4 Incase of DP funded bid, DP:

(a) will cancel the portion of the loan allocated to a contract if it determines at any time that representatives of the Borrower or of a beneficiary of the loan engaged in corrupt, fraudulent, collusive or coercive practices during the procurement or the execution of that contract, without the Borrower having taken timely and appropriate action satisfactory to the Bank to remedy the situation;

(b) will sanction a firm or individual, including declaring them ineligible, either indefinitely or for a stated period of time, to be awarded a Bank-financed contract if it at any time determines that they have, directly or through an agent, engaged, in corrupt, fraudulent, collusive or coercive practices in competing for, or in executing, a Bank-financed contract; and

(c) will have the right to require that Suppliers to permit the Bank to inspect their accounts and records and other documents relating to the bid submission and contract performance and to have them audited by auditors appointed by the Bank.

4. Interpretation

4.1 If the context so requires it, singular means plural and vice versa.

4.2 Incoterms

(a) The meaning of any trade term and the rights and obligations of parties thereunder shall be as prescribed by

Incoterms.

(b) EXW, CIF, CIP, and other similar terms, shall be governed by the rules prescribed in the current edition of Incoterms, published by the International Chamber of Commerce at the date of the Invitation for Bids or as specified in the SCC.

4.3 Entire Agreement

The Contract constitutes the entire agreement between the Purchaser and the Supplier and supersedes all communications, negotiations and agreements (whether written or oral) of parties with respect thereto made prior to the date of Contract.

4.4 Amendment

No amendment or other variation of the Contract shall be valid unless it is in writing, is dated, expressly refers to the Contract, and is signed by a duly authorized representative of each party thereto.

4.5 Non-waiver

(a) Subject to GCC Sub-Clause 4.5(b) below, no relaxation, forbearance, delay, or indulgence by either party in enforcing any of the terms and conditions of the Contract or the granting of time by either party to the other shall prejudice, affect, or restrict the rights of that party under the Contract, neither shall any waiver by either party of any breach of Contract operate as waiver of any subsequent or continuing breach of Contract.

(b) Any waiver of a party's rights, powers, or remedies under the Contract must be in writing, dated, and signed by an authorized representative of the party granting such waiver, and must specify the right and the extent to which it is being waived.

4.6 Severability

If any provision or condition of the Contract is prohibited or rendered invalid or unenforceable, such prohibition, invalidity or unenforceability shall not affect the validity or enforceability of any other provisions and conditions of the Contract.

5. Language

5.1 The Contract as well as all correspondence and documents relating to the Contract exchanged by the Supplier and the Purchaser, shall be written in the language specified in the SCC. Supporting documents and printed literature that are part of the Contract may be in another language provided they are accompanied by an accurate translation of the relevant passages

in the language specified in the SCC, in which case, for purposes of interpretation of the Contract, this translation shall govern.

5.2 The Supplier shall bear all costs of translation to the governing language and all risks of the accuracy of such translation.

6. Joint Venture, Consortium or Association

6.1 Unless otherwise specified in the SCC, if the Supplier is a joint venture, consortium, or association, all of the parties shall be jointly and severally liable to the Purchaser for the fulfillment of the provisions of the Contract and shall designate one party to act as a leader with authority to bind the joint venture, consortium, or association. A bidder can submit only one bid either as a partner of the joint venture or individually. The composition or the constitution of the joint venture, consortium, or association shall not be altered without the prior consent of the Purchaser.

7. Notices

7.1 Any Notice given by one party to the other pursuant to the Contract shall be in writing to the address specified in the SCC. The term "in writing" means communicated in written form with proof of receipt.

7.2 A Notice shall be effective when delivered or on the Notice's effective date, whichever is later.

8. Governing Law

8.1 The Contract shall be governed by and interpreted in accordance with the laws of the Nepal, unless otherwise specified in the SCC.

9. Settlement of Disputes

9.1 The Purchaser and the Supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.

9.2 Any dispute between the parties as to matter arising pursuant to this Contract which cannot be settled amicably within thirty(30) days after receipt by one Party of the other Party's request forsuch amicable settlement may be referred to Arbitation within 30 days after the expiration of amicable settlement period.

10. Scope of Supply

10.1 Subject to the SCC, the Goods and Related Services to be supplied shall be as **specified in Section V, Schedule of Supply.**

10.2 Unless otherwise stipulated in the Contract, the Scope of Supply shall include all such items not specifically mentioned in the Contract but that can be reasonably inferred from the Contract as being required for attaining Delivery and Completion of the Goods and Related Services as if such items were expressly mentioned in the Contract.

11. Delivery

11.1 Subject to GCC Sub-Clause **32.1,** the Delivery of the Goods and Completion of the Related Services shall be in accordance with the Delivery and Completion Schedule specified in the Section V, Schedule of Supply. The details of shipping and other documents to be furnished by the Supplier **are specified in the SCC.**

12. Supplier's Responsibilities

12.1 The Supplier shall supply all the Goods and Related Services included in the Scope of Supply in accordance with GCC Clause **10**, and the Delivery and Completion Schedule, as per GCC Clause **11.**

13. Purchaser's Responsibilities

13.1 Whenever the supply of Goods and Related Services requires that the Supplier obtain permits, approvals, and import and other licenses from public authorities of Nepal, the Purchaser shall, if so required by the Supplier, make its best effort to assist the Supplier in complying with such requirements in a timely and expeditious manner.

13.2 The Purchaser shall pay all costs involved in the performance of its responsibilities, in accordance with GCC Sub-Clause **13.1**.

14. Contract Price

14.1 The Contract Price shall be as specified in the Agreement subject to any additions and adjustments thereto, or deductions there from, as may be made pursuant to the Contract.

14.2 Prices charged by the Supplier for the Goods delivered and the Related Services performed under the Contract shall not vary from the prices quoted by the Supplier in its bid, with the exception of any price adjustments authorized in the SCC.

15. Terms of Payment

15.1 The Contract Price shall be paid as specified in the SCC.

15.2 The Supplier's request for payment shall be made to the Purchaser in writing, accompanied by invoices describing, as appropriate, the Goods delivered and Related Services performed, and by the documents submitted pursuant to GCC Clause 11 and upon fulfillment of all the obligations stipulated in the Contract.

15.3 Payments shall be made promptly by the Purchaser, no later than thirty (30) days after submission of an invoice or request for payment by the Supplier, and the Purchaser has accepted it.

15.4 The currency or currencies in which payments shall be made to the Supplier under this Contract shall be as specified in the SCC.

15.5 In the event that the Purchaser fails to pay the Supplier any payment by its due date or within the period set forth in the GCC 15.3, the Purchaser shall pay to the Supplier interest on the amount of such delayed payment at the rate shown in the

SCC, for the period of delay until due payment has been made.

16. Taxes and Duties

16.1 For goods supplied from outside Nepal, the Supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside Nepal. However, Tax deduction at source shall be applied as per taxation laws of Nepal.

16.2 For goods supplied from within the Nepal, the Supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted Goods to the Purchaser. Tax deduction at source shall be applied as per taxation law of Nepal.

16.3 If any tax exemptions, reductions, allowances or privileges may be available to the Supplier in Nepal, the Purchaser shall use its best efforts to enable the Supplier to benefit from any such tax savings to the maximum allowable extent.

17. Performance Security

17.1 The Supplier shall, within fifteen (15) days of the receipt of notification of Contract award, provide a Performance Security for the due performance of the Contract in the amounts and currencies specified in the SCC.

17.2 The proceeds of the Performance Security shall be payable to the Purchaser as compensation for any loss resulting from the Supplier's failure to complete its obligations under the Contract.

17.3 The Performance Security shall be denominated in the currencies of the Contract, or in a freely convertible currency acceptable to the Purchaser, and shall be in one of the forms stipulated by the Purchaser in the SCC, or in another form acceptable to the Purchaser.

17.4 The Performance Security shall be discharged by the Purchaser and returned to the Supplier not later than thirty (30) days following the date of completion of the Supplier's performance obligations under the Contract, including any warranty obligations.

18. Copy right

18.1 The copyright in all drawings, documents, and other materials containing data and information furnished to the Purchaser by the Supplier herein shall remain vested in the Supplier, or, if they are furnished to the Purchaser directly or through the Supplier by any third party, including suppliers of materials, the copyright in such materials shall remain vested in such third party.

19. Confidential

19.1 The Purchaser and the Supplier shall keep confidential and shall not, without the written consent of the other party hereto,

Information

divulge to any third party any documents, data, or other information furnished directly or indirectly by the other party hereto in connection with the Contract, whether such information has been furnished prior to, during or following completion or termination of the Contract. Notwithstanding the above, the Supplier may furnish to its Subcontractor such documents, data, and other information it receives from the Purchaser to the extent required for the Subcontractor to perform its work under the Contract, in which event the Supplier shall obtain from such Subcontractor an undertaking of confidentiality similar to that imposed on the Supplier under GCC Clause 19.

19.2 The Purchaser shall not use such documents, data, and other information received from the Supplier for any purposes unrelated to the Contract. Similarly, the Supplier shall not use such documents, data, and other information received from the Purchaser for any purpose other than the design, procurement, or other work and services required for the performance of the Contract.

19.3 The obligation of a party under GCC Sub-Clauses 19.1 and 19.2 above, however, shall not apply to information that:

(a) the Purchaser or Supplier need to share with the Donor or other institutions participating in the financing of the Contract;

(b) now or hereafter enters the public domain through no fault of that party;

(c) can be proven to have been possessed by that party at the time of disclosure and which was not previously obtained, directly or indirectly, from the other party; or

(d) otherwise lawfully becomes available to that party from a third party that has no obligation of confidentiality.

19.4 The above provisions of GCC Clause 19 shall not in any way modify any undertaking of confidentiality given by either of the parties hereto prior to the date of the Contract in respect of the Supply or any part thereof.

19.5 The provisions of GCC Clause 19 shall survive completion or termination, for whatever reason, of the Contract.

20. Sub-contracting

20.1 The Supplier shall notify the Purchaser in writing of all subcontracts awarded under the Contract if not already specified in the Bid. Subcontracting shall in no event relieve the Supplier from any of its obligations, duties, responsibilities, or liability under the Contract.

20.2 Subcontracts shall comply with the provisions of GCC Clauses 3.

21. Specifications and Standards

21.1 Technical Specifications and Drawings

(a) The Supplier shall ensure that the Goods and Related Services comply with the technical specifications and other provisions of the Contract.

(b) The Supplier shall be entitled to disclaim responsibility for any design, data, drawing, specification or other document, or any modification thereof provided or designed by or on behalf of the Purchaser, by giving a notice of such disclaimer to the Purchaser.

(c) The Goods and Related Services supplied under this Contract shall conform to the standards mentioned in Section V, Schedule of Supply and, when no applicable standard is mentioned, the standard shall be equivalent or superior to the official standards whose application is appropriate to the country of origin of the Goods.

21.2 Wherever references are made in the Contract to codes and standards in accordance with which it shall be executed, the edition or the revised version of such codes and standards shall be those specified in the Section V, Schedule of Supply. During Contract execution, any changes in any such codes and standards shall be applied only after approval by the Purchaser and shall be treated in accordance with GCC Clause 32.

22. Packing and Documents

22.1 The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the Contract. During transit, the packing shall be sufficient to withstand, without limitation, rough handling and exposure to extreme temperatures, salt and precipitation, and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the final destination of the Goods and the absence of heavy handling facilities at all points in transit.

22.2 The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract, including additional requirements, if any, specified in the SCC, and in any other instructions ordered by the Purchaser.

23. Insurance

23.1 Unless otherwise specified in the SCC, the Goods supplied under the Contract shall be fully insured, in a freely convertible currency from an eligible country, against loss or damage incidental to manufacture or acquisition, transportation, storage, and delivery, in accordance with the applicable Incoterms or in the manner **specified in the SCC**.

24. Transportation

24.1 Unless otherwise specified in the SCC, obligations for transportation of the Goods shall be in accordance with the

Incoterms specified in Sections V, Schedule of Supply.

25. Inspections and Tests

25.1 The Supplier shall at its own expense and at no cost to the Purchaser carry out all such tests and/or inspections of the Goods and Related Services as are specified in Sections V, Schedule of Supply.

25.2 The inspections and tests may be conducted on the premises of the Supplier or its Subcontractor, at point of delivery, and/or at the final destination of the Goods, or in another place in Nepal as **specified in the SCC**. Subject to GCC Sub-Clause 25.3, if conducted on the premises of the Supplier or its Subcontractor, all reasonable facilities and assistance, including access to drawings and production data, shall be furnished to the inspectors at no charge to the Purchaser.

25.3 The Purchaser or its designated representative shall be entitled to attend the tests and/or inspections referred to in GCC Sub-Clause **25.2**, provided that the Purchaser bear all of its own costs and expenses incurred in connection with such attendance including, but not limited to, all traveling and board and lodging expenses.

25.4 Whenever the Supplier is ready to carry out any such test and inspection, it shall give a reasonable advance notice, including the place and time, to the Purchaser. The Supplier shall obtain from any relevant third party or manufacturer any necessary permission or consent to enable the Purchaser or its designated representative to attend the test and/or inspection.

25.5 The Purchaser may require the Supplier to carry out any test and/or inspection not required by the Contract but deemed necessary to verify that the characteristics and performance of the Goods comply with the technical specifications, codes and standards under the Contract, provided that the Supplier's reasonable costs and expenses incurred in the carrying out of such test and/or inspection shall be added to the Contract Price. Further, if such test and/or inspection impedes the progress of manufacturing and/or the Supplier's performance of its other obligations under the Contract, due allowance will be made in respect of the Delivery Dates and Completion Dates and the other obligations so affected.

25.6 The Supplier shall provide the Purchaser with a report of the results of any such test and/or inspection.

25.7 The Purchaser may reject any Goods or any part thereof that fail to pass any test and/or inspection or do not conform to the specifications. The Supplier shall either rectify or replace such rejected Goods or parts thereof or make alterations necessary to meet the specifications at no cost to the Purchaser, and shall

repeat the test and/or inspection, at no cost to the Purchaser, upon giving a notice pursuant to GCC Sub-Clause **25.4**.

25.8 The Supplier agrees that neither the execution of a test and/or inspection of the Goods or any part thereof, nor the attendance by the Purchaser or its representative, nor the issue of any report pursuant to GCC Sub-Clause **25.6**, shall release the Supplier from any warranties or other obligations under the Contract.

26. Liquidated Damages

26.1 Except as provided under GCC Clause **31**, if the Supplier fails to deliver any or all of the Goods or perform the Related Services within the period specified in the Contract, the Purchaser may without prejudice to all its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to the percentage specified in the SCC of the Contract Price for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of the percentage specified in the SCC. Once the maximum is reached, the Purchaser may terminate the Contract pursuant to GCC Clause **34.**

27. Warranty

27.1 The Supplier warrants that all the Goods are new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided otherwise in the Contract.

27.2 Subject to GCC Sub-Clause **21.1,** the Supplier further warrants that the Goods shall be free from defects arising from any act or omission of the Supplier or arising from design, materials, and workmanship, under normal use in the conditions prevailing in the country of final destination.

27.3 Unless otherwise specified in the SCC, the warranty shall remain valid for twelve (12) months after the Goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the SCC, or for eighteen (18) months after the date of shipment or loading in the country of origin, whichever period concludes earlier.

27.4 The Purchaser shall give Notice to the Supplier stating the nature of any such defects together with all available evidence thereof, promptly following the discovery thereof. The Purchaser shall afford all reasonable opportunity for the Supplier to inspect such defects.

27.5 Upon receipt of such Notice, the Supplier shall, within the period specified in the SCC, expeditiously repair or replace the defective Goods or parts thereof, at no cost to the Purchaser.

27.6 If having been notified, the Supplier fails to remedy the defect within the period specified in the SCC, the Purchaser may proceed to take within a reasonable period such remedial action

as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Purchaser may have against the Supplier under the Contract.

28. Patent Indemnity

28.1 The Supplier shall, subject to the Purchaser's compliance with GCC Sub-Clause 28.2, indemnify and hold harmless the Purchaser and its employees and officers from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of any nature, including attorney's fees and expenses, which the Purchaser may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright, or other intellectual property right registered or otherwise existing at the date of the Contract by reason of:

(a) the installation of the Goods by the Supplier or the use of the Goods in the country where the Site is located; and

(b) the sale in any country of the products produced by the Goods.

Such indemnity shall not cover any use of the Goods or any part thereof other than for the purpose indicated by or to be reasonably inferred from the Contract, neither any infringement resulting from the use of the Goods or any part thereof, or any products produced thereby in association or combination with any other equipment, plant, or materials not supplied by the Supplier, pursuant to the Contract.

28.2 If any proceedings are brought or any claim is made against the Purchaser arising out of the matters referred to in GCC Sub-Clause 28.1, the Purchaser shall promptly give the Supplier a notice thereof, and the Supplier may at its own expense and in the Purchaser's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim.

28.3 If the Supplier fails to notify the Purchaser within thirty (30) days after receipt of such notice that it intends to conduct any such proceedings or claim, then the Purchaser shall be free to conduct the same on its own behalf.

28.4 The Purchaser shall, at the Supplier's request, afford all available assistance to the Supplier in conducting such proceedings or claim, and shall be reimbursed by the Supplier for all reasonable expenses incurred in so doing.

28.5 The Purchaser shall indemnify and hold harmless the Supplier and its employees, officers, and Subcontractors from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of any

nature, including attorney's fees and expenses, which the Supplier may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright, or other intellectual property right registered or otherwise existing at the date of the Contract arising out of or in connection with any design, data, drawing, specification, or other documents or materials provided or designed by or on behalf of the Purchaser.

29. Limitation of Liability

29.1 Except in cases of gross negligence or willful misconduct :

(a) neither party shall be liable to the other party for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the Supplier to pay liquidated damages to the Purchaser; and

(b) the aggregate liability of the Supplier to the Purchaser, whether under the Contract, in tort, or otherwise, shall not exceed the total Contract Price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment, or to any obligation of the Supplier to indemnify the Purchaser with respect to patent infringement.

30. Change in Laws and Regulations

30.1 Unless otherwise specified in the Contract, if after the date of the Invitation for Bids, any law, regulation, ordinance, order or bylaw having the force of law is enacted, promulgated, abrogated, or changed in the place of Nepal where the Site is located (which shall be deemed to include any change in interpretation or application by the competent authorities) that subsequently affects the Delivery Date and/or the Contract Price, then such Delivery Date and/or Contract Price shall be correspondingly increased or decreased, to the extent that the Supplier has thereby been affected in the performance of any of its obligations under the Contract. Notwithstanding the foregoing, such additional or reduced cost shall not be separately paid or credited if the same has already been accounted for in the price adjustment provisions where applicable, in accordance with GCC Clause 14.

31. Force Majeure

31.1 The Supplier shall not be liable for forfeiture of its Performance Security, liquidated damages, or termination for default if and to the extent that its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

31.2 For purposes of this Clause, "Force Majeure" means an event or situation beyond the control of the Supplier that is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of the Supplier. Such events may include, but not be limited to, acts of the Purchaser in its sovereign capacity, wars or revolutions, fires, floods,

epidemics, quarantine restrictions, and freight embargoes.

31.3 If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

32. Change Orders and Contract Amendments

32.1 The Purchaser may at any time order the Supplier through Notice in accordance GCC Clause 7, to make changes within the general scope of the Contract in any one or more of the following:

(a) drawings, designs, or specifications, where Goods to be furnished under the Contract are to be specifically manufactured for the Purchaser;

(b) the method of shipment or packing;

(c) the place of delivery; and

(d) the Related Services to be provided by the Supplier.

32.2 If any such change causes an increase or decrease in the cost of, or the time required for, the Supplier's performance of any provisions under the Contract, an equitable adjustment shall be made in the Contract Price or in the Delivery and Completion Schedule, or both, and the Contract shall accordingly be amended. Any claims by the Supplier for adjustment under this Clause must be asserted within thirty (30) days from the date of the Supplier's receipt of the Purchaser's change order.

32.3 Prices to be charged by the Supplier for any Related Services that might be needed but which were not included in the Contract shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the Supplier for similar services.

33. Extensions of Time

33.1 If at any time during performance of the Contract, the Supplier or its Subcontractors should encounter conditions impeding timely delivery of the Goods or completion of Related Services pursuant to GCC Clause 11, the Supplier shall promptly and at least seven (7) days before the expiry of procurement contract, notify the Purchaser in writing of the delay, its likely duration, and its cause. As soon as practicable after receipt of the Supplier's notice, the Purchaser shall evaluate the situation and may at its discretion extend the Supplier's time for performance, in which case the extension shall be ratified by the parties by amendment of the Contract.

Except in case of Force Majeure, as provided under GCC Clause **31**, a delay by the Supplier in the performance of its Delivery and Completion obligations shall render the Supplier liable to the imposition of liquidated damages pursuant to GCC Clause **26**, unless an extension of time is agreed upon, pursuant to GCC Sub-Clause **33.1.**

34. Termination

34.1 Termination for Default

(a) The Purchaser, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the Supplier, may terminate the Contract in whole or in part:

(i) if the Supplier fails to deliver any or all of the Goods within the period specified in the Contract, or within any extension thereof granted by the Purchaser pursuant to GCC Clause 33;

(ii) if the Supplier fails to perform any other obligation under the Contract; or

(iii) if the Supplier, in the judgment of the Purchaser has engaged in fraud and corruption, as defined in GCC Clause 3, in competing for or in executing the Contract.

(b) In the event the Purchaser terminates the Contract in whole or in part, pursuant to GCC Clause 34.1(a), the Purchaser may procure, upon such terms and in such manner as it deems appropriate, Goods or Related Services similar to those undelivered or not performed, and the Supplier shall be liable to the Purchaser for any additional costs for such similar Goods or Related Services. However, the Supplier shall continue performance of the Contract to the extent not terminated.

34.2 Termination for Insolvency.

(a) The Purchaser may at any time terminate the Contract by giving notice to the Supplier if the Supplier becomes bankrupt or otherwise insolvent. In such event, termination will be without compensation to the Supplier, provided that such termination will not prejudice or affect any right of action or remedy that has accrued or will accrue thereafter to the Purchaser

34.3 Termination for Convenience.

(a) The Purchaser, by notice sent to the Supplier, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Purchaser's convenience, the

extent to which performance of the Supplier under the Contract is terminated, and the date upon which such termination becomes effective.

(b) The Goods that are complete and ready for shipment within twenty-eight (28) days after the Supplier's receipt of notice of termination shall be accepted by the Purchaser at the Contract terms and prices. For the remaining Goods, the Purchaser may elect:

(i) to have any portion completed and delivered at the Contract terms and prices; and/or

(ii) to cancel the remainder and pay to the Supplier an agreed amount for partially completed Goods and Related Services and for materials and parts previously procured by the Supplier.

35. Assignment

35.1 Neither the Purchaser nor the Supplier shall assign, in whole or in part, their obligations under this Contract, except with prior written consent of the other party.

Section VII. Special Conditions of Contract

Section VII. Special Conditions of Contract

The following Special Conditions of Contract (SCC) shall supplement the General Conditions of Contract (GCC). Whenever there is a conflict, the provisions herein shall prevail over those in the GCC.

GCC 1.1(k)	The Purchaser is: **Kathmandu regional Office , Nepal Electricity Authority (NEA)**
GCC 1.1 (p)	The Site is: As mentioned in schedule of supply in section V**.**
GCC 4.2 (b)	The version of Incoterms shall be: 2010
GCC 5.1	The language shall be: English
GCC 6.1	The individuals or firms in a joint venture, consortium or association **shall** be jointly and severally liable.
GCC 7.1	For **notices**, the Purchaser's address shall be: Name and Address of the Purchaser: Attention: **The Director** Name of the Purchaser: **Kathmandu regional Office , Nepal Electricity Authority** Address: **Durbar Marg, Kathmandu** Country: **Nepal** Telephone: **+ 977 (01) 4153156** Facsimile Number: **+ 977 (01) 4153223**
GCC 8.1	The governing law shall be the law of: Nepal

GCC 9.2	The formal mechanism for the resolution of disputes shall be: If the dispute is not settled amicably or no attempt is made to settle the dispute amicably within 30 days of mutual consultation as per GCC 9.2 then within 15 days the dispute shall be referred to an Adjudicator if the Contract amount does not exceed NRs.100.00 million. If the Contract amount exceeds NRs.100.00million then the dispute shall be referred to a three member Dispute Resolution Committee (DRB). The appointing authority for the Adjudicator shall be Nepal Council for Arbitration (NEPCA). In case of DRB , each Party shall nominate one member for the approval of the other Party. The first two members shall recommend and the Parties shall agree upon the third member, who shall act as chairman of the DRB. The terms of the remuneration of either the Adjudicator or each of the threemembers, including the remuneration of any expert whom the Adjudicator or DB may consult, shall be mutually agreed upon by the Parties when agreeing the terms of appointment and each party shall be responsible for paying one-half of this remuneration and associated costs. Within 30 days after receiving dispute reference, or within such other period as may be proposed by the Adjudicator or DB and approved by both Parties, the Adjudicator or DB shall give its decision, with reasons.The decision shall be binding on both Parties, who shall promptly give effect to it unless and until it shall be revised in an amicable settlement or an arbitral award as described below. If either Party is dissatisfied with the Adjudicator or the DB's decision, then either Party may, within 30 days after receiving the decision, give notice to the other Party of its dissatisfaction and intention to commence arbitration. The Arbitration proceedings shall be as follows: **In case of dispute between the Purchaser and the Supplier who is national of Nepal, the dispute shall be referred to arbitration in accordance with the rules of Nepal Council of Arbitration or,** "In the case of a dispute between the Purchaser and the Foreign Supplier, the dispute shall be settled by arbitration in accordance with the provisions of the United Nations Commission on International Trade Law (UNCITRAL) Arbitration Rules.
GCC 10.1	The Scope of Supply shall be defined in: Section V, Schedule of Supply. At the time of awarding the Contract, the Purchaser shall specify any change in the Scope of Supply with respect to Section V, Schedule of Supply included in the Bidding Document. Such changes may be due, for instance, if the quantities of Goods and Related Services are increased or decreased at the time of award.

GCC 11.1	Details of shipping and documents to be furnished by the Supplier shall be: **"For Goods supplied from abroad as per Incoterms CIP:** Upon shipment, the Supplier shall notify the Purchaser and the Insurance Company by telex or fax the full details of the shipment, including Contract number, description of Goods, quantity, the vessel, the bill of lading number and date, port of loading, date of shipment, port of discharge, etc. The Supplier shall send the following documents to the Purchaser, with a copy to the Insurance Company: a) Copies of the Supplier's invoice showing the description of the Goods, quantity, unit price, and total amount; b) original and copies of the negotiable, clean, on-board bill of lading marked "freight prepaid" and copies of non-negotiable bill of lading; c) copies of the packing list identifying contents of each package; d) insurance certificate; e) Manufacturer's or Supplier's warranty certificate; f) inspection certificate, issued by the nominated inspection agency, and the Supplier's factory inspection report; and g) Certificate of origin. The Purchaser shall receive the above documents at least one week before arrival of the Goods at the port or place of arrival and, if not received, the Supplier will be responsible for any consequent expenses. **For Goods from within the Purchaser's country as per Incoterm EXW:** Upon delivery of the Goods to the transporter, the Supplier shall **notify** the Purchaser and send the following documents to the Purchaser: **a)** copies of the Supplier's invoice showing the description of the Goods, quantity, unit price, and total amount; **b)** delivery note, airway, railway receipt, or truck receipt; **c)** Manufacturer's or Supplier's warranty certificate; **d)** inspection certificate issued by the nominated inspection agency, and the Supplier's factory inspection report; and **e)** Certificate of origin. **[***The Purchaser, shall receive the above documents before the arrival of the Goods and, if not received, the Supplier will be responsible for any consequent expenses.]*

GCC 15.1	The terms of payment to be made to the Supplier under the contract shall be as follows: **The payment shall be made:** **(a)** through an irrevocable letter of credit opened in favour of the Supplier (LC confirmation charges and charges outside Nepal shall be borne by Supplier), or **(b)** through direct payment to the Supplier as per Clause of Payment under Local Currency portion. The method and conditions of payment to be made to the Supplier under this Contract shall be as follows: **<u>Payment for Goods supplied from abroad:</u>** Payment of shall be made in currency of the Contract Price in the following manner: **(i) Advance Payment: Ten** (10) percent of the Contract Price shall be paid within thirty (30) days of signing of the Contract, and upon submission of claim and a bank guarantee for equivalent amount valid until the Goods are delivered and in the form provided in the bidding documents or another form acceptable to the Purchaser. However, the advance payment shall be made only after establishment of L/C. Should the supplier fails to claim the advance payment amount within 15 days of signing of contract, the 10% of contract value will be paid after all the goods are delivered to and accepted by the Purchaser. In case, the Supplier fails to submit the Advance Payment Guarantee within 15 days of signing of Contract or does not require Advance Payment, the Contract shall be effective 15 days after the signing of Contract. **(ii) On Shipment:** Fifty Five (55) percent of the Contract Price of the Goods shipped shall be paid through irrevocable confirmed letter of credit opened in favor of the Supplier in a bank in its country, upon submission of following documents: a) Three copies of the Supplier's invoice showing the description of the Goods, quantity, unit price, and total amount; b) original and two copies of the negotiable, clean, on-board bill of lading marked "freight prepaid" and three copies of non-negotiable bill of lading; c) Three copies of the packing list identifying contents of each package;

d) insurance certificate;

e) Manufacturer's or Supplier's warranty certificate;

f) inspection certificate, issued by the nominated inspectors / inspection agency, and the Supplier's factory inspection report; and

g) certificate of origin.

(iii) On Acceptance: Thirty (30) percent of the Contract Price of Goods received shall be paid within thirty (30) days of receipt of the Goods upon submission of claim supported by the pre dispatch inspection test report & acceptance test report issued by the Purchaser.

Acceptance certificate shall be issued after carrying out physical verification and available tests on 2% of delivered goods at Central Store, Hetauda in presence of authorized representative of the Supplier and shall be subject to the goods are found in compliance with the technical specification of Contract to the inspectors satisfaction.

(iv) Five (5) percent will be withheld as retention which will be paid after the warranty period and upon submission of tax clearance certificate.

(v) The Tax Deduction at Source (TDS) shall be applicable on payments as per prevailing rules in Nepal.

Payment for Goods and Services supplied from within the Purchaser's country:

Payment for goods and Services supplied from within the Purchaser's country shall be made in currency of the Contract Price currency, as follows:

(i) Advance Payment: Ten (10) percent of the Contract Price shall be paid within thirty (30) days of signing of the Contract, and upon submission of claim and a bank guarantee for equivalent amount valid until the Goods are delivered and in the form provided in the bidding documents or another form acceptable to the Purchaser. Should the supplier fails to claim the advance payment amount within 15 days of signing of contract, the 10% of contract value will be paid after all the goods are delivered to and accepted by the Purchaser.

In case, the Supplier fails to submit the Advance Payment Guarantee within 15 days of signing of Contract or does not require Advance Payment, the Contract shall be effective 15 days after the signing of Contract.

GCC 15.1	**(ii) On Delivery:** Fifty Five (55) percent of the Contract Price shall be paid on receipt of the Goods and upon submission of the following documents: **a)** Three copies of the Supplier's invoice showing the description of the Goods, quantity, unit price, and total amount; **b)** delivery note, airway, railway receipt, or truck receipt; **c)** Manufacturer's or Supplier's warranty certificate; **d)** inspection certificate, issued by the nominated inspectors / inspection agency, and the routine test certificate issued by the Manufacturer on each unit as per IS-731; and **e)** certificate of origin. **(iii) On Acceptance:** Thirty (30) percent of the Contract Price of Goods received shall be paid within thirty (30) days of receipt of the Goods upon submission of claim supported by the pre dispatch inspection test report & acceptance test report issued by the Purchaser. Acceptance certificate shall be issued after carrying out physical verification and available tests on 2% of delivered goods at Central Store, Hetauda in presence of authorized representative of the Supplier and shall be subject to the goods are found in compliance with the technical specification of Contract to the inspectors satisfaction. **(iv)** Five (5) percent of the invoice value of the contract amount shall be withheld as retention. The retention thus held shall be paid after one year of successful delivery & acceptance of goods. **(v)** TDS shall be applicable on payments as per prevailing rules in Nepal.
GCC 15.4	**The currencies for payments shall be:** In the quoted currency/ies of Contract.
GCC 17.1	The Supplier shall provide a Performance Security of five (5) percent of the Contract Price. The Performance Security shall be denominated in the following amounts and currencies: *[*quoted currency/ies*]* The Supplier shall provide a Performance Security of five (5) percent of the Contract Price. However, if the quoted amount is more than fifteen (15) percent below than the estimated amount, an additional performance securities in amount fifty (50) percent of the excessive quoted percentage below 15% shall be added to five (5) percent.

GCC 17.3	The types of acceptable Performance Securities are: A bank guarantee issued by a reputable bank located in the Purchaser's country or abroad, acceptable to the Purchaser, in the format included in Section VIII, Contract Forms, Performance Security issued by foreign Bank must be counter – guaranteed by a "A" class commercial Bank in Nepal.
GCC 22.2	**The packing, marking, and documentation within and outside the packages shall be*:*** **<u>Packaging</u>** a. Where applicable, the Supplier shall pack and crate all equipment for sea shipment in a manner suitable for export to a tropical humid climate in accordance with internationally accepted export practices and in such a manner to protect the equipment from damage and deterioration in transit by road, rail or sea. The Supplier shall be held responsible for all damages due to improper packing. b. In accordance with good packing practices, materials shall be packed in the smallest possible containers. Interior blocking, bracing, and cushioning shall be provided where necessary to absorb shocks, prevent rattling and prevent damage from destructive forces. Packages containing fragile material shall be so marked in bold letters and shall be tropicalized. c. The use of open type crating and/or similar packing shall be restricted to materials not susceptible to pilferage or to damage by the elements of salt water. This method of packing shall not be used without obtaining the prior approval of Purchaser. d. One protected copy of packing list for each case shall be enclosed in that case. e. All items must be packaged in manufacturer's quantities, as would be delivered to a retailer and all packages of a given item shall contain the same number of pieces. Individual packages shall be sufficiently strong to withstand normal handling and storage. **<u>Marking</u>** The Supplier shall adhere to and/or require his suppliers to adhere to the following provisions for export marking: a. All external marking must be legibly and durably painted/stenciled on two (2) sides and both ends of containers in letters at least five (5) centimeters high. Under no circumstances shall chalk or crayon be used. b. Packages from each supplier must be numbered consecutively. No two (2) packages delivered shall carry the same package number.

GCC 22.2	c. Net, tare and gross weights in kilograms as well as the correct outside measurement in terms of length, width and height in the Metric system must be shown on each package. d. Marks indicating where to "SLING" will be emphasized on containers by stamping/painting an arrow on the exposed surface. e. In the event that prior approval has been obtained from Purchaser to forward pieces without packing as specified in the Clause 6.6 above, the pieces must be safely protected or bundled, using ample metal binding, and metal tags bearing the required marks must be firmly wired to each bundle in at least two (2) visible places. f. Unless otherwise specified by NEA, only the following marks shall be used on shipping containers: To: NEA_____ For _____ Package No: _____ Contract No: _____ Letter of Credit: _____ Contents (or Item): _____ Contents (or Item): _____ Gross Weight: ____Kg._____ Tare Weight: _____Kg._____ Net Weight: _____Kg._____ Dimensions-Height-Width-Depth: _____ Meters :_____ Total Cubic Meters: _____ g) Total cubic measurement of the shipment in cubic meters. h) Package number and total number of package in the shipment. i) Manufacturer's serial number/numbers of equipment in shipment, if any. j) In case of local supplier only the store the receipt advice shall be sufficient to meet all above obligation.

GCC 23.1	The insurance coverage shall be in accordance with: *The Supplier must insure the Goods in an amount equal to 110 percent of the CIP or EXW price of the Goods from "Warehouse" to "Warehouse" on "All Risks" basis, including War Risks, Arson and Strikes."*
GCC 24.1	Obligations for transportation of the Goods shall be in accordance with: The supplier is required under the contract to transport the Goods to a specified place of final destination within the purchaser's country, defined as the project site, transport to such place of destination in the Purchaser's country including insurance and storage, as shall be specified in the contract, shall be arranged by the supplier, and related costs shall be included in the contract price.
GCC 25.2	Tests and Inspections specified in Section V, Schedule of Supply, shall be carried out at the following times or milestones, and places: **Goods:** Stay sets and hardwares **Type of Test:** Routine Test as per the Specification **Time:** Before Shipment or delivery of Goods **Place:** Manufacturer's Premises **Country:** Manufacturer's Country
GCC 26.1	The applicable rate of liquidated damages shall be: 0.05 percent of the Contract Price per day.
GCC 26.1	The maximum amount of liquidated damages shall be: maximum amount for liquidated damages, i.e. ten (10) percent of the Contract Price.
GCC 27.3	The period of validity of the Warranty shall be: **12 months after the complete delivery and acceptance of goods.**
GCC 27.5	The Supplier shall correct any defects covered by the Warranty within : 60 days of being notified by the Purchaser of the occurrence of such defects

Section VIII. Contract Forms

Table of Forms

Letter of Intent **1**
Letter of Acceptance **2**
Agreement Form **3**
Performance Security **5**
Advance Payment Security **6**

Letter of Intent

[on letterhead paper of the Purchaser]

. . . . . .*[insert **date]**.*

To:. . . . . ***[insert name and address of the Contractor]***

Subject: ***Issuance of letter of intent to award the contract*** .

This is to notify you that, it is our intention to award the contract ……. [insert ***date]*** for execution of the . . . . . *[insert. **name of the contract and identification number] t***o you as your bid price . . . . . *[insert currency and .**amount in figures and words]*** as corrected and modified in accordance with the Instructions to Bidders is hereby selected as substantially responsive lowest evaluated bid.

Authorized Signature: .....

Name: .....

Title: .....

CC:

[Insert name and address of all other Bidders, who submitted the bid]

Letter of Acceptance

[on letterhead paper of the Employer]

. . . . . ***date***. . . . . .

To:. . . . . ***name and address of the Supplier*** . . . . . .

Subject: ***Notification of Award***

This is to notify that your Bid dated . . . .[insert ***date]*** for execution of the . . . . . .*[insert* ***.name of the contract and identification number]*** for the Contract price of ……..***[insert*** currency and ***amount in figures and words]***, as corrected in accordance with the Instructions to Bidders is hereby accepted in accordance with the Instruction to Bidders.

You are hereby instructed to contract this office to sign the formal contract agreement within 15 days. As per the Conditions of Contract, you are also required to submit Performance Security, as specified in SCC, consisting of a Bank Guarantee in the format included in Section VIII (Contract Forms) of the Bidding Document.

The Purchaser shall forfeit the bid security, in case you fail to furnish the Performance Security and to sign the contract within specified period.

Authorized Signature: .....

Name and Title of Signatory:

1. Contract Agreement

[The successful Bidder shall fill in this form in accordance with the instructions indicated]

THIS CONTRACT AGREEMENT is made

the *[insert:* ***number*** *]* day of *[insert:* ***month*** *]*, *[insert:* ***year*** *]*.

BETWEEN

(1) *[insert complete name of Purchaser]*, a *[insert description of type of legal entity, for example, an agency of the Ministry of .... of the Government of { insert name of Country of Purchaser }, or corporation incorporated under the laws of { insert name of Country of Purchaser }]* and having its principal place of business at *[insert address of Purchaser]* (hereinafter called "the Purchaser"), and

(2) *[insert name of Supplier]*, a corporation incorporated under the laws of *[insert: country of Supplier]* and having its principal place of business at *[insert: address of Supplier]* (hereinafter called "the Supplier").

WHEREAS the Purchaser invited bids for certain Goods and ancillary services, viz., *[insert brief description of Goods and Services]* and has accepted a Bid by the Supplier for the supply of those Goods and Services in the sum of *[insert Contract Price in words and figures, expressed in the Contract currency(ies)]* (hereinafter called "the Contract Price").

NOW THIS AGREEMENT WITNESSETH 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 referred to.

2. The following documents shall constitute the Contract between the Purchaser and the Supplier, and each shall be read and construed as an integral part of the Contract:

   (a) This Contract Agreement

   (b) Special Conditions of Contract

   (c) General Conditions of Contract

   (d) Technical Requirements (including Schedule of Requirements and Technical Specifications)

   (e) The Supplier's Bid and original Price Schedules

   (f) The Purchaser's Notification of Award

   (g) *[Add here any other document(s)]*

   This Contract shall prevail over all other Contract documents. In the event of any discrepancy or inconsistency within the Contract documents, then the documents shall prevail in the order listed above.

3. In consideration of the payments to be made by the Purchaser to the Supplier as indicated in this Agreement, the Supplier hereby covenants with the Purchaser to provide the Goods and Related Services and to remedy defects therein in conformity in all respects with the provisions of the Contract.
4. The Purchaser hereby covenants to pay the Supplier in consideration of the provision of the Goods and Related Services and the remedying of defects therein, 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 hereto have caused this Agreement to be executed in accordance with the laws of **"Nepal"** on the day, month, and year indicated above.

Signed by [**insert authorized signature for the Purchaser**] (for the Purchaser)

Signed by [**insert authorized signature for the Supplier**] (for the Supplier)

Performance Security

[**insert complete name and number of Contract**]

To: [**insert complete name of Purchaser**]

WHEREAS [**insert complete name of Supplier**] (hereinafter "the Supplier") has received the notification of award for the execution of **[insert identification number and name of contract]** (hereinafter "the Contract").] (hereinafter "the Contract").

AND WHEREAS it has been stipulated by you in the aforementioned notification of award that the Supplier shall furnish you with a security [**insert type of security**] issued by a reputable guarantor for the sum specified therein as security for compliance with the Supplier's performance obligations in accordance with the Contract.

AND WHEREAS the undersigned [**insert complete name of Guarantor**], legally domiciled in [**insert complete address of Guarantor**], (hereinafter the "Guarantor"), have agreed to give the Supplier a security:

THEREFORE WE hereby affirm that we are Guarantors and responsible to you, on behalf of the Supplier, up to a total of [**insert currency or currencies and amount of guarantee in words and figures**] and we undertake to pay you, upon your first written demand declaring the Supplier to be in default under the Contract, without cavil or argument, any sum or sums within the limits of [**insert currency and amount of guarantee in words and figures**] as aforesaid, without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

This security is valid until the [**insert day, month, year**].

Name: [**insert complete name of person signing the Security**]

In the capacity of: [**insert legal capacity of person signing the Security**]

Signed: [**insert signature of person whose name and capacity are shown above**]

Duly authorized to sign the security for and on behalf of: **[insert seal and complete name of Guarantor]**

Date: [**insert date of signing**]

Advance Payment Security

[**insert complete name and number of Contract**]

To: [**insert complete name of Purchaser**]

In accordance with the payment provision included in the Contract, in relation to advance payments, [**insert complete name of Supplier**] (hereinafter called "the Supplier") shall deposit with the Purchaser a security consisting of [**indicate type of security**], to guarantee its proper and faithful performance of the obligations imposed by said Clause of the Contract, in the amount of [**insert currency and amount of guarantee in words and figures**].

We, the undersigned [**insert complete name of Guarantor**], legally domiciled in [**insert full address of Guarantor**] (hereinafter "the Guarantor"), as instructed by the Supplier, agree unconditionally and irrevocably to guarantee as primary obligator and not as surety merely, the payment to the Purchaser on its first demand without whatsoever right of objection on our part and without its first claim to the Supplier, in the amount not exceeding [**insert currency and amount of guarantee in words and figures**].

This security shall remain valid and in full effect from the date of the advance payment being received by the Supplier under the Contract until **(insert day, month**, **year). [Contract completion date may be a basis for this date**]

Name: [**insert complete name of person signing the Security**]

In the capacity of: [**insert legal capacity of person signing the Security**]

Signed: [**insert signature of person whose name and capacity are shown above**]

Duly authorized to sign the security for and on behalf of: **[insert seal and complete name of Guarantor]**

Date: [**insert date of signing**]

S.P. 13.0 STAY SET

1. **Scope**

This Specification covers the fabrication and supply of adjustable threaded, galvanized steel stay sets for use in overhead line construction.

2. **Material**

2.1 The stay set shall consist of mild steel, galvanized stay rod, stay tightener (turn buckle) or adjustable head, eyebolt for Steel Tubular pole or two-way clamp and twisted double-eye for steel tubular pole, thimbles complete with stay plate as shown in the conceptual drawings Dwg. CSG17.

2.2 The manufacturer of the Stay Set must have been accredited with ISO 9001 or ISO 9002 quality certification.

2.3 The stay rod and stay tightener shall be made of mild steel of minimum ultimate tensile strength of 4200-kg/sq. cm.

2.4 The stay plate shall be square type mild steel plate.

2.5 The thimbles shall be made of 1.219mm (18 SWG) GI sheet.

3. **Description**

3.1 Conceptual drawings of stay set and its associate hardware are given in Dwg. CSG17, and technical features and dimensions in Table 1.

3.2 The stay rod is either thimble-eye type or twin-eye type. The stay rod and suitable nut shall be fabricated to the shape and dimensions shown in Dwg. CSG17. The thimble-eye or twin-eye of the stay rod shall be made by drop forged processing. The thread form at the threaded end of the rod, and that of the accompanying nut, shall be optional with the supplier. However, it shall be the responsibility of the Supplier to supply the stay rod with a thread form that shall sustain the rated loads specified in Table 1 without creep or stripping over the full life of the rod material at specified diameter.

3.3 The stay tightener shall be fabricated in accordance with the conceptual drawing shown in Dwg. CSG17.

3.4 The eyebolt shall be oval-eye type. The eyebolt shall be made by drop-forged processing. The eyebolt shall be supplied with suitable nut and washer.

3.5 The two-way clamp required for mounting stay set (stay tightnener) in steel tubular pole shall be made of hot-rolled steel flat. The clamp shall be two halve type and shall be provided with two numbers of nuts and bolts, diameter not less than 19 mm. The both

ways of the clamp shall be suitable for accommodating two numbers of twisted double-eye fittings described in Clause 3.5 below. The two-way clamp shall be following types:

a) Type A: Suitable for pole diameter ranging from 180-230 mm.
b) Type B: Suitable for pole diameter ranging from 140-180 mm.

3.6 The twisted double eye shall be made by drop-forged processing. The twisted double-eye shall be twisted in 90^0. The diameter of the steel shall not be less than 16 mm., and eye of the twisted-eye shall be suitable for accommodating sty tightener.

3.7 The Stay plate shall be square and the plate shall have a matching hole at the center to fit the end of the stay rod.

3.8 The thimble shall be suitable for terminating steel stay wire with a preformed grip.

3.9 After galvanizing, the nut and rod threading shall be such that the nut may be run the full length of the thread without the use of tools.

4. Galvanizing

4.1 All ferrous parts of the stay set shall be galvanized after fabrication in accordance with IS: 2629-1985or the latest version thereof or any other national or international standards that ensures at least equal or better quality to the standard mentioned above, will also be acceptable.

5. Tests

5.1 Apart from the tests indicated in the relevant referenced standards of steel, the stay set shall undergo following type tests:

- Visual Inspection.
- Verification of Dimensions.
- Tensile test: The stay set assemblies shall withstand a minimum tensile loads specified in Table 1.
- Bend test: The stay rod shall be bend-tested over a mandrel of 19 mm through an angle of 90 degrees at any point in the un-threaded section of the rod without fracture of the steel. Temperature of the test shall be 22.5 deg Celsius.

5.2 Routine tests shall be performed on each batch of the stay sets as per the relevant governing standards.

6. Quality Assurance Program

Along with the Bid the Bidder shall furnish quality assurance program of the manufacturer which includes the Quality System and the Quality Plans, which shall include, among others, information to meet the following requirement, failing which the Bid shall be liable for rejection.

i. The structure of the organization;
ii. The duties and responsibilities assigned to staff ensuring quality of works;
iii. The system for purchasing, taking delivery and verification of materials;
iv. The system for ensuring quality of workmanship;
v. The quality assurance arrangement shall conform to relevant requirements of ISO9001;
vi. Statement giving list of important raw materials, names of manufacturer for the raw materials, list of standards according to which the raw materials are tested, list of test normally carried out on raw materials;
vii. List of manufacturing facilities available;
viii. List of areas in manufacturing process, where stage inspections are normally carried out for quality control and details of such tests and inspections;
ix. List of testing equipment available with the manufacturer for final testing of equipment specified and the test plant limitation, if any, vis-à-vis the type, special, acceptance and routine tests specified in the relevant standards.

7. Bid Documentation

7.1 The Bidder shall provide a complete description, catalogue and two (2) clear copies of certified dimensional drawings of all the components of the stay set.

7.2 A clause-by-clause commentary on specification, specifying compliance and deviations, if any.

7.3 All data, drawings, catalogues and other technical documents shall be bound separately from the Bid documents.

TABLE 1

RATINGS AND FEATURES

	11m	8m
Length of stay rod, m.	2.44	1.8
Diameter of stay rod, mm.	19	16
Ultimate tensile strength of stay rod and tightner (min.), kg/sq. mm.	4200	4200
Minimum breaking load, kg.	10,454	7,272
Length of threaded portion, mm.	300	300
Thimble shape	Suitable for preformed for 7/8 SWG stay wire	Suitable for preformed for 7/12 SWG stay wire
Thimble section Min.), SWG	18	18
Stay plate section, mm.	600×600×6	300×300×6
Eyebolt length, mm./1	300	300
Galvanization	IS: 2629-1985	

Note:

1. For the steel tubular pole, two-way pole clamp and twisted double-eye shall be provided instead of eye-bolt.

S.P. 14.0STRANDED STAY WIRE

1. **Scope**

This Specification covers the fabrication and supply of galvanized stranded steel wire for use in overhead power line as stay wire ropes for line supports.

2. **Description**

2.1 The steel strand shall be fabricated in accordance with B.S. 183 1972/(1983) or any revision thereof or other equivalent national or international standard provided that the resulting steel stock is of equal quality and strength. The minimum tensile strength of the steel shall be 4200 kg/cm^2. The wires shall be 45-ton quality.

2.2 The steel wire strand shall have a left-hand lay. The steel wires shall have no joint throughout the whole length. Strands shall be uniform and shall have no defects such as cracks, dust encapsulation or crevices. Further details are given in Table 1 herein.

2.3 The manufacturer of the Stranded Stay Wire must have been accredited with ISO 9001 or ISO 9002 quality certification.

3. **Galvanizing**

3.1 The stranded stay wire shall be galvanized after fabrication in accordance with IS: 2629-1985 or any revision thereof or any other national or international standards that ensure at least equal or better quality to the standard mentioned above will also be acceptable.

4. **Tests**

4.1 The stranded stay wire shall undergo type and routine tests in accordance with the governing standard.

5. **Packaging**

5.1 The stranded stay wire shall be furnished in reels holding approximately 300m. Each reel shall have a weather - resistant tag securely attached showing the length, nominal diameter, number of individual wires, and grade of the strand.

6**. Quality Assurance Program**

Along with the Bid the Bidder shall furnish quality assurance program of the manufacturer which includes the Quality System and the Quality Plans, which shall include, among others, information to meet the following requirement, failing which the Bid shall be liable for rejection.

i. The structure of the organization;
ii. The duties and responsibilities assigned to staff ensuring quality of works;
iii. The system for purchasing, taking delivery and verification of materials;
iv. The system for ensuring quality of workmanship;
v. The quality assurance arrangement shall conform to relevant requirements of ISO9001;
vi. Statement giving list of important raw materials, names of manufacturer for the raw materials, list of standards according to which the raw materials are tested, list of test normally carried out on raw materials;
vii. List of manufacturing facilities available;
viii. List of areas in manufacturing process, where stage inspections are normally carried out for quality control and details of such tests and inspections;
ix. List of testing equipment available with the manufacturer for final testing of equipment specified and the test plant limitation, if any, vis-à-vis the type, special, acceptance and routine tests specified in the relevant standards.

7. Bid Documentation

7.1 The Bidder shall provide with the Bid two (2) clear copies of the governing standards for fabrication and testing of stranded stay wire and two (2) clear copies of all other relevant standards referenced therein.

7.2 The Bidder shall provide a complete description, and catalogue of stranded stay wire.

7.3 The Bidder shall provide certified type test results of insulator pins as required by governing standards.

7.4 A clause-by-clause commentary on specification, specifying compliance and deviations, if any.

7.5 All data, drawings, catalogues and other technical documents shall be bound separately from the Bid documents.

TABLE 1

RATING AND FEATURES

	11m	8m
Steel Wire Size (No. of wire/SWG)	7/12	7/8
Grade	700	700
Steel quality	45 ton	45 ton
Diameter of Wires, mm.	2.64	4.06
Minimum Weight, kg/km	300	720
Applicable Standard	B.S. 183 1972/(1983)	B.S. 183 1972/(1983)
Galvanization	IS: 2629-1985	IS: 2629-1985

S.P. 15.0 GALVANISED STEEL BOLTS, NUTS AND MISCELLANEOUS FASTENING COMPONENTS

1. **Scope**

1.1 This Specification covers the fabrication and supply of galvanized steel bolts and nuts, as specified herein, for use in overhead electric line construction.

2. **Material**

2.1 The bolts and nuts shall be manufactured and tested in accordance with IS: 1363 (Part I)-1984 or the latest version thereof or any other national or international standards that ensures at least equal or better quality to the standard mentioned above, will also be acceptable.

3. **General**

3.1 Bolts and nuts shall be furnished in the types, diameters and lengths specified in the Schedules of Rates and Prices. **However, the dimensions and length of threading of bolt must be confirmed with the Project prior to manufacture**.

3.2 Thread forms shall be consistent with all material/items listed herein and shall not strip or slip under sustained tensile loading equal to the design tensile strength of the threaded material item.

3.3 The manufacturer must have been accredited with ISO 9001:2000 with design and manufacturing quality certification.

4. **Machine Bolt and Nut**

4.1 Each machine bolt shall be furnished with two (2) hexagonal nuts and two (2) plain washers assembled thereon.

5. **Double-Arming Bolt and Nut**

5.1 Each double-arming bolt shall be furnished with four (4) hexagonal nuts and two (2) washers assembled thereon.

6. **Galvanizing**

6.1 The stranded stay wire shall be galvanized after fabrication in accordance with IS: 2629-1985 or any revision thereof or other equivalent national or international standard provided that ensure at least equal or better quality to the standard mentioned above will also be acceptable.

7. **Tests**

7.1 The bolt and nut shall undergo type and routine tests in accordance with the relevant governing standard.

8. Quality Assurance Program

Along with the Bid the Bidder shall furnish quality assurance program of the manufacturer which includes the Quality System and the Quality Plans, which shall include, among others, information to meet the following requirement, failing which the Bid shall be liable for rejection.

i. The structure of the organization;
ii. The duties and responsibilities assigned to staff ensuring quality of works;
iii. The system for purchasing, taking delivery and verification of materials;
iv. The system for ensuring quality of workmanship;
v. The quality assurance arrangement shall conform to relevant requirements of ISO9001;
vi. Statement giving list of important raw materials, names of manufacturer for the raw materials, list of standards according to which the raw materials are tested, list of test normally carried out on raw materials;
vii. List of manufacturing facilities available;
viii. List of areas in manufacturing process, where stage inspections are normally carried out for quality control and details of such tests and inspections;
ix. List of testing equipment available with the manufacturer for final testing of equipment specified and the test plant limitation, if any, vis-à-vis the type, special, acceptance and routine tests specified in the relevant standards.

9. Bid Documentation

9.1 The Bidder shall provide with the Bid two (2) clear copies of the governing standards for fabrication and testing of bolt and nut and two (2) clear copies of all other relevant standards referenced therein.

9.2 The Bidder shall provide certified type test results of bolt and nut as required by governing standards.

9.3 The Bidder shall provide catalogue and certified dimensional drawings of all types of bolt and nut.

9.4 A clause-by-clause commentary on specification, specifying compliance and deviations, if any.

9.5 All data, drawings, catalogues and other technical documents shall be bound separately from the Bid documents.

S.P. 16.0 PREFORMED WIRE PRODUCTS FOR STAY SETS

1. **Scope**

This Specification covers the fabrication and supply of wire strand grips for stay set commonly used in overhead power line construction.

2. **Description**

2.1 The design of the preformed wire products specified herein shall be appropriate for the optimum combination of conductor strand diameter, inside diameter, rod diameter, pitch diameter, number of pitch lengths, direction of lay, and raw materials of the specific application.

2.2 The manufacturer of the Preformed Wire Products must have been accredited with ISO 9001:2000 with design and manufacturing quality certification.

2.3 The preformed wire product shall be so designed to grip the designated surface evenly, with evenly-spaced gaps, and shall not bridge the gripped surface due to excessive number of strands in the grip or tie.

3. **Steel Wire Strand Grip for Stay Set**

3.1 The steel wire strand grip shall be designed for use with thimble eye or double eye stay rod and tightner fabricated in accordance SPECIFICATION: S.P.13.0, stay wire fabricated in accordance with SPECIFICATION: S.P.14.0 (B.S. 183 1972/(1983)) and stay insulator fabricated in accordance with SPECIFICATION: S.P.11.0 (IS:5300-1969).

3.2 The steel wire strand grip shall be furnished for strand size and grade in accordance with Table 2.

3.3 The steel wire strand grip shall be manufactured of a galvanized steel wire in cabled loop form with long and short legs. The grip shall have a left-hand lay. Galvanizing shall be equivalent to Class C zinc coating per ASTM A-475.

3.4 The steel wire strand grip shall be color-coded for strand size and length and shall have one (1) or two (2) crossover marks for different diameter fittings. An identification tag shall be attached showing the manufacturer's catalogue number and applicable strand size.

3. Tests

The performs shall undergo type and routine tests in accordance with the relevant governing standard.

4**. Quality Assurance Program**

Along with the Bid the Bidder shall furnish quality assurance program of the manufacturer which includes the Quality System and the Quality Plans, which shall include, among

others, information to meet the following requirement, failing which the Bid shall be liable for rejection.

i. The structure of the organization;
ii. The duties and responsibilities assigned to staff ensuring quality of works;
iii. The system for purchasing, taking delivery and verification of materials;
iv. The system for ensuring quality of workmanship;
v. The quality assurance arrangement shall conform to relevant requirements of ISO9001;
vi. Statement giving list of important raw materials, names of manufacturer for the raw materials, list of standards according to which the raw materials are tested, list of test normally carried out on raw materials;
vii. List of manufacturing facilities available;
viii. List of areas in manufacturing process, where stage inspections are normally carried out for quality control and details of such tests and inspections;
ix. List of testing equipment available with the manufacturer for final testing of equipment specified and the test plant limitation, if any, vis-à-vis the type, special, acceptance and routine tests specified in the relevant standards.

5. Bid Documentation

5.1 The Bidder shall provide with the Bid two (2) clear copies of the governing standards for fabrication and testing of preformed wire products and two (2) clear copies of all other relevant standards referenced therein.

5.2 The Bidder shall provide certified type test results of preformed wire products as required by governing standards.

5.3 The Bidder shall provide complete description, and catalogue of preformed wire products.

5.4 A clause-by-clause commentary on specification, specifying compliance and deviations, if any.

5.5 All data, drawings, catalogues and other technical documents shall be bound separately from the Bid documents.

TABLE 1

STEEL WIRE STRANDED GRIPS

Tie Application for Strand Size	**Identification Tag and Color Code**	
7/8 SWG	GS-1	Red
7/12 SWG	GS-2	Blue

Note: All designations shown are used for product identification for the purpose of this IFB.

S.P. 17.0 GROUND RODS AND CLAMPS

1. Scope

This Specification covers the fabrication and supply of galvanized steel ground rods and clamps for use in overhead power line construction.

2. Description

Ground Rod

2.1 The ground rod shall be made of high carbon, open-hearth steel so as to achieve maximum strength. It shall be hot dip galvanized.

2.2 The ground rod shall be 19mm in diameter and 4,000mm in overall length.

2.3 The driven end of the ground rod shall have a truncated cone point. The cone point shall be approximately 13mm long, measured along the axis of the ground rod. The driving head of the ground rod shall have an approximate 3 mm, 45 degrees chamfer.

2.4 The manufacturing process shall assure that ground rod does not bend when driven into hard soils.

Ground Rod Clamp

2.5 The ground rod clamp shall be heavy duty forged steel clamp provided with a hex head cup point set screw of high strength steel with machine-cut threads. It shall be so manufactured that it gives low resistance connection. The ground rod clamp shall be galvanized.

2.6 The clamp shall suitably accommodate and clamp a 19 mm. ground rod and a stranded grounding conductor of 7/12 SWG size (SPECIFICATION: S.P.18.0).

3. Galvanizing

3.1 The galvanization of ground rod and clamp shall be in accordance with IS: 2629-1985 or any revision thereof or other equivalent national or international standard provided that ensure at least equal or better quality to the standard mentioned above will also be acceptable.

4. Tests

Grounds rods and clamps shall undergo type and routine tests in accordance with the relevant governing standard.

5. Quality Assurance Program

5.1 The manufacturer must have been accredited with ISO 9001:2000 with design and manufacturing quality certification.

5.2 Along with the Bid the Bidder shall furnish quality assurance program of the manufacturer which includes the Quality System and the Quality Plans, which shall include, among others, information to meet the following requirement, failing which the Bid shall be liable for rejection.

i. The structure of the organization;
ii. The duties and responsibilities assigned to staff ensuring quality of works;
iii. The system for purchasing, taking delivery and verification of materials;
iv. The system for ensuring quality of workmanship;
v. The quality assurance arrangement shall conform to relevant requirements of ISO9001;
vi. Statement giving list of important raw materials, names of manufacturer for the raw materials, list of standards according to which the raw materials are tested, list of test normally carried out on raw materials;
vii. List of manufacturing facilities available;
viii. List of areas in manufacturing process, where stage inspections are normally carried out for quality control and details of such tests and inspections;
ix. List of testing equipment available with the manufacturer for final testing of equipment specified and the test plant limitation, if any, vis-à-vis the type, special, acceptance and routine tests specified in the relevant standards.

6. Bid Documentation

6.1 The Bidder shall provide with the Bid two (2) clear copies of the governing standards for fabrication and testing of grounding rod and clamp and two (2) clear copies of all other relevant standards referenced therein.

6.2 The Bidder shall provide certified type test results of ground rods and clamps as required by governing standards.

6.3 The Bidder shall provide catalogue and certified dimensional drawings of all types of ground rods and clamps.

6.4 A clause-by-clause commentary on specification, specifying compliance and deviations, if any.

6.5 All data, drawings, catalogues and other technical documents shall be bound separately from the Bid documents.

S.P. 18.0 GROUNDING CONDUCTOR

1. Scope

This specification covers the fabrication and supply of galvanized stranded steel grounding conductor for use in the neutral grounding of distribution transformers and body grounding of electrical equipment.

2. Description

2.1 The conductor shall be 7-wire stranded conductor and shall conform to the characteristics as specified in Table 1 contained herein. Stranded conductor shall be galvanized.

2.2 The manufacturer of ground Conductor must have been accredited with ISO 9001:2000 with design and manufacturing quality certification.

3. Galvanizing

3.1 The stranded stay wire shall be galvanized after fabrication in accordance with IS: 2629-1985 or any revision thereof or any other national or international standards that ensure at least equal or better quality to the standard mentioned above will also be acceptable.

4. Tests

The grounding conductor shall undergo type and routine tests in accordance with the relevant governing standard.

5. Quality Assurance Program

Along with the Bid the Bidder shall furnish quality assurance program of the manufacturer which includes the Quality System and the Quality Plans, which shall include, among others, information to meet the following requirement, failing which the Bid shall be liable for rejection.

i. The structure of the organization;
ii. The duties and responsibilities assigned to staff ensuring quality of works;
iii. The system for purchasing, taking delivery and verification of materials;
iv. The system for ensuring quality of workmanship;
v. The quality assurance arrangement shall conform to relevant requirements of ISO9001;
vi. Statement giving list of important raw materials, names of manufacturer for the raw materials, list of standards according to which the raw materials are tested, list of test normally carried out on raw materials;
vii. List of manufacturing facilities available;
viii. List of areas in manufacturing process, where stage inspections are normally carried out for quality control and details of such tests and inspections;

ix. List of testing equipment available with the manufacturer for final testing of equipment specified and the test plant limitation, if any, vis-à-vis the type, special, acceptance and routine tests specified in the relevant standards.

6. **Bid Documentation**

6.1 The Bidder shall provide with the Bid two (2) clear copies of the governing standards for fabrication and testing of grounding conductor and two (2) clear copies of all other relevant standards referenced therein.

6.2 The Bidder shall provide a complete description, and catalogue of grounding conductor.

6.3 The Bidder shall provide certified type test results of grounding conductor as required by governing standards.

6.4 A clause-by-clause commentary on specification, specifying compliance and deviations, if any.

6.5 All data, drawings, catalogues and other technical documents shall be bound separately from the Bid documents.

TABLE 1

GROUNDING CONDUCTOR MINIMUM REQUIREMENTS

7-No. 12 SWG	
Diameter of single strand	2.67 mm
Weight	299 kg/km
Short time fusing current	12 kA
Resistivity	15 Micro-Ohm-cm

S.P. 21.0CROSSARMS AND BRACING ANGLES

1. **Scope**

This Specification covers the fabrication and supply of galvanized steel cross-arms and bracing members commonly used in overhead power line construction.

2. **Material**

2.1 The steel cross-arms shall be fabricated from hot rolled channels and angles.

2.2 The steel channels and angles shall be fabricated and tested in accordance with Indian Standards IS: 226-1975 and IS-808-1964 or any revision thereof or other equivalent national or international standard provided that ensure at least equal or better quality to the standard mentioned above will also be acceptable. The minimum tensile strength of the steel shall be 4200 kg/cm^2.

3. **Description**

3.1 The steel cross-arms and bracing angles shall be of sizes shown in the Table 1: Cross-arms and bracing angles, contained herein.

3.2 Conceptual hole pattern and size of holes on cross-arm channels are shown in appropriate drawings herein, however, the Supplier must confirm with the Project the locations and sizes of holes prior to the manufacture.

3.3 The surface of the steel shall be flat after drilling or (punching) and free of dimpling or imperfections. The hole edges shall be broken by reaming. The holes shall be full dimension after galvanizing and no minus tolerance of specified hole size will be accepted.

3.3 The steel cross-arm and bracing angles shall be furnished reasonably smooth on all surfaces and free of burrs or sharp projections.

4. **Galvanizing**

4.1 The steel cross-arms and bracing angles shall be galvanized after fabrication in accordance with IS: 2629-1985 or any revision thereof or other equivalent national or international standard provided that ensure at least equal or better quality to the standard mentioned above will also be acceptable..

5. **Tests**

5.1 Apart from the tests indicated herein in the referenced standards, the channels and angles shall undergo following tests:

- Visual Inspection;
- Verification of Dimensions;

6. Quality Assurance Program

Along with the Bid the Bidder shall furnish quality assurance program of the manufacturer which includes the Quality System and the Quality Plans, which shall include, among others, information to meet the following requirement, failing which the Bid shall be liable for rejection.

i. The structure of the organization;
ii. The duties and responsibilities assigned to staff ensuring quality of works;
iii. The system for purchasing, taking delivery and verification of materials;
iv. The system for ensuring quality of workmanship;
v. The quality assurance arrangement shall conform to relevant requirements of ISO9001;
vi. Statement giving list of important raw materials, names of manufacturer for the raw materials, list of standards according to which the raw materials are tested, list of test normally carried out on raw materials;
vii. List of manufacturing facilities available;
viii. List of areas in manufacturing process, where stage inspections are normally carried out for quality control and details of such tests and inspections;
ix. List of testing equipment available with the manufacturer for final testing of equipment specified and the test plant limitation, if any, vis-à-vis the type, special, acceptance and routine tests specified in the relevant standards.

7. Bid Documentation

7.1 The Bidder shall provide with the Bid two (2) clear copies of the governing standards for fabrication and testing of channels and angles and two (2) clear copies of all other relevant standards referenced therein.

7.2 The Bidder shall provide a complete description, catalogue and certified dimensional drawings of all channels and angles.

7.3 A clause-by-clause commentary on specification, specifying compliance and deviations, if any.

7.4 All data, drawings, catalogues and other technical documents shall be bound separately from the Bid documents.

TABLE 1: STEEL CROSSARM CHANNELS AND ANGLE BRACES

S.NO.	***Description***	***Type***	*Dimension in mm.*	*Ref. DWG.*
1.	11 kV, Single Pole, Triangular: 1.1 Pole Top 1.2 Standard	 Channel Channel	 100×50×6.4×5×300 100×50×6.4×5×1200	 CA1 CA2
2.	11 kV, Double Pole: 4.1 Standard 4.2 Bracing Member 4.3 Bracing Member	 Channel Angle Angle	 100×50×6.4×5×2390 40×40×5×2071 40×40×5×2719	 CA3 CA4, CA5 CA4, CA5
3.	Transformer Platform Complete set	Channel Channel	100×50×6.4×5×2500 100×50×6.4×5×1200	CSLV-6A,6B,7
4.	Lightening Arrester and Cut-out Support(at Transformer Platform):5.1 Support	Channel	100×50×6.4×5×2348	CA09

S.P. 22.0 FLAT CROSSARM BRACE

1. **Scope**

This Specification covers the fabrication, testing and supply of flat, galvanized steel cross-arm braces.

2. **Material**

2.1 The flat cross-arms brace shall be fabricated out of hot rolled steel flat.

2.2 The steel flat for cross-arms brace shall be fabricated and tested in accordance with Indian Standards IS: 226-1975, and IS-1731-1971 or any revision thereof or other equivalent national or international standard provided that ensure at least equal or better quality to the standard mentioned above will also be acceptable. The minimum tensile strength of the steel shall be 4200 kg/cm^2.

3. **Description**

3.1 The brace shall be furnished reasonably smooth on all surfaces and free of burrs or sharp projections.

3.2 The surface of the steel shall be flat after drilling or (punching) and free of dimpling or imperfections. The hole edges shall be broken by reaming. The holes shall be full dimension after galvanizing and no minus tolerance of specified hole size will be accepted.

3.3 The brace shall have a minimum tensile strength of 3182 kg at the bolt-hole and bolt slot.

3.4 The brace shall be capable of being bent 10 degrees at the bolt hole or slot and 140 degrees at any point between hole and slot without cracking of the base metal on the outside of bent portion.

3.5 The brace shall be drilled and dimensioned in accordance with Dwg. CA10 attached herein.

4. **Galvanizing**

4.1 The flat cross arm brace shall be hot dipped galvanized after fabrication in accordance with IS: 2629-1985 or any revision thereof or other equivalent national or international standard provided that ensure at least equal or better quality to the standard mentioned above will also be acceptable.

5. **Tests**

5.1 Apart from the tests indicated herein in the referenced standards, the flat cross arm brace shall undergo following tests:

- Visual Inspection;
- Verification of Dimensions;

6. **Quality Assurance Program**

Along with the Bid the Bidder shall furnish quality assurance program of the manufacturer which includes the Quality System and the Quality Plans, which shall include, among others, information to meet the following requirement, failing which the Bid shall be liable for rejection.

i. The structure of the organization;
ii. The duties and responsibilities assigned to staff ensuring quality of works;
iii. The system for purchasing, taking delivery and verification of materials;
iv. The system for ensuring quality of workmanship;
v. The quality assurance arrangement shall conform to relevant requirements of ISO9001;
vi. Statement giving list of important raw materials, names of manufacturer for the raw materials, list of standards according to which the raw materials are tested, list of test normally carried out on raw materials;
vii. List of manufacturing facilities available;
viii. List of areas in manufacturing process, where stage inspections are normally carried out for quality control and details of such tests and inspections;
ix. List of testing equipment available with the manufacturer for final testing of equipment specified and the test plant limitation, if any, vis-à-vis the type, special, acceptance and routine tests specified in the relevant standards.

7. **Bid Documentation**

7.1 The Bidder shall provide with the Bid two (2) clear copies of the governing standards for fabrication and testing of flat cross arm brace and two (2) clear copies of all other relevant standards referenced therein.

7.2 The Bidder shall provide a complete description, catalogue and certified dimensional drawings of flat cross arm brace.

7.3 A clause-by-clause commentary on specification, specifying compliance and deviations, if any.

7.4 All data, drawings, catalogues and other technical documents shall be bound separately from the Bid documents.

S.P. 23.0 TRANSFORMER PLATFORMS

1. Scope

1.1 This specification covers the fabrication and supply of transformer platforms used in overhead power line construction.

2. Material

2.1 The transformer platform shall be fabricated from hot rolled channels, angles and steel members.

2.2 The steel channels and angles for transformer platform shall be fabricated in accordance with Indian Standards IS: 226-1975 and IS-808-1964 or any revision thereof or other equivalent national or international standard provided that ensure at least equal or better quality to the standard mentioned above will also be acceptable. The minimum tensile strength of the steel shall be 4200 kg/cm^2.

3. Description

3.1 The platform shall be fabricated out of galvanized steel members, field assembled by bolting.

3.2 The platform will support the transformer above the ground and will be supported by two-pole structures of steel tubular or Steel Tubular (STEEL TUBULAR) poles. Transformers will be bolted to the platform at four (4) points. Provision should be made for the mounting of transformers of different physical dimensions and ratings up to 200 kVA.

3.3 The platform shall be designed by the supplier and fabricated, in general, in accordance with the conceptual configuration shown in Dwg. CA12 and CSLV7 contained herein. The design shall provide support for a transformer of a minimum of 1500 kg in weight with a minimum safety factor of 2.0. The Platform shall be stiff and shall be capable of withstanding horizontal forces and an overturning moment due to seismic effects on a transformer with centre of gravity 0.5 meter above its base and seismic horizontal acceleration of 0.4g. The platform shall be stiff and shall not visibly deflect under static loading.

3.4 The platform shall be supplied disassembled, complete with all required members and fastenings. Packing may be made by banding structural members. Fastenings shall be separately packed. Structural members shall be clearly identified for ease of assembly in accordance with the assembly drawing furnished by the supplier.

3.5 The platform shall be suitable for fixing to support poles of 150 to 250 mm diameter in the case of poles, and to STEEL TUBULAR poles of rectangular section with 250 to 350 mm in width and 140 to 180 mm depth.

4. **Galvanizing**

4.1 All ferrous parts of transformer platform shall be galvanized after fabrication in accordance with IS: 2629-1985 or any revision thereof or other equivalent national or international standard provided that ensure at least equal or better quality to the standard mentioned above will also be acceptable.

5. **Tests**

5.1 Apart from the tests indicated herein in the referenced standards, the transformer platform shall undergo following tests:

- Visual Inspection;
- Verification of Dimensions;

6**. Quality Assurance Program**

Along with the Bid the Bidder shall furnish quality assurance program of the manufacturer which includes the Quality System and the Quality Plans, which shall include, among others, information to meet the following requirement, failing which the Bid shall be liable for rejection.

i. The structure of the organization;
ii. The duties and responsibilities assigned to staff ensuring quality of works;
iii. The system for purchasing, taking delivery and verification of materials;
iv. The system for ensuring quality of workmanship;
v. The quality assurance arrangement shall conform to relevant requirements of ISO9001;
vi. Statement giving list of important raw materials, names of manufacturer for the raw materials, list of standards according to which the raw materials are tested, list of test normally carried out on raw materials;
vii. List of manufacturing facilities available;
viii. List of areas in manufacturing process, where stage inspections are normally carried out for quality control and details of such tests and inspections;
ix. List of testing equipment available with the manufacturer for final testing of equipment specified and the test plant limitation, if any, vis-à-vis the type, special, acceptance and routine tests specified in the relevant standards.

7. **Bid Documentation**

7.1 A preliminary design of the platform shall be submitted with the Bid. Data to be supplied with the preliminary design shall be:

a) Steel classification proposed to be used and the characteristics thereof;
b) Two copies of Preliminary detail drawings of the proposed platform;
c) Data regarding:
   1) Vertical and horizontal loading on poles,
   2) Resultant safety factor,
   3) Resultant deflection,

4) Resultant percent of allowable tension, compression, and shear limits for the steel selected and associated fastening,
5) Moments on pole due to seismic effects on the platform and transformers.

7.2 A clause-by-clause commentary on specification, specifying compliance and deviations, if any.

7.3 All data, drawings, catalogues and other technical documents shall be bound separately from the Bid documents.

S.P. 24.0 POLE CLAMPS

1. **Scope**

1.1 This Specification covers the fabrication and supply of galvanized steel pole clamps with nuts, bolts and washers for use on overhead power line construction.

2. **Material**

2.1 The pole clamp shall be fabricated out of hot-rolled steel flat.

2.2 The steel flat for pole clamp shall be fabricated and tested in accordance with Indian Standards IS: 226-1975, and IS-1731-1971 or any revision thereof or other equivalent national or international standard provided that ensure at least equal or better quality to the standard mentioned above will also be acceptable. The minimum tensile strength of the steel shall be 4200 kg/cm^2.

3. **Description**

3.1 Outline details of pole clamps are shown in the drawings Dwg: CA13. Dimensions may be changed to comply with the final pole sizes selected. Therefore, the dimensions must be confirmed with the Project prior to manufacture.

3.2 Two (2) numbers of galvanized, 16 mm. (dia.) × 60mm. (length), fully threaded bolts with two (2) nuts and washers shall be provided with each pole clamp.

3.3 The fittings shall be free of burrs, splinters, splits, sharp points and edges, which may damage conductors or show evidence of poor workmanship.

3.4 The surface of the steel shall be flat after drilling or (punching) and free of dimpling or imperfections. The hole edges shall be broken by reaming. The holes shall be full dimension after galvanizing and no minus tolerance of specified hole size will be accepted.

3.5 The pole clamps shall have a minimum tensile strength of 3182 kg at the bolt-hole and bolt slot.

4. **Galvanizing**

4.1 The pole clamps and nut, bolts and washers shall be galvanized after fabrication in accordance with IS: 2629-1985 or any revision thereof or other equivalent national or international standard provided that ensure at least equal or better quality to the standard mentioned above will also be acceptable.

5. **Tests**

5.1 Apart from the tests indicated herein in the referenced standards, the pole clamps shall undergo following tests:

- Visual Inspection;
- Verification of Dimensions;

6. Quality Assurance Program

Along with the Bid the Bidder shall furnish quality assurance program of the manufacturer which includes the Quality System and the Quality Plans, which shall include, among others, information to meet the following requirement, failing which the Bid shall be liable for rejection.

i. The structure of the organization;
ii. The duties and responsibilities assigned to staff ensuring quality of works;
iii. The system for purchasing, taking delivery and verification of materials;
iv. The system for ensuring quality of workmanship;
v. The quality assurance arrangement shall conform to relevant requirements of ISO9001;
vi. Statement giving list of important raw materials, names of manufacturer for the raw materials, list of standards according to which the raw materials are tested, list of test normally carried out on raw materials;
vii. List of manufacturing facilities available;
viii. List of areas in manufacturing process, where stage inspections are normally carried out for quality control and details of such tests and inspections;
ix. List of testing equipment available with the manufacturer for final testing of equipment specified and the test plant limitation, if any, vis-à-vis the type, special, acceptance and routine tests specified in the relevant standards.

7. Bid Documentation

7.2 The Bidder shall provide a complete description, catalogue and two (2) copies of certified dimensional drawings of pole clamps.

7.3 A clause-by-clause commentary on specification, specifying compliance and deviations, if any.

7.4 All data, drawings, catalogues and other technical documents shall be bound separately from the Bid documents.

Item No. 10: Ground (Earth Rods and Clamps)

(To be completed by bidder)

	Item	Ground (Earth Rods and Clamps)	
	Description		*Unit*
1.	Manufacturer		
2.	Material Description furnished?	Yes/No	
3.	Governing Standard for manufacturing and testing		
4.	Governing Standard for galvanization		
5.	Standards attached?		Yes/No
6.	Catalogue/ dimensional drawings attached for all items?		Yes/No
7.	Dimensions (Ground Rod):		
	Length	mm.	
	Diameter	mm.	
8.	Catalogue number		
	Rod		
	Clamp		
9.	Copies of type test results attached?		Yes/No

Item No. 11: Grounding Conductor

(To be completed by bidder)

	Item	Grounding Conductor
	Description	*Unit*
1.	Manufacturer	
2.	Governing Standard for manufacturing and testing	
3.	Governing Standard for galvanization	
4.	Standards attached?	Yes/No
5.	Diameter	mm
6.	Cross Section	sq. mm
7.	Short time fusing 30 cycles	Amps
8.	Weight (Approx.)	kg/km
9.	Resistance 20 degree C (Approx.)	ohms/km

Item No. 14 :Stay Set

(To be completed by Bidder)

Item Stay Set

	Description	*Unit*	*Stay Set (19 mm.)*	*Stay Set (16 mm.)*
1.	Manufacturer			
2.	Catalog Numbers			
3.	Steel Classification			
4.	Governing Standard for galvanization			
5.	Load rating, kg.			
6.	Type tests-tensile load data attached?		Yes/No	Yes/No
7.	Type test-bend test data attached ?		Yes/No	Yes/No
8.	Dimensional drawing attached?		Yes/No	Yes/No

Item No. 15 : Steel Wire Strand

(To be completed by Bidder)

	Item		Steel Wire Strand	
	Description	*Unit*	*7/8 SWG*	*7/12 SWG*
1.	Manufacturer			
2.	Strand diameter (overall)	mm		
3.	No. of Strands			
4.	Minimum Breaking load	kg		
5.	Nominal diameter of coated wire in strand	mm		
6.	Left hand lay	Yes/No		
7.	Governing Standard for manufacturing and testing	Yes/No		
8.	Governing Standard for galvanization			
9.	Standards attached?	Yes/No		

Item No. 16 : Galvanized Steel Nuts and Bolts

(To be completed by Bidder)

Item Galvanized Steel Nuts and Bolts

	Description	*Unit*
1.	Manufacturer	
2.	Material Description furnished?	Yes/No
3.	Governing Standard for manufacturing and testing	
4.	Governing Standard for galvanization	
5.	Standards attached?	Yes/No
6.	Catalog numbers attached for all items?	Yes/No

Item No. 18 : Compression Connectors

(To be completed by Bidder)

Item Compression Connectors

	Description	*Unit*
1.	Manufacturer	
2.	Material Description furnished?	Yes/No
3.	Governing Standard for manufacturing and testing	
4.	Standards attached?	Yes/No
5.	Catalog/ dimensional drawings attached?	Yes/No

Item No. 19 : Cross-arm and angle

(To be completed by Bidder)

Item Cross-arm and angle

	Description	*Unit*
1.	Manufacturer	
2.	Steel Classification	
3.	Minimum tensile strength of steel	
4.	Is the cross arm and angles fabricated from hot-rolled steel sections?	Yes/No
5.	Governing Standard	
6.	Standard attached?	Yes/No
6.	Governing Standard for galvanizing	
7.	Drawings of cross arm and bracing?	Yes/No

Item No. 20 : Flat cross-armbrace

(To be completed by Bidder)

	Item	Flat cross-arm brace
	Description	*Unit*
1.	Manufacturer	
2.	Steel Classification	
3.	Minimum tensile strength of steel	
4.	Is the flat cross arm brace fabricated from hot-rolled steel sections?	Yes/No
5.	Governing Standard for manufacturing and testing	
6.	Governing Standard for galvanizing	
7.	Standards attached?	Yes/No
8.	Drawings of flat cross arm brace?	Yes/No

Item No. 21: Transformer Platform

(To be completed by the Bidder)

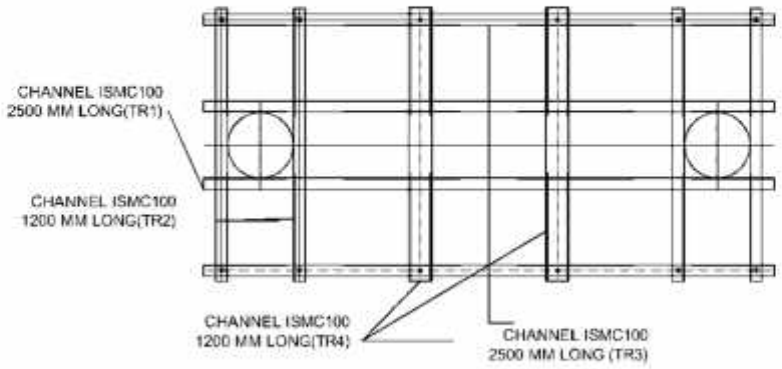
	Item	Transformer Platform
	Description	*Unit*
1.	Manufacturer	
2.	Preliminary details dwg. furnished?	Yes/No
3.	Steel Classification/ Characteristics furnished?	Yes/No
4.	Governing Standard for galvanization	
5.	Vertical Load on pole	
6.	Resultant Safety Factor	
7.	Resultant Deflection at design load	mm
8.	% of allowable tension	
9.	% of allowable compression	
10.	% of allowable shear limits	

Item No. 22: Pole Clamps

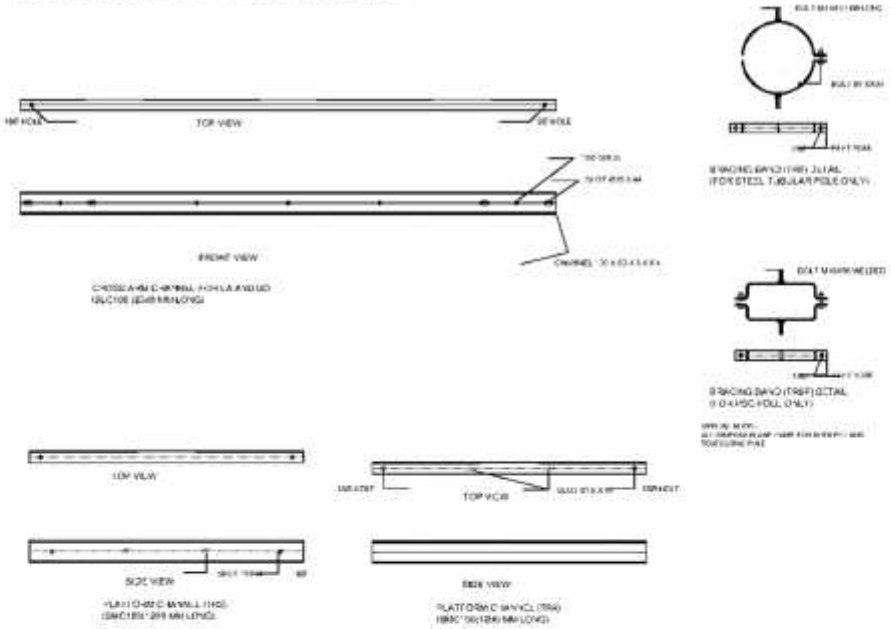
(To be completed by Bidder)

Item Pole Clamps

	Description	*Unit*
1.	Manufacturer	
2.	Steel Classification	
3.	Governing Standard for galvanization	
4.	Drawings of Pole Clamp furnished?	Yes/No

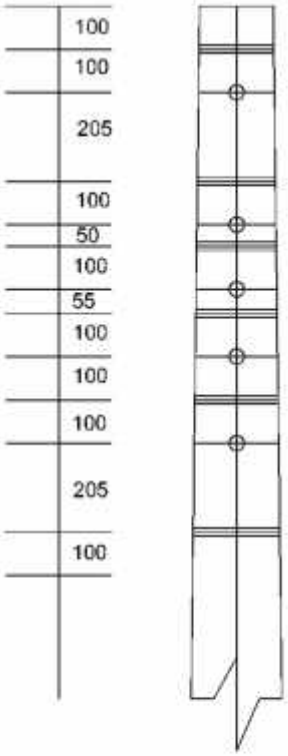


TRANSFORMER PLAT-FORM TOP VIEW

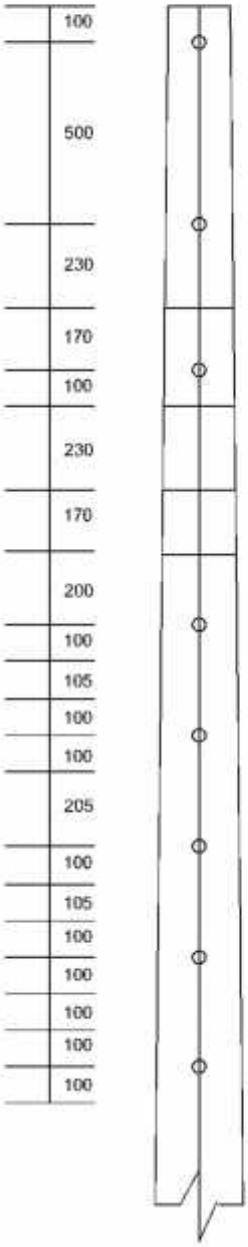


Drawing	Transformer Platform and Accessories	NEPAL ELECTRICITY AUTHORITY
CS11-TRN-05		

Steel Tubular Pole (STP)



9 Meter STP

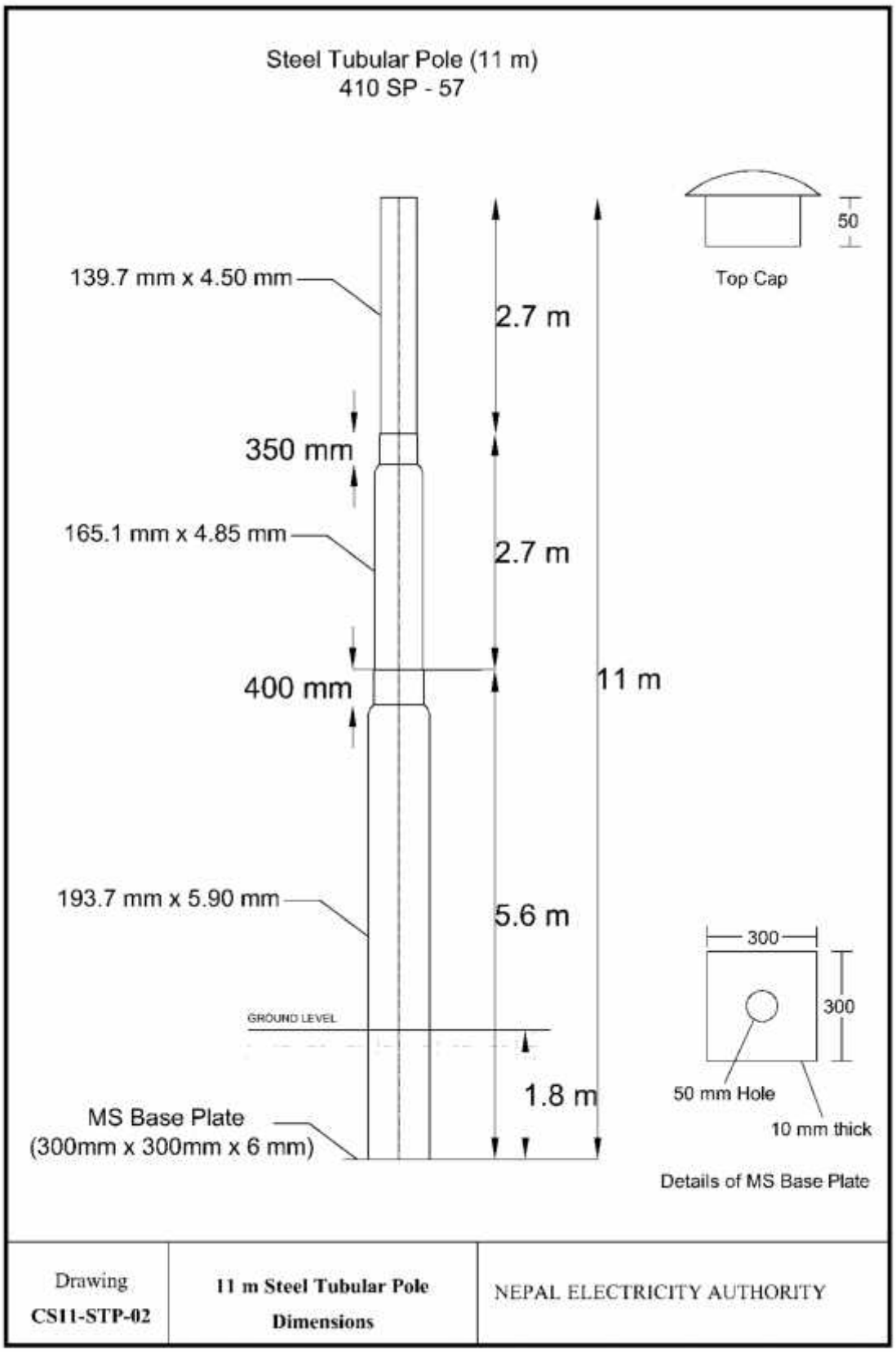


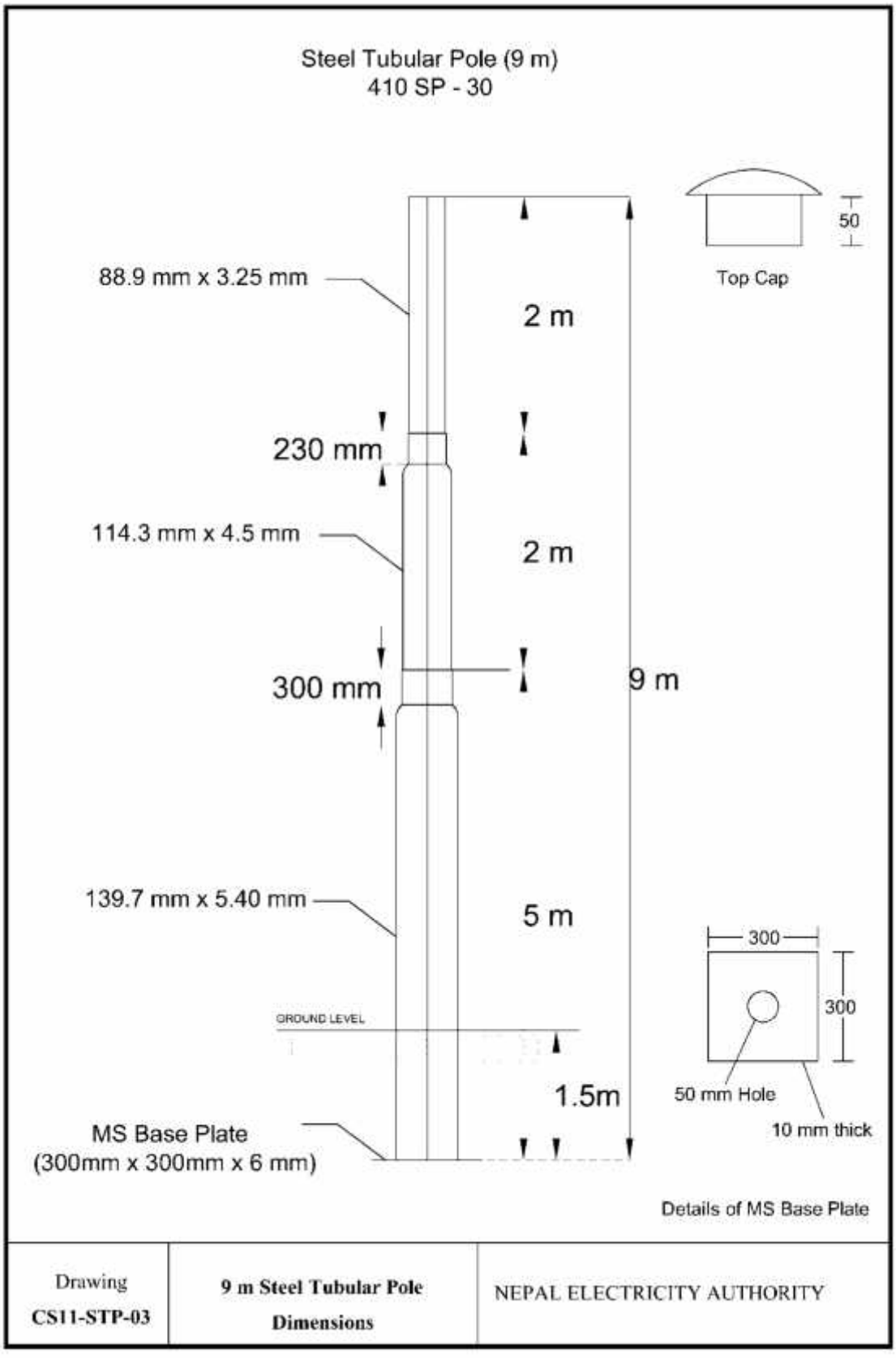
11 Meter STP

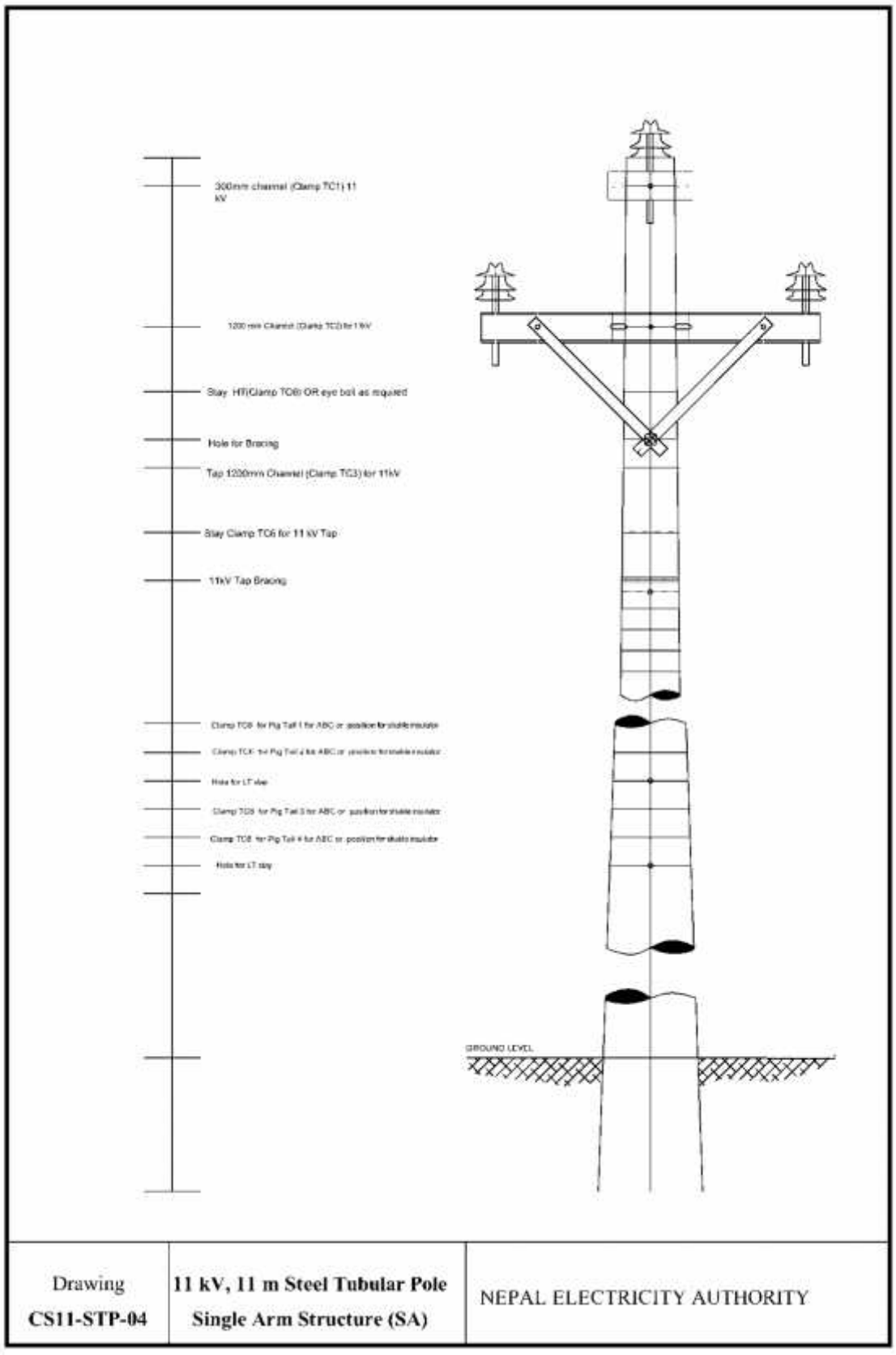
Hole diameter is 18 mm

Note: All dimensions are in mm

Drawing	9/11 m Steel Tubular Pole	NEPAL ELECTRICITY AUTHORITY
CS11-STP-01	**Hole Pattern**	


Steel Tubular Pole (11 m)
410 SP - 57
139.7 mm x 4.50 mm
165.1 mm x 4.85 mm
193.7 mm x 5.90 mm
350 mm
400 mm
2.7 m
2.7 m
5.6 m
11 m
1.8 m
GROUND LEVEL
MS Base Plate
(300mm x 300mm x 6 mm)
50
Top Cap
300
300
50 mm Hole
10 mm thick
Details of MS Base Plate
Drawing
CS11-STP-02
11 m Steel Tubular Pole
Dimensions
NEPAL ELECTRICITY AUTHORITY

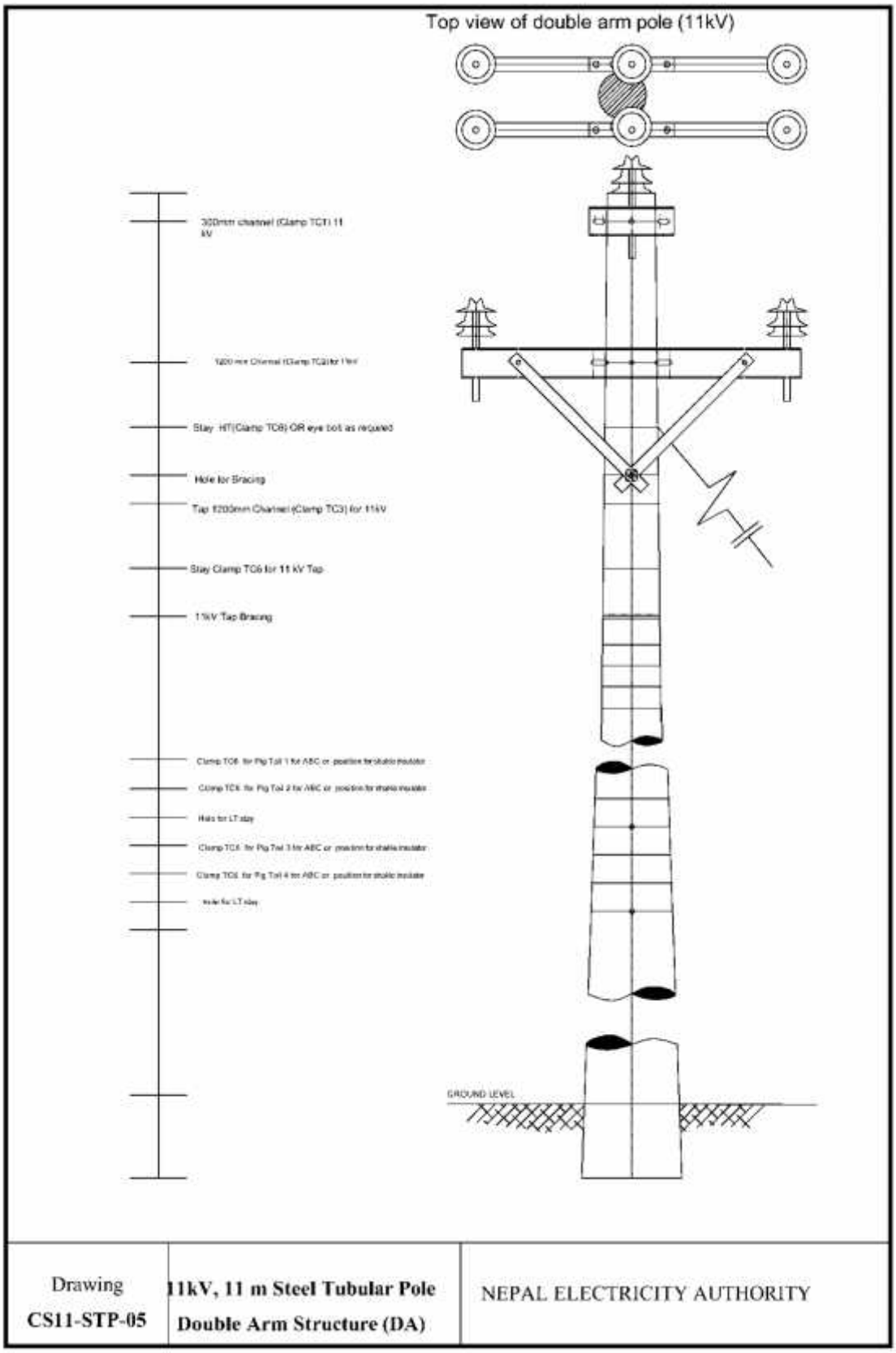

Steel Tubular Pole (9 m)
410 SP - 30
88.9 mm x 3.25 mm
2 m
230 mm
114.3 mm x 4.5 mm
2 m
300 mm
9 m
139.7 mm x 5.40 mm
5 m
GROUND LEVEL
1.5m
MS Base Plate
(300mm x 300mm x 6 mm)
50
Top Cap
300
300
50 mm Hole
10 mm thick
Details of MS Base Plate
Drawing
CS11-STP-03
9 m Steel Tubular Pole
Dimensions
NEPAL ELECTRICITY AUTHORITY



Drawing	11 kV, 11 m Steel Tubular Pole	NEPAL ELECTRICITY AUTHORITY
CS11-STP-04	**Single Arm Structure (SA)**	

S.No.	QTY.	UNIT	MATERIAL
1	3	NOS	PIN INSULATOR WITH PIN AND NUTS/WASHER
2	1	NOS	STEEL CROSSARM CHANNEL (50x100x300) mm.
3	1	NOS	POLE CLAMP WITH NUTS, BOLTS AND WASHERS (TC1)
4	1	NOS	STEEL CROSSARM CHANNEL (50x100x1200) mm.
5	1	NOS	POLE CLAMP WITH NUTS, BOLTS AND WASHERS (TC2)
6	2	NOS	FLAT CROSSARM BRACE (40 X 6 X 660) mm
7	1	LOT	BOLTS WITH SUITABLE NUTS AND WASHERS
8	3	NOS	PREFORMED WIRE (TOP TIE)
9	1	NOS	STEEL TUBULAR POLE 11 M

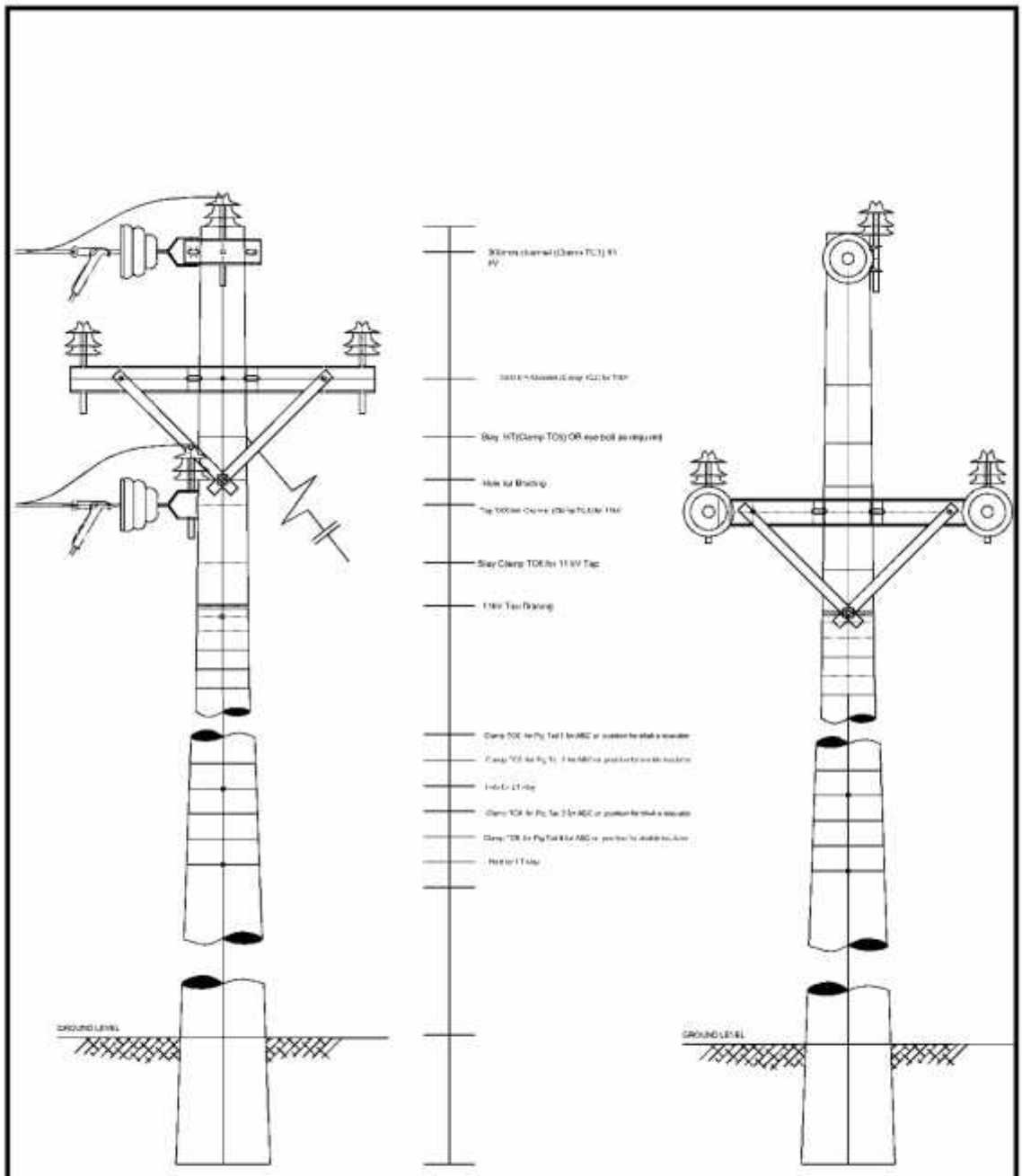
CONSTRUCTION STANDARDS **11 kV SINGLE ARM STRUCTURE (SA) STEEL TUBULAR POLE**	**NEPAL ELECTRICITY AUTHORITY**



Drawing CS11-STP-05	11kV, 11 m Steel Tubular Pole Double Arm Structure (DA)	NEPAL ELECTRICITY AUTHORITY

S.No.	QTY.	UNIT	MATERIAL
1	6	NOS	PIN INSULATOR WITH PIN AND NUTS/WASHER
2	2	NOS	STEEL CROSSARM CHANNEL (50x100x300) mm.
3	2	NOS	STEEL CROSSARM CHANNEL (50x100x1200) mm.
4	4	NOS	FLAT CROSSARM BRACE (40 X 6 X 660) mm
5	1	LOT	BOLTS WITH SUITABLE NUTS AND WASHERS
6	6	NOS	PREFORMED WIRE (DOUBLE SIDE TIES)
7	1	NOS	STEEL TUBULAR POLE - 11 M

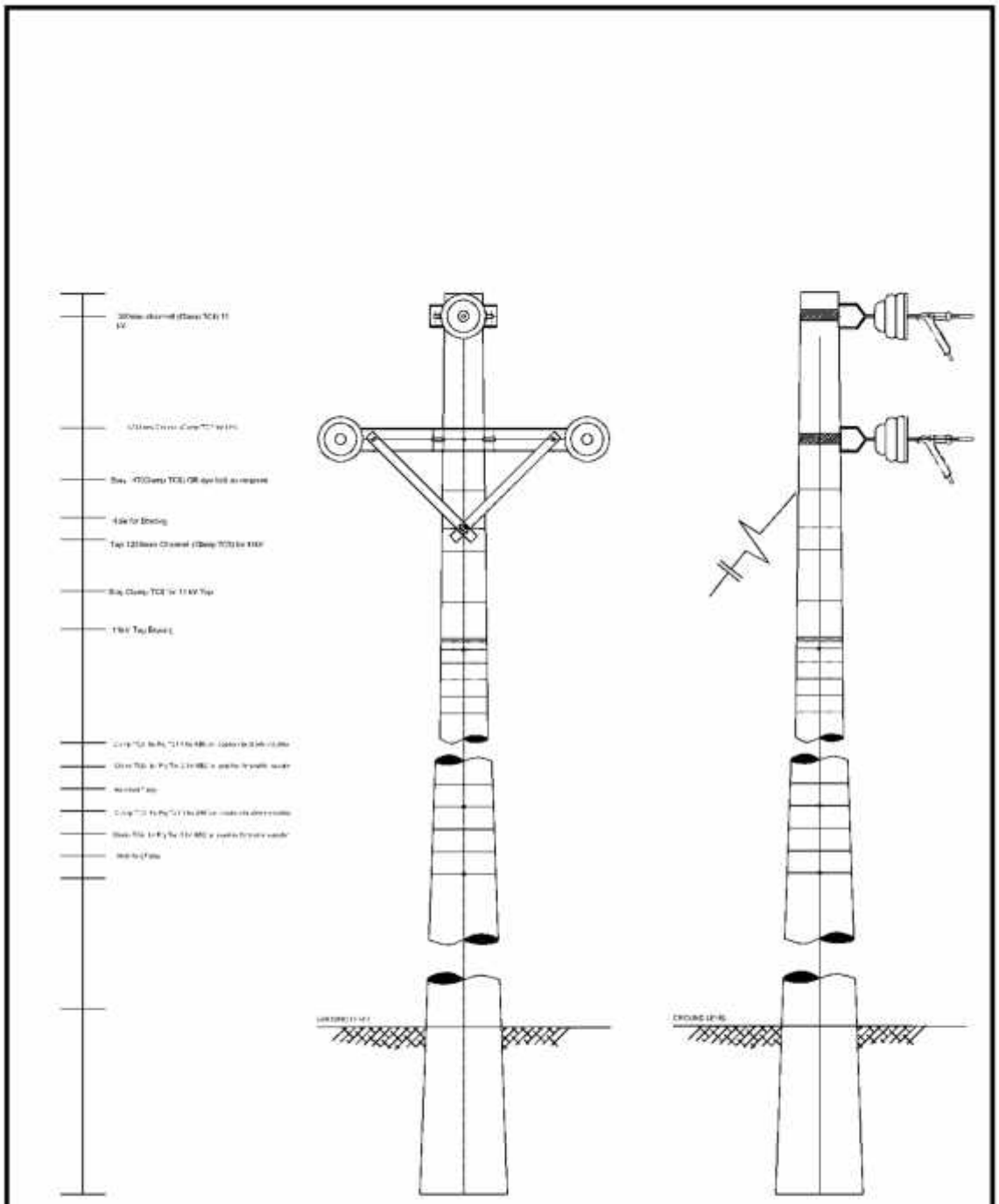
CONSTRUCTION STANDARDS **11 kV DOUBLE ARM STRUCTURE (DA)** **STEEL TUBULAR POLE**	**NEPAL ELECTRICITY AUTHORITY**



Drawing	11kV, 11 m Steel Tubular Pole	NEPAL ELECTRICITY AUTHORITY
CS11-STP-06	Tap Off Structure (TO)	

S.No.	QTY.	UNIT	MATERIAL
1	5	NOS	PIN INSULATOR WITH PIN AND NUTS/WASHER
2	3	SET	DISC INSULATOR WITH HARDWARE
3	3	NOS	DEAD END CLAMPS
4	1	NOS	STEEL CROSSARM CHANNEL (50x100x300) mm.
5	1	NOS	POLE CLAMP WITH NUTS, BOLTS AND WASHERS (TC1)
6	2	NOS	STEEL CROSSARM CHANNEL (50x100x1200) mm.
7	1	NOS	POLE CLAMP WITH NUTS, BOLTS AND WASHERS (TC3)
8	4	NOS	FLAT CROSSARM BRACE (40 X 6 X 660) mm
9	1	LOT	BOLTS WITH SUITABLE NUTS AND WASHERS
10	5	NOS	PREFORMED WIRE (TOP TIE)
11	3	NOS	INSULATED PIERCING CONNECTORS
12	1	SET	HT STAY (TYPE AS REQUIRED)
13	1	NOS	STEEL TUBULAR POLE - 11 M

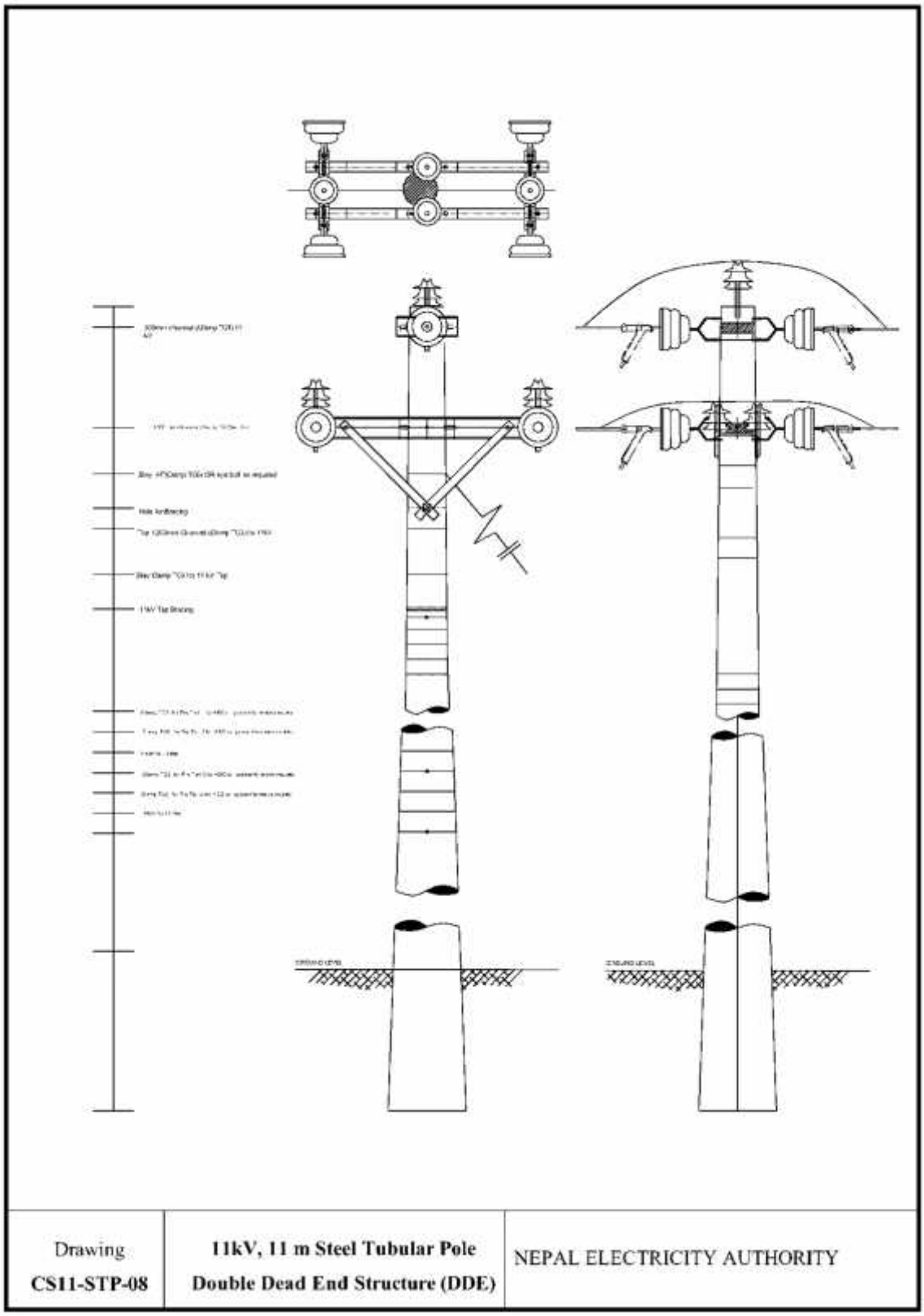
CONSTRUCTION STANDARDS **11 kV TAP OFF STRUCTURE (TO)** **STEEL TUBULARPOLE**	**NEPAL ELECTRICITY AUTHORITY**



Drawing	11kV, 11 m Steel Tubular Pole	NEPAL ELECTRICITY AUTHORITY
CS11-STP-07	Dead End Structure (DE)	

S.No.	QTY.	UNIT	MATERIAL
1	3	NOS	DISC INSULATOR WITH HARDWARE
2	3	NOS	DEAD END CLAMPS
3	1	NOS	STEEL CROSSARM CHANNEL (50x100x300) mm.
4	1	NOS	POLE CLAMP WITH NUTS, BOLTS AND WASHERS T)
5	1	NOS	STEEL CROSSARM CHANNEL (50x100x1200) mm.
6	1	NOS	POLE CLAMP WITH NUTS, BOLTS AND WASHERS (TC2)
7	2	NOS	FLAT CROSSARM BRACE (40 X 6 X 660) mm
8	1	LOT	BOLTS WITH SUITABLE NUTS AND WASHERS
9	1	SET	HT STAY (TYPE AS REQUIRED)
10	1	NOS	STEEL TUBULAR POLE – 11m

CONSTRUCTION STANDARDS **11 kV DEAD END STRUCTURE (DE)** **STEEL TUBULAR POLE**	**NEPAL ELECTRICITY AUTHORITY**

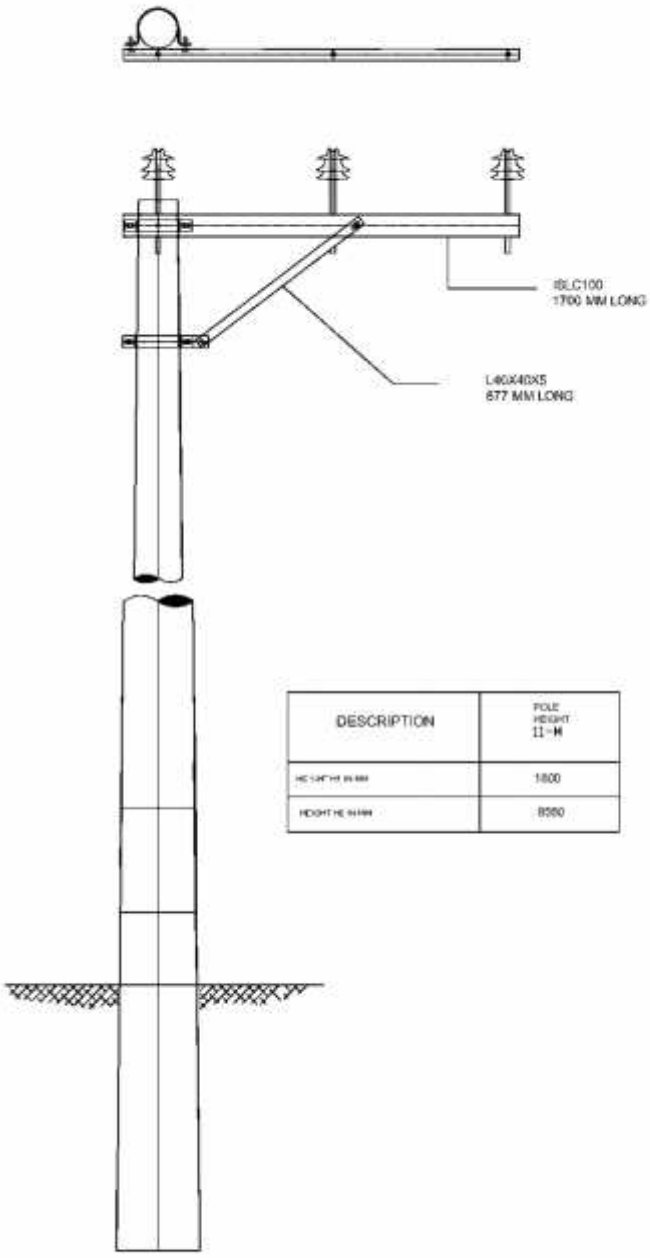


Drawing	11kV, 11 m Steel Tubular Pole	NEPAL ELECTRICITY AUTHORITY
CS11-STP-08	Double Dead End Structure (DDE)	

S.No.	QTY.	UNIT	MATERIAL
1	3	NOS	PIN INSULATOR WITH PIN AND NUTS/WASHER
2	6	SET	DISC INSULATOR WITH HARDWARE
3	6	NOS	DEAD END CLAMPS
4	2	NOS	STEEL CROSSARM CHANNEL (50x100x300) mm.
5	2	NOS	STEEL CROSSARM CHANNEL (50x100x1200) mm.
6	4	NOS	FLAT CROSSARM BRACE (40 X 6 X 660) mm
7	1	LOT	BOLTS WITH SUITABLE NUTS AND WASHERS
8	3	NOS	PREFORMED WIRE (TOP TIE)
9	3	NOS	INSULATED PIERCING CONNECTOR
10	1	NOS	STEEL TUBULAR POLE - 11 M

CONSTRUCTION STANDARDS **11 kV DOUBLE DEAD END STRUCTURE (DDE)** **STEEL TUBULARPOLE**	**NEPAL ELECTRICITY AUTHORITY**

TOP VIEW



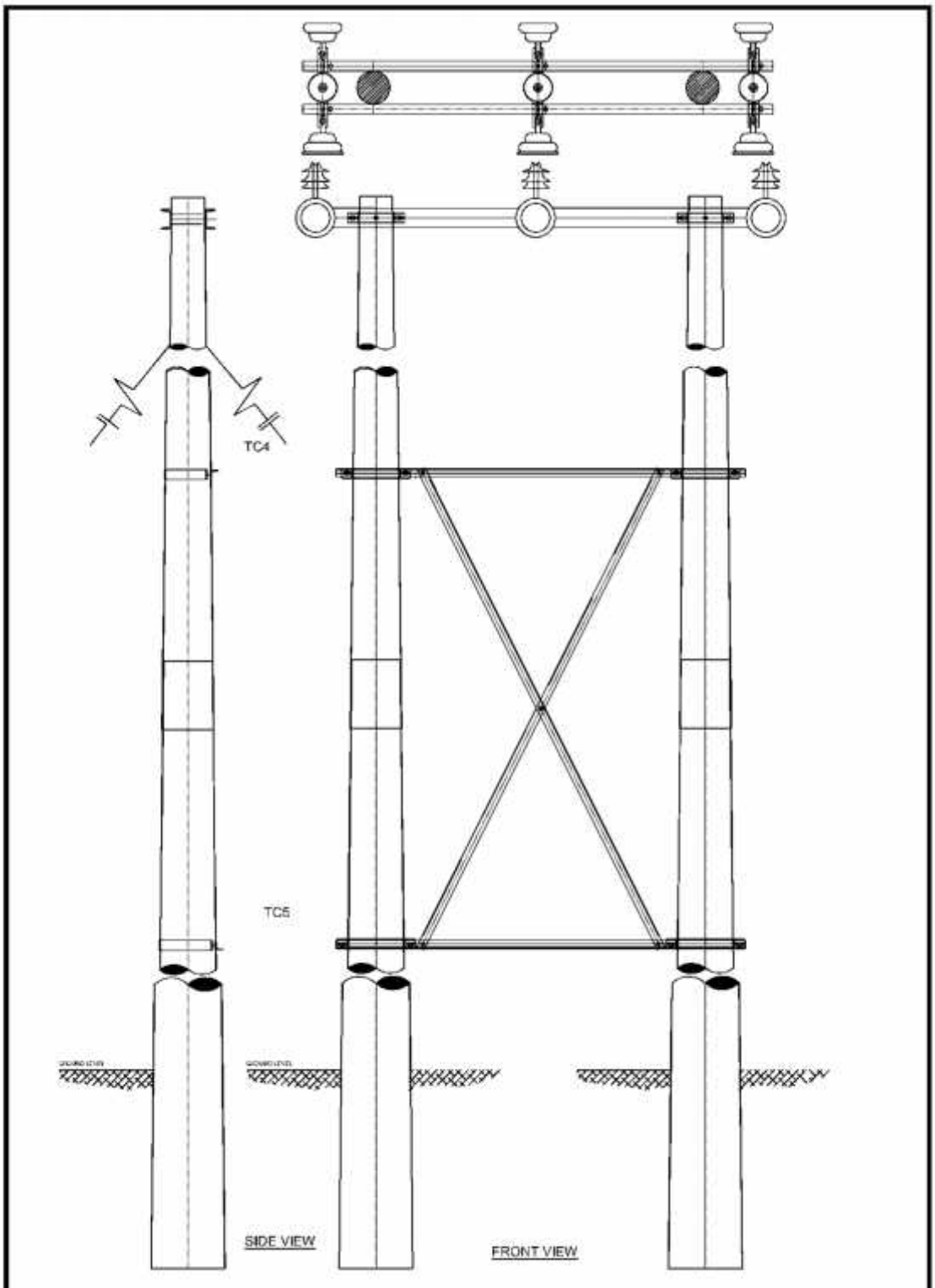
DESCRIPTION	POLE HEIGHT 11 - M
	1800
	8580

ALL DIMENSIONS ARE IN MM

Drawing		
CS11-STP-09	**11kV, 11 m Steel Tubular Pole Offset Pole Structure (OS)**	NEPAL ELECTRICITY AUTHORITY

S.No.	QTY.	UNIT	MATERIAL
1	3	NOS	PIN INSULATOR WITH PIN AND NUTS/WASHER
2	1	NOS	STEEL CROSSARM CHANNEL (50x100x1700) mm.
3	1	NOS	POLE CLAMP WITH NUTS, BOLTS AND WASHERS (TC1)
4	1	NOS	BRACING ANGLE FOR OFFSET STRUCTURE (827 X 40 X 5) mm
5	1	NOS	POLE CLAMP WITH NUTS, BOLTS AND WASHERS (TC2)
6	4	NOS	FLAT BRACE FOR OFFSET STRUCTURE (40 X 6 X 374) mm
7	1	LOT	BOLTS WITH SUITABLE NUTS AND WASHERS
8	3	NOS	PREFORMED WIRE (TOP TIE)
9	1	NOS	STEEL TUBULAR POLE - 11 M

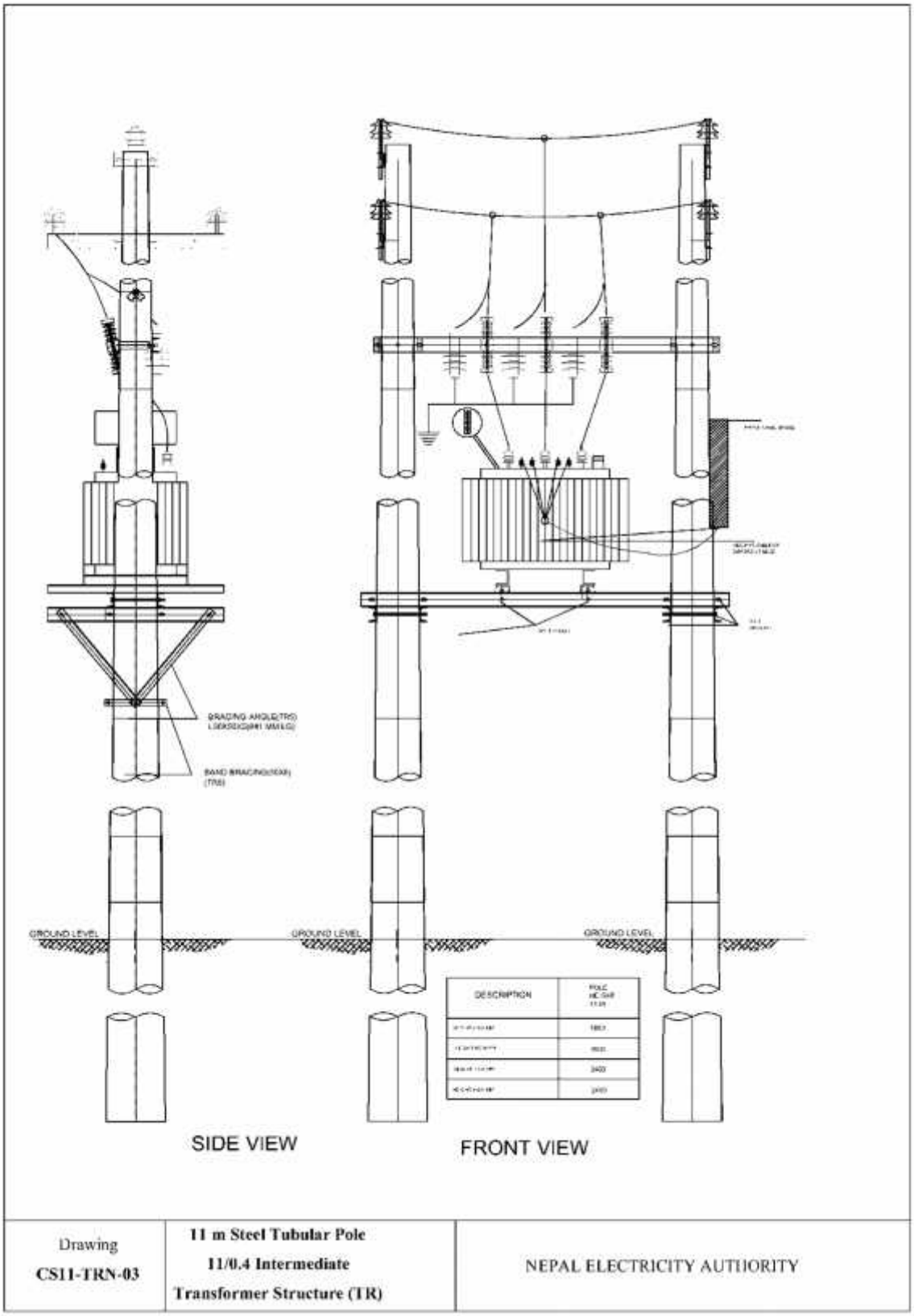
CONSTRUCTION STANDARDS **11 kV OFF SET STRUCTURE (OS)** **STEEL TUBULARPOLE**	**NEPAL ELECTRICITY AUTHORITY**



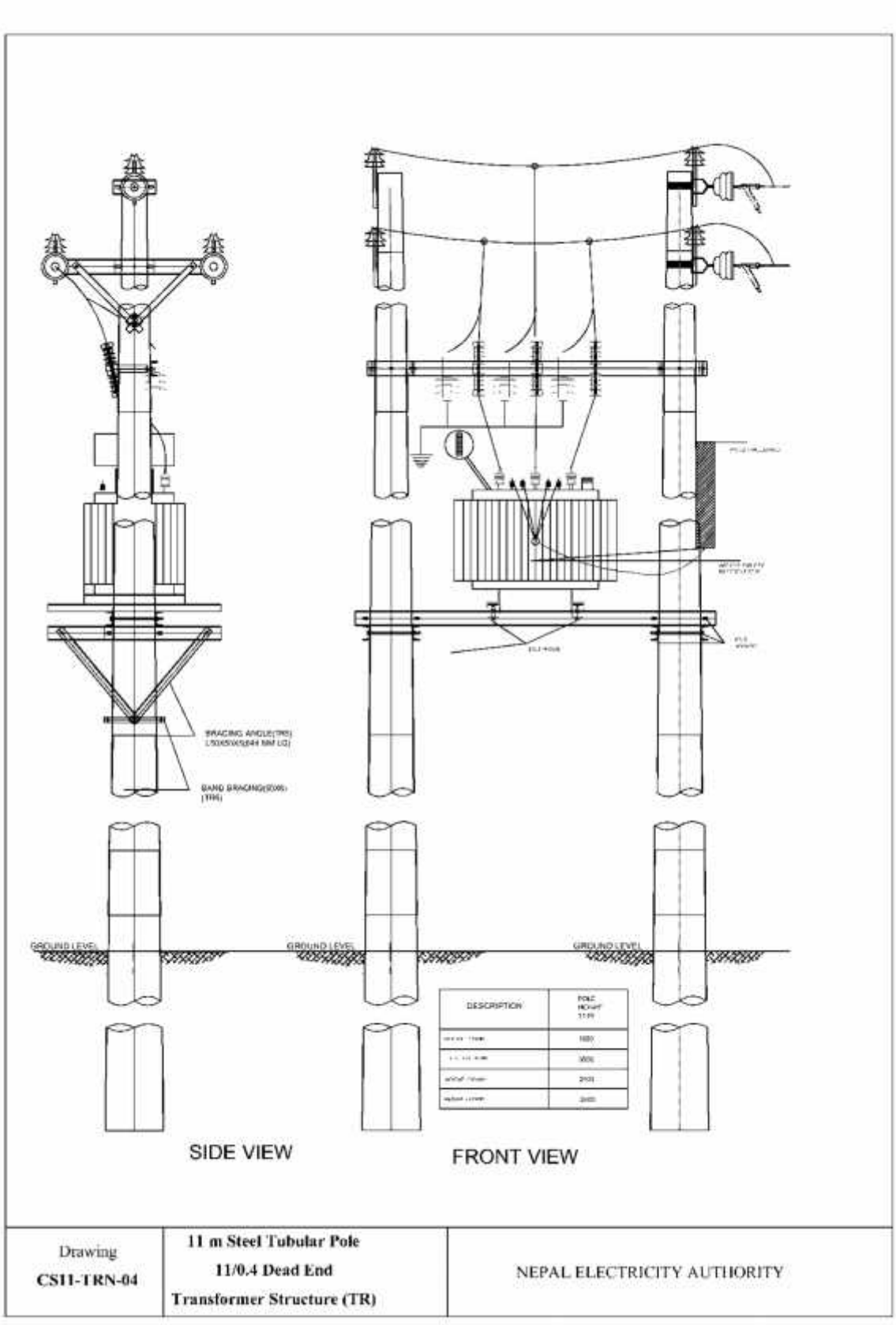
Drawing	11kV, 11 m Steel Tubular Pole	NEPAL ELECTRICITY AUTHORITY
CS11-STP-10	H - Structure (HS)	

S.No.	QTY.	UNIT	MATERIAL
1	3	NOS	PIN INSULATOR WITH PIN AND NUTS/WASHER
2	6	SET	DISC INSULATOR WITH HARDWARE
3	6	NOS	DEAD END CLAMPS
4	1	NOS	STEEL CROSSARM CHANNEL (50x100x6.4 x2390) mm.
5	2	NOS	POLE CLAMP WITH NUTS, BOLTS AND WASHERS (TC1)
6	2	NOS	BRACING ANGLE (40 x 40 x 5 x 2071) mm.
7	2	NOS	POLE CLAMP WITH NUTS, BOLTS AND WASHERS (TC4)
8	2	NOS	POLE CLAMP WITH NUTS, BOLTS AND WASHERS (TC5)
9	2	NOS	BRACING ANGLE (40 x 40 x 5 x 2723) mm.
10	1	LOT	BOLTS WITH SUITABLE NUTS AND WASHERS
11	3	NOS	PREFORMED TIE (TOP TIE)
12	3	NOS	INSULATED PIERCING CONNECTORS
13	1	SET	HT STAY SET (TYPE AS REQUIRED)
14	2	NOS	STEEL TUBULAR POLE - 11 M

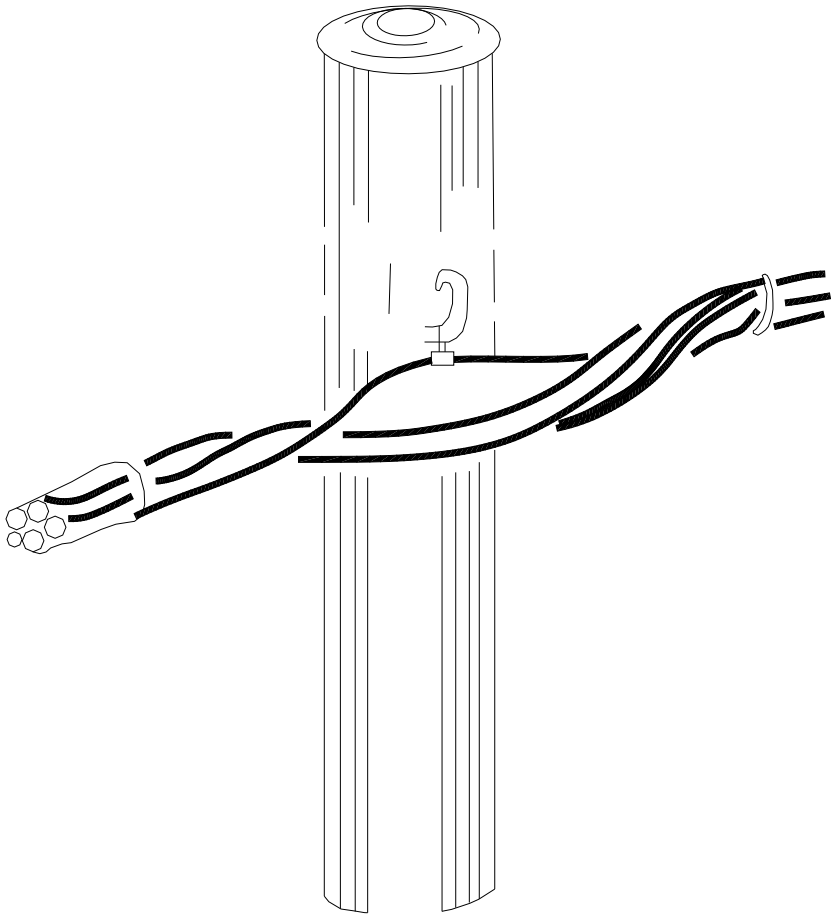
CONSTRUCTION STANDARDS **11 kV H - STRUCTURE (HS)** **STEEL TUBULARPOLE**	**NEPAL ELECTRICITY AUTHORITY**



Drawing	11 m Steel Tubular Pole	NEPAL ELECTRICITY AUTHORITY
CS11-TRN-03	11/0.4 Intermediate Transformer Structure (TR)	



Drawing	11 m Steel Tubular Pole	NEPAL ELECTRICITY AUTHORITY
CS11-TRN-04	**11/0.4 Dead End**	
	Transformer Structure (TR)	

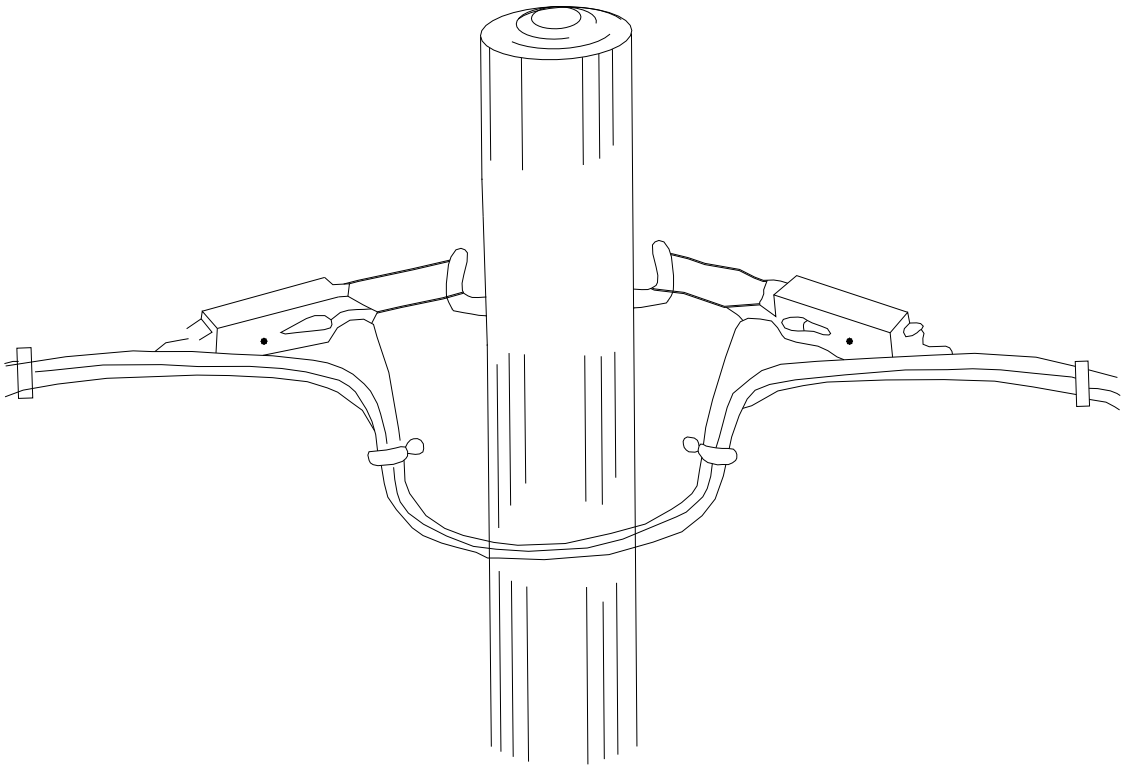


ANNEX L TYPICAL DRAWING	SUSPENSION ASSEMBLY TYPE "A 1"	NEPAL ELECTRICITY AUTHORITY

For PSC Pole

S.NO.	QTY.	UNIT	MATERIAL
1	1	NOS	SUSPENSION CLAMP
2	1 for STP 0 for PSC	NOS	POLE CLAMP WITH NUTS, BOLTS AND WASHERS (TC8)
3	1 for PSC 0 for STP	NOS	PIGTAIL WITH HEXAGONAL NUTS AND WASHERS (16 X 203) MM
4	1	NOS	POLE 9 METER

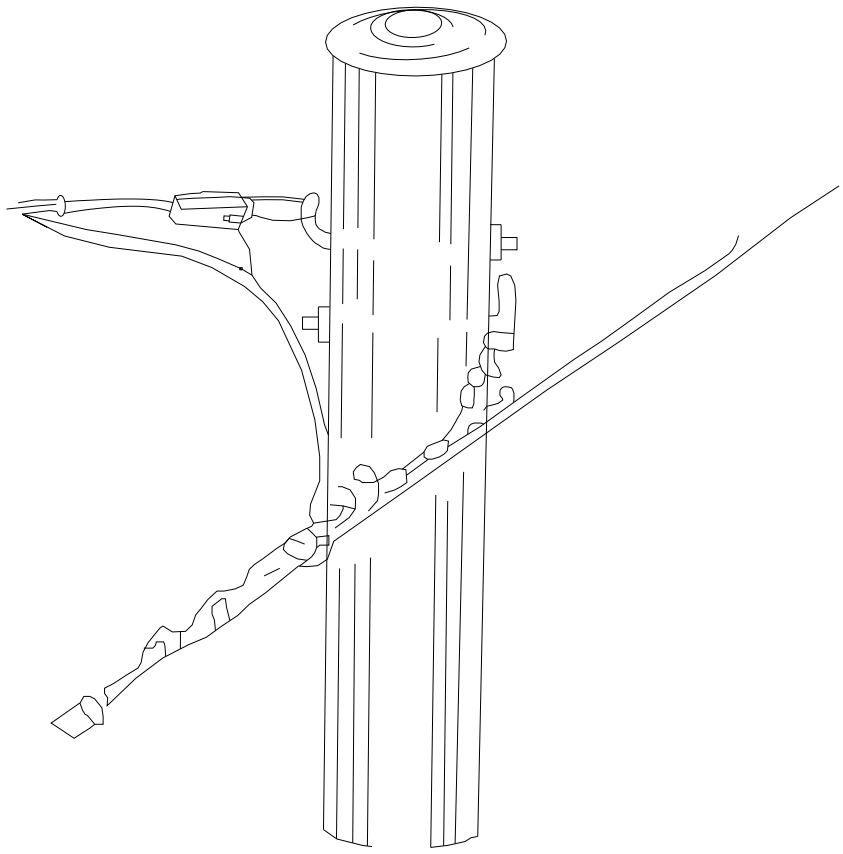
CONSTRUCTION STANDARDS **LV TYPE – A1 (Suspension Type)**	**NEPAL ELECTRICITY AUTHORITY**



ANNEX L TYPICAL DRAWING	ANGLE ASSEMBLY OVER 90° TYPE "A 2"	NEPAL ELECTRICITY AUTHORITY

S.NO.	QTY.	UNIT	MATERIAL
1	2	NOS	ANCHOR CLAMP
2	2 for PSC 0 for STP	NOS	PIGTAIL WITH HEXAGONAL NUTS AND WASHERS (16 X 203) MM
3	2 for PSC 0 for STP	NOS	EYE NUT
4	2 for STP 0 for PSC	NOS	POLE CLAMP WITH NUTS, BOLTS AND WASHERS (TC8)
5	1	NOS	POLE 9 METER
6	1	SET	LT STAY SET

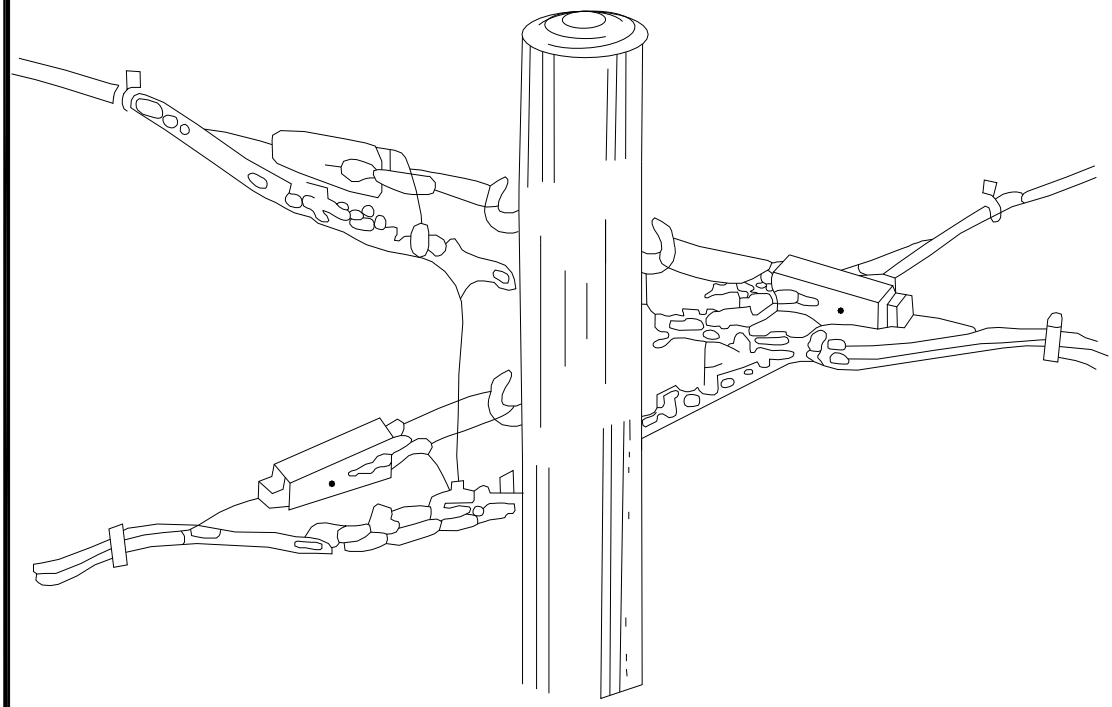
CONSTRUCTION STANDARDS **LV TYPE – A2 (Suspension Type with Angle)**	**NEPAL ELECTRICITY AUTHORITY**



ANNEX L TYPICAL DRAWING	INTERMIDIATE TAP TYPE "B"	NEPAL ELECTRICITY AUTHORITY

S.NO.	QTY.	UNIT	MATERIAL
1	1	NOS	SUSPENSION CLAMP
2	1	NOS	ANCHOR CLAMP
3	2 for PSC 0 for STP	NOS	PIGTAIL WITH HEXAGONAL NUTS AND WASHERS (16 X 203) MM
4	1 for PSC 0 for STP	NOS	EYE NUT
5	2 for STP 0 for PSC	NOS	POLE CLAMP WITH NUTS, BOLTS AND WASHERS (TC8)
6	5	NOS	INSULATEDPIERCING CONNECTOR
7	5	NOS	INSULATED CABLE CAPS
8	1	NOS	POLE 9 METER
9	1	SET	LT STAY

CONSTRUCTION STANDARDS **LV TYPE - B (Suspension with an Anchor for Dead)**	**NEPAL ELECTRICITY AUTHORITY**



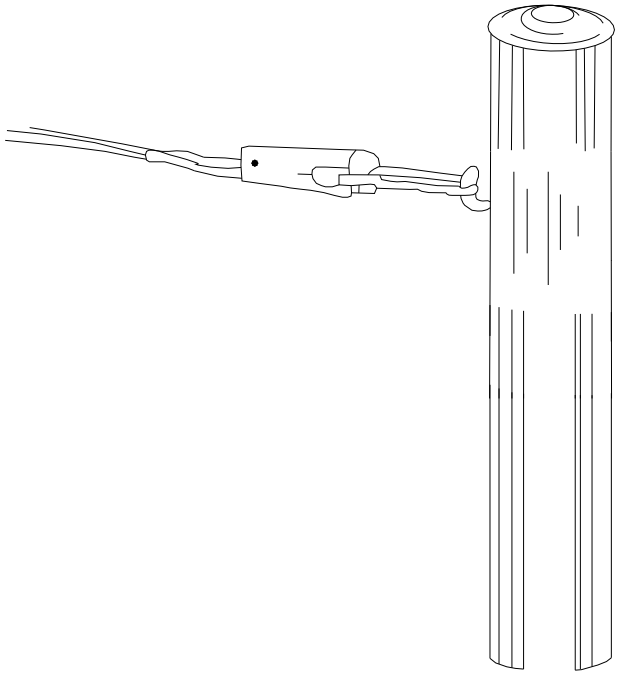
ANNEX L TYPICAL DRAWING	**LV Type 'C'** DOUBLE DEAD END WITH TAPS	NEPAL ELECTRICITY AUTHORITY

S.NO.	QTY.	UNIT	MATERIAL
1	4	NOS	ANCHOR CLAMP
2	2 for PSC 0 for STP	NOS	PIGTAIL WITH HEXAGONAL NUTS AND WASHERS (16 X 203) MM
3	1 for PSC 0 for STP	NOS	EYE NUT
4	2 for STP 0 for PSC	NOS	POLE CLAMP WITH NUTS, BOLTS AND WASHERS (TC8)
5	15	NOS	INSULATED PIERCING CONNECTOR
6	20	NOS	INSULATED CABLE CAPS
7	1	NOS	POLE 9 METER

CONSTRUCTION STANDARDS **LV TYPE - C (Four Anchor Dead End)**	**NEPAL ELECTRICITY AUTHORITY**

S.NO.	QTY.	UNIT	MATERIAL
1	1	NOS	SUSPENSION CLAMP
2	2	NOS	ANCHOR CLAMP
3	2 for PSC 0 for STP	NOS	PIGTAIL WITH HEXAGONAL NUTS AND WASHERS (16 X 203) MM
4	2 for PSC 0 for STP	NOS	EYE NUT
5	2 for STP 0 for PSC	NOS	POLE CLAMP WITH NUTS, BOLTS AND WASHERS (TC8)
6	10	NOS	INSULATED PIERCING CONNECTOR
7	10	NOS	INSULATED CABLE CAPS
8	1	NOS	POLE 9 METER

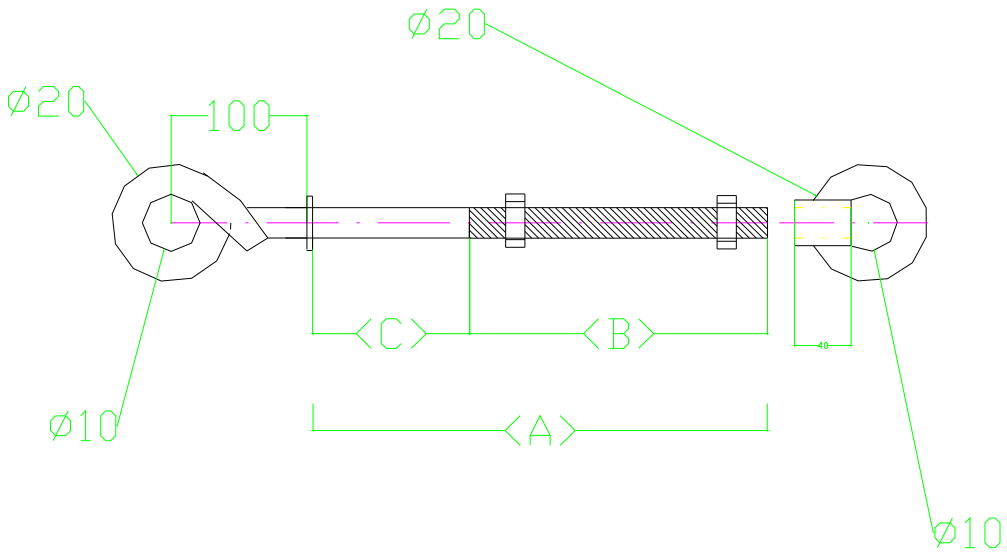
CONSTRUCTION STANDARDS **LV TYPE - D (One Suspension with two anchor dead end)**	**NEPAL ELECTRICITY AUTHORITY**



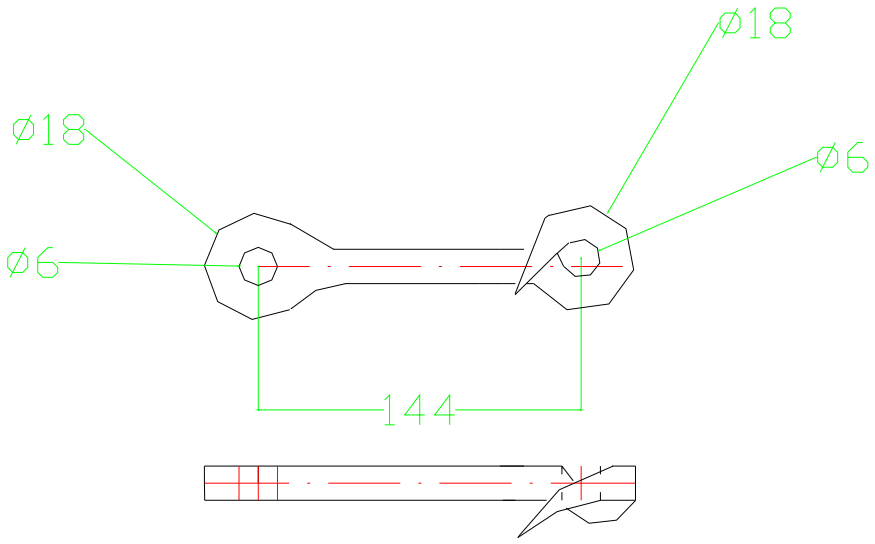
ANNEX L TYPICAL DRAWING	**LV Type 'E'** DEAD END ASSEMBLY	NEPAL ELECTRICITY AUTHORITY

S.No.	QTY.	UNIT	MATERIAL
1	1	NOS	ANCHOR CLAMP
2	1 for PSC 0 for STP	NOS	PIGTAIL WITH HEXAGONAL NUTS AND WASHERS (16 X 203) MM
3	1 for PSC 0 for STP	NOS	EYE NUT
4	2 for STP 0 for PSC	NOS	POLE CLAMP WITH NUTS, BOLTS AND WASHERS (TC8)
5	5	NOS	INSULATED CABLE CAPS
6	1	NOS	POLE 9 METER
7	1	SET	LT STAY

CONSTRUCTION STANDARDS **LV TYPE - E (Single Anchor Dead End)**	**NEPAL ELECTRICITY AUTHORITY**

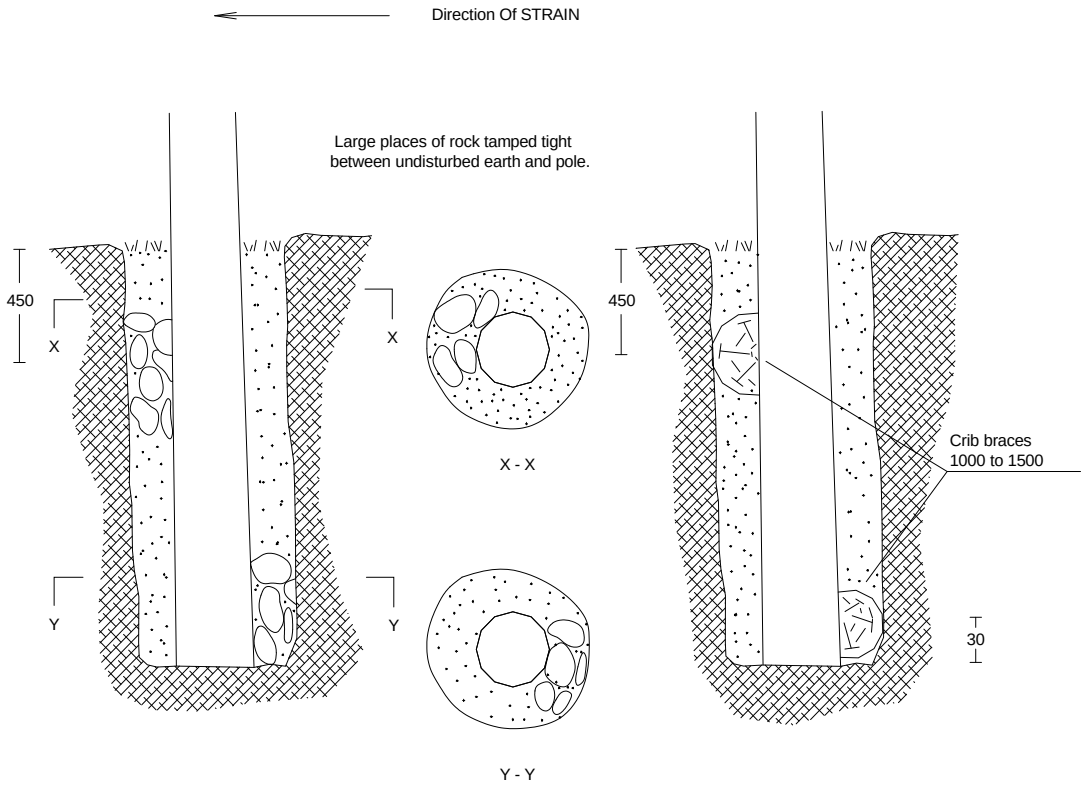


Particular	A , mm	B , mm	C , mm
Pig Tail A1	300	150	150
Pig Tail A2	200	120	80



CSLV-16	CONSTRUCTION STANDARDS Pig Tail with Adjustable Eye and Double Eye Fitting	NEPAL ELECTRICITY AUTHORITY TION

PLOE LENGTH (m.)	DEPTH OF BURIAL (m.)
8	1.5
9	1.5
10	1.7
11	1.8

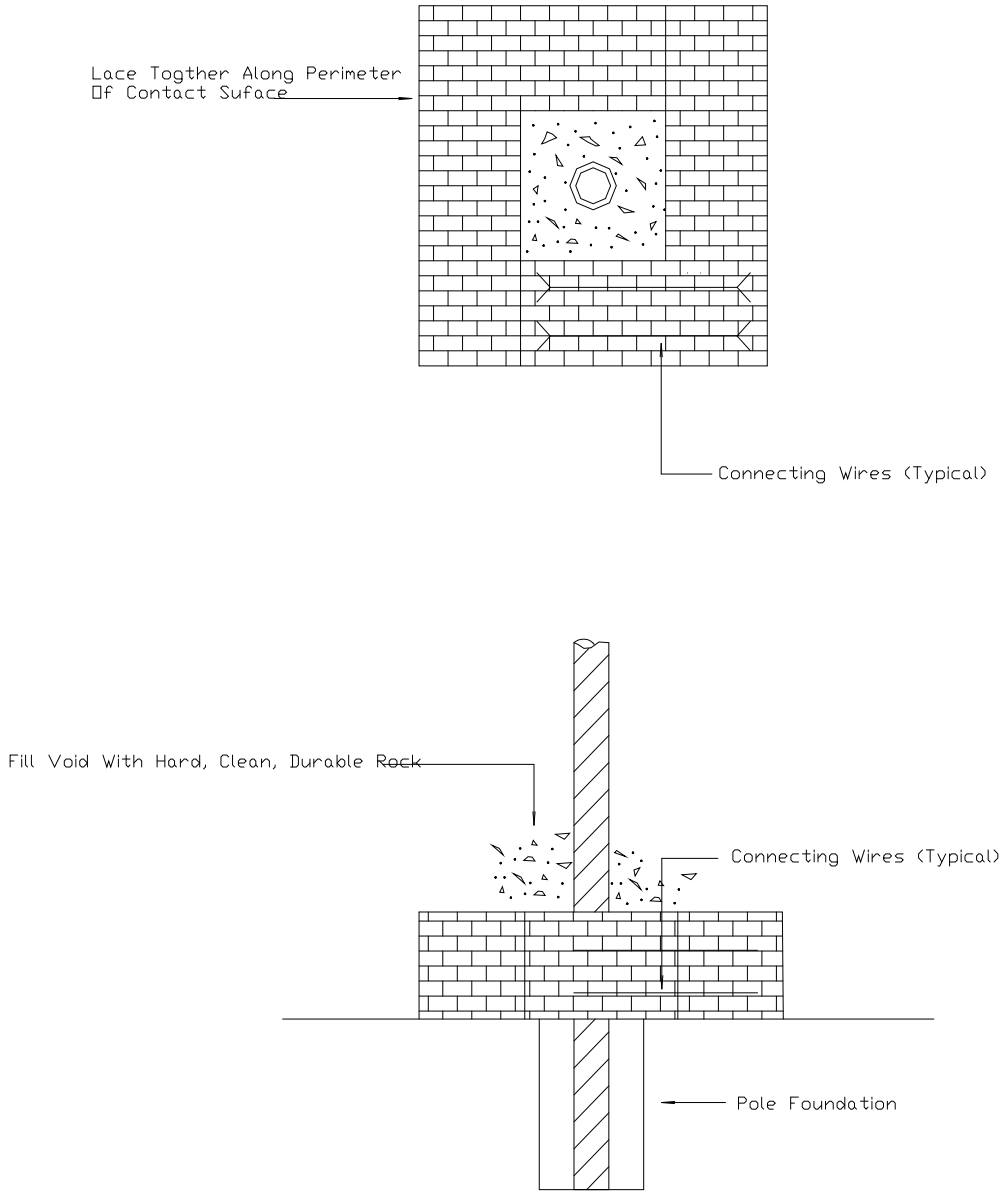


For use where ground is soild or compact.

For use where ground is soft

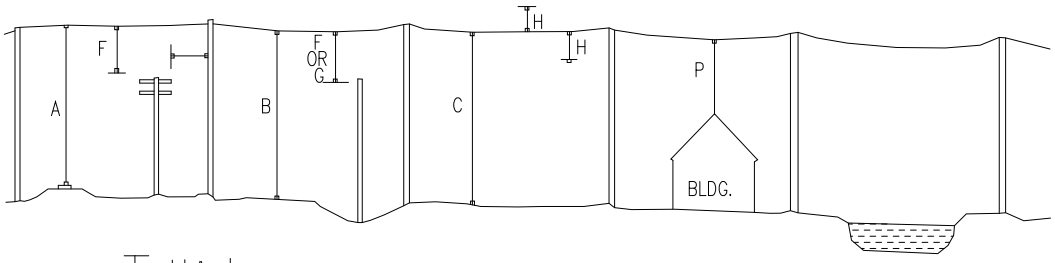
NOTE
CRIBBING FOR POLES WITHOUT CONCRETE FUNDATIONS.

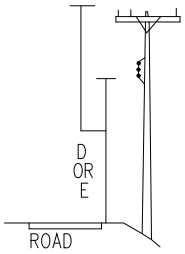
CSG-05	CONSTRUCTION STANDARDS POLE BURIAL	NEPAL ELECTRICITY AUTHORITY



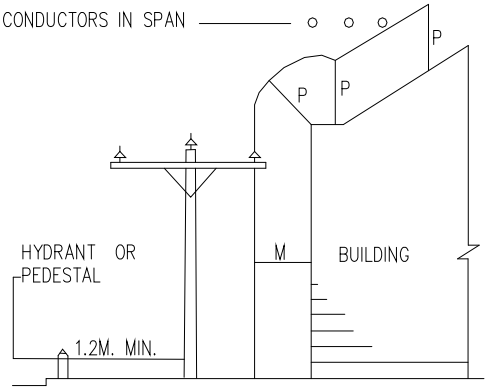
CSG-06	CONSTRUCTION STANDARDS POLE PROTECTION IN SHALLOW RIVER BEDS	NEPAL ELECTRICITY AUTHORITY

CONDUCTOR CLEARANCE





POLES ADJACENT TO ROADS



MINIMMUM CLEARANCE FROM BUILDINGS

	CROSSING OVER	VOLTAGE OF CIRCUIT CROSSING	METER
A	RAILROAD OR TURNPIKE	STAY & CABLE MESSENGER	7.10
		0 – 650 V.	7.10
		651 – 33,000 V.	7.60
B	ROAD, STREET, HIGHWAY OR LIMITED ACCESS HIGHWAY –	STAY & CABLE MESSENGER	5.80
		0 – 650 V.	5.80
		651 – 33,000 V.	6.10
C	AREAS ACCESSIBLE TO PEDESTRIANS ONLY	STAY & CABLE MESSENGER	4.60
		0 – 650 V.	4.60
		651 – 33,000	5.50
	LINE ALONG SIDE OF		
D	MAIN HIGHWAYS STREETS OR ALLEYS	STAY & CABLE MESSENGER	5.50
		0 – 650 V.	5.50
		6581 – 33,000 V.	6.10
E	RURAL ROADS NO VEHICLE CROSSING UNDER	STAY & CABLE MESSENGER	4.60
		0 – 650 V.	4.60
		651 – 33,000 V.	6.00

LOCATIONB	VOLTAGE	CLEARANCE (METER)
M	0 – 11.000 V.	1.20
	11.000 – 33.000 V.	1.83
P	0 – 11.000 V.	2.44
	11.000 – 33.000 V.	3.65

CLEARANCE M ALSO SPECIFIED HORIZONTAL CLEARANCE FROM BALCONIES.

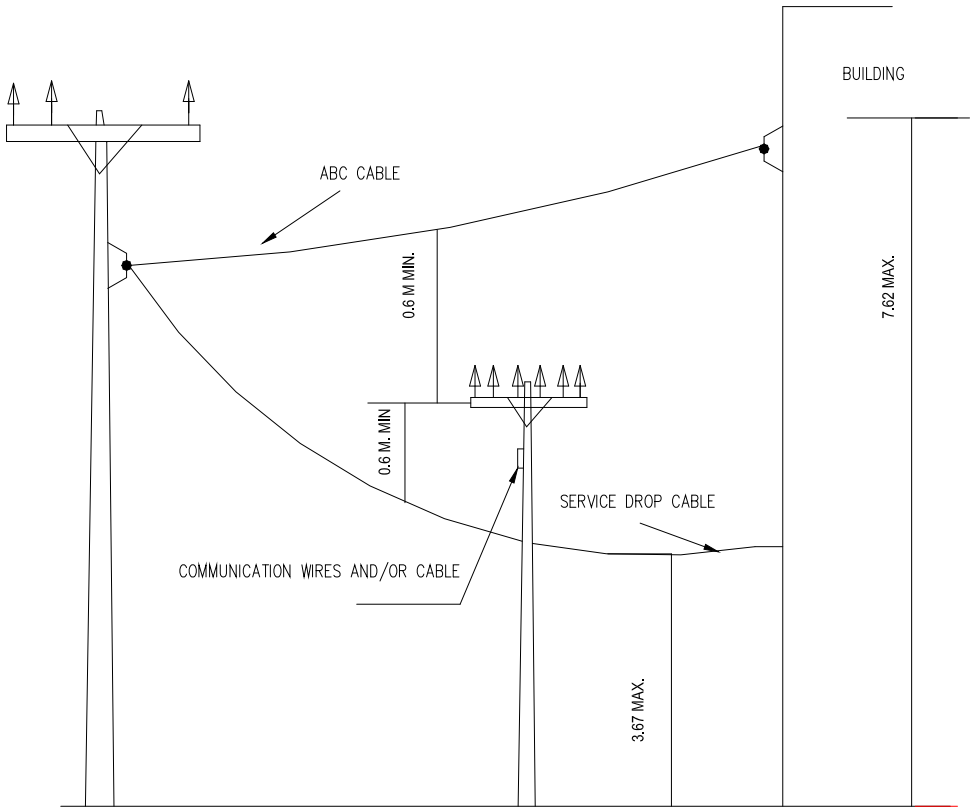
CSG-01	CONSTRUCTION STANDARDS CONDUCTOR CLEARANCE	NEPAL ELECTRICITY AUTHORITY

CONDUCTORS AT HIGHER LEVEL / CONDUCTORS AT LOWER LEVEL		SERVICE DROP 0 – 650 V	OPEN SUPPLY WIRES			STAYS AND SUPPLY CABLES ON GROUNDED MESSENGER
			0 – 650V	651 – 11000 V	33000 V	
F	COMMUNICATION WIRES	0.60 M.				
	COMMUNICATION CABLES AND MESSENGER	0.6 M. OVER 1.2 M. UNDER	1.38	2.15	—	0.60
G	SUPPLY CABLES ON EFFECTIVE GROUNDED MESSENGER	0.6 M. OVER 1.2 M. UNDER	0.60	0.60	—	0.60
H	OPEN SUPPLY 0 – 650 V.	—	1.30	1.80	2.70	0.60
	WIRES 651 – 11,000 V.	—	—	1.20	—	1.20
GUYS SERVICE DROPS 0 – 650 V.		0.60	0.60	1.20	—	—

— VOLTAGE SHOWN ARE PHASE TO GROUND VALUES.

CSG–02	CONSTRUCTION STANDARDS CONDUCTOR CLEARANCE	NEPAL ELECTRICITY AUTHORITY

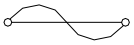
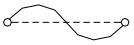
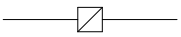
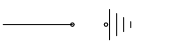
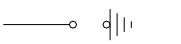
CONDUCTOR CLEARANCE



SERVICE DROP: Install Service over communication facilities where practical and attached to pole when available; otherwise cross under communication facilities; with proper clearance.

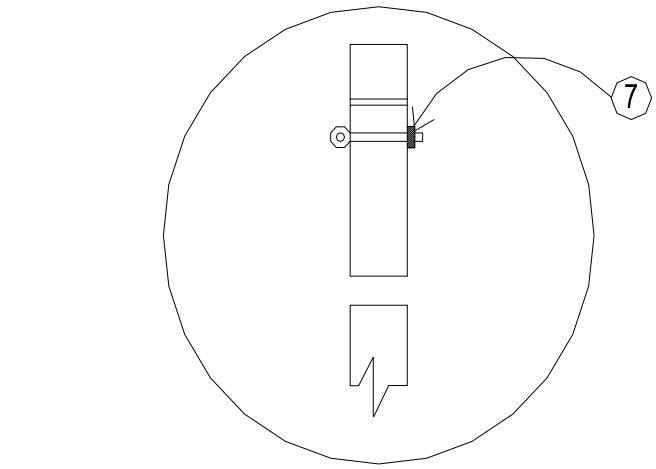
SERVICE DROP (0-600 V) Crossing Over	CLEARANCE
DRIVE WAY TO RESIDENCE, GARAGE, OR OVER PARKING LOT EXCLUDING TRACKS IN URBAN AREA	3.67 M
DRIVE WAY AND COMMERCIAL PARKING LOT OR AREA SUBJECT TO TRUCK TRAFFIC	4.57 M

CSG-03	CONSTRUCTION STANDARDS CONDUCTOR CLEARANCE	NEPAL ELECTRICITY AUTHORITY

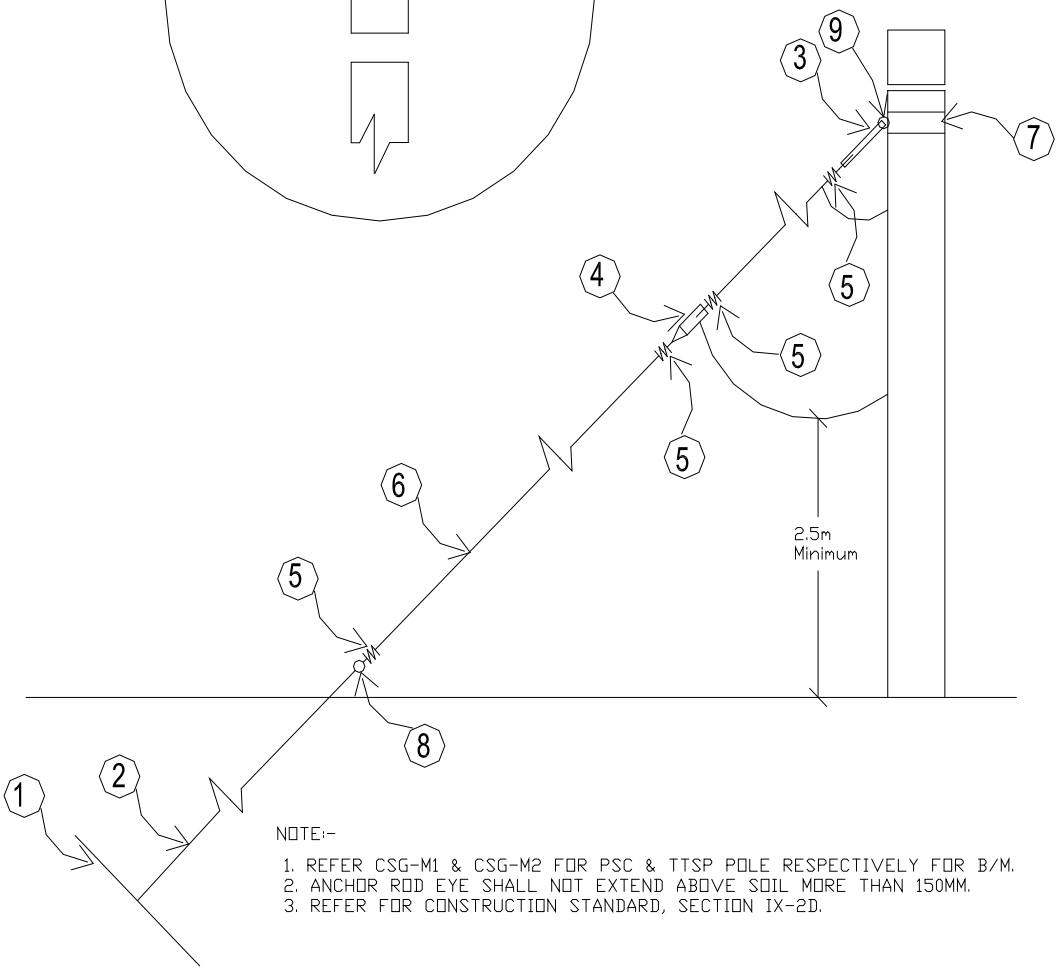
SN	ELECTRIC SYMBOLS	EXISTING	PROPOSED
1	Transformer		
2	Fuse Cutout		
3	Disconnecting Switch		
4	Load Break Switch		
5	Auto Reclosure		
6	Substation		
7	Lighting Arrester		
8	Pole Telescopic with Stay		
9	Pole P.S.C. with Stay		
10	Tapping Point		

CSG-04	CONSTRUCTION STANDARDS ELECTRICAL SYMBOLS	NEPAL ELECTRICITY AUTHORITY

PSC POLE



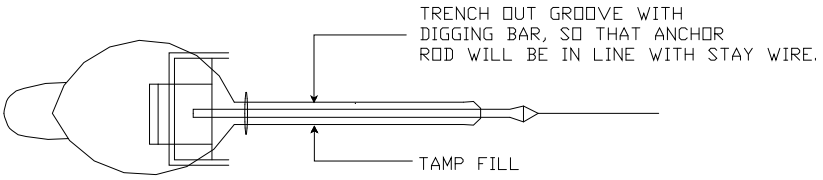
TYPE A

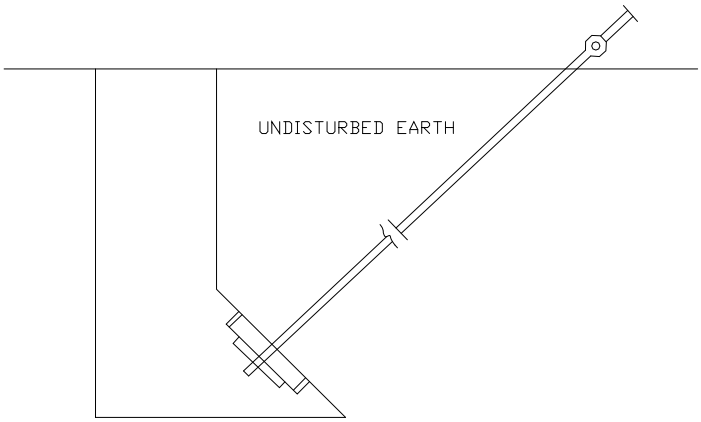


NOTE:-

1. REFER CSG-M1 & CSG-M2 FOR PSC & TTSP POLE RESPECTIVELY FOR B/M.
2. ANCHOR ROD EYE SHALL NOT EXTEND ABOVE SOIL MORE THAN 150MM.
3. REFER FOR CONSTRUCTION STANDARD, SECTION IX-2D.

CSG-08	CONSTRUCTION STANDARDS STAYS AND ANCHORS	NEPAL ELECTRICITY AUTHORITY





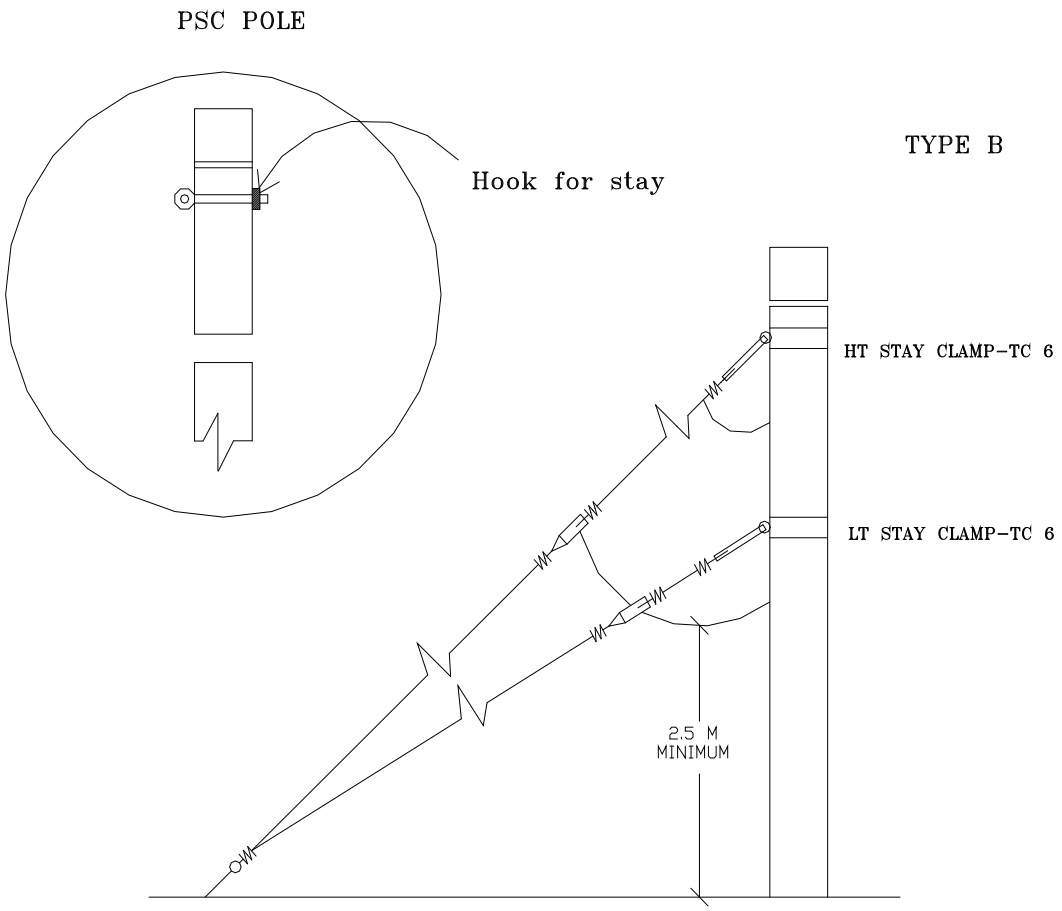
MAKE UNDERCUT AT BOTTOM OF ANCHOR HOLE,
PLATE TO BEAR AGAINST UNDISTURBED EARTH.

1. BACKFILL SHALL BE THOROUGHLY TAMPED.
2. BACKFILL FOR ANCHORS PLACED IN SOFT OR UNSTABLE SOIL SHALL BE 50MM GRAVEL PLACED TO DEPTH OF 1000 MM ABOVE ANCHOR PLATE.

CSG–07	CONSTRUCTION STANDARDS STAYS AND ANCHORS	NEPAL ELECTRICITY AUTHORITY

S.No.	MATERIAL (HT-STAY)	QTY.	UNIT	MATERIAL (LT-STAY)	QTY
1	HT STAY SET (600 x 600 MM PLATE AND ROD)	1	NOS	LT STAY SET (300 X 300 MM PLATE AND ROD)	1
2	HT TURN BUCKLE	1	NOS	LT TURN BUCKLE	1
3	HT THIMBLES	1	NOS	LT THIMBLES	1
4	POLE CLAMP(TC6)	1	NOS	POLE CLAMP(TC8)	0
5	HT STAY INSULATOR	1	NOS	STAY INSULATOR	1
6	PREFORM TIE FOR STAY WIRE 7/8 SWG	4	NOS	PREFORM TIE FOR STAY WIRE 7/12 SWG	4
7	7/8" SWG STAY WIRE	12	M	7/12" SWG STAY WIRE	10
8	HT EYE BOLT	0	NOS	LT EYE BOLT	0

CONSTRUCTION STANDARDS **HT AND LT - SINGLE STAY**	**NEPAL ELECTRICITY AUTHORITY**



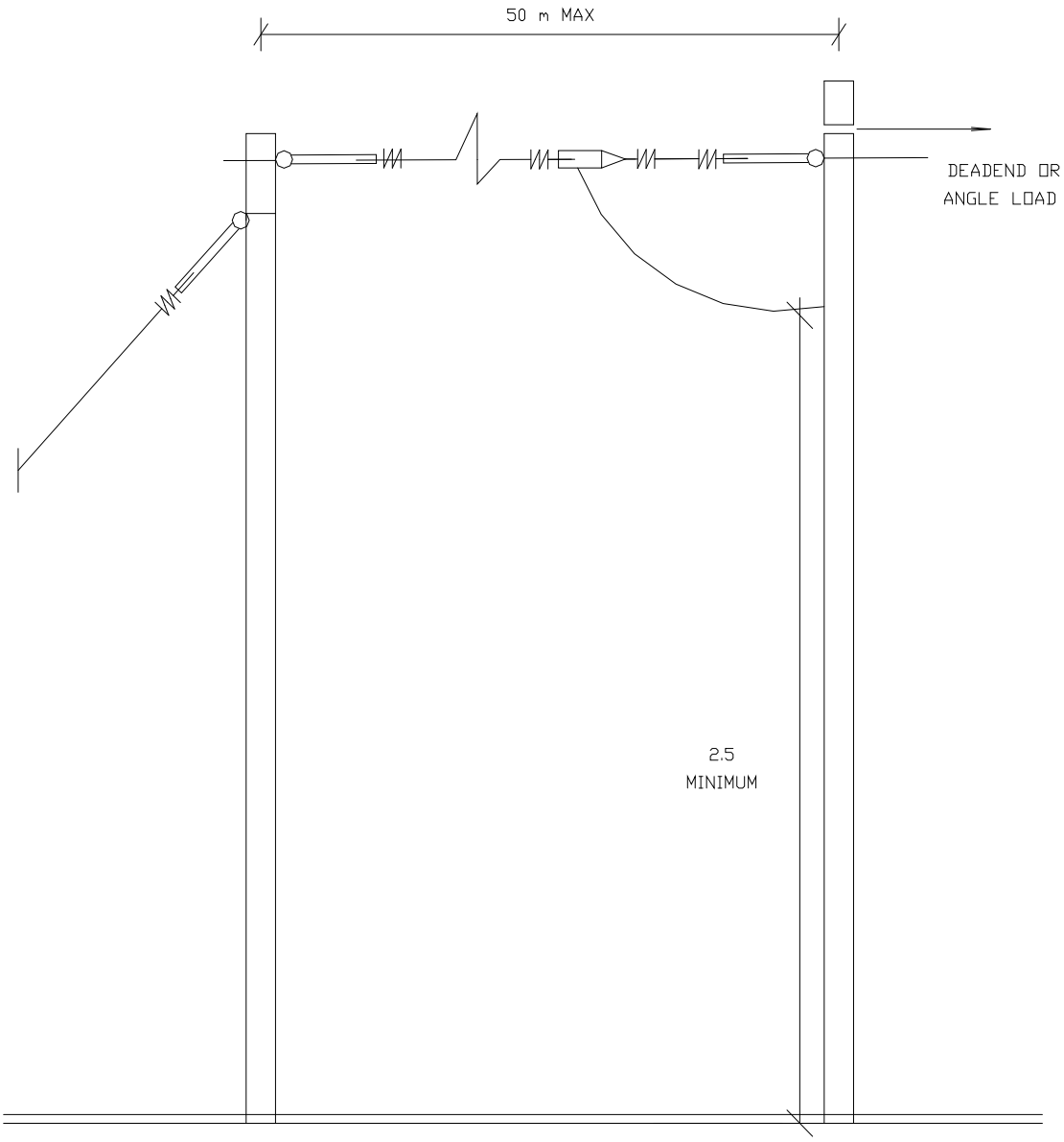
NOTE:
1. REFER CSG-M3 & CSG-M4 FOR PSC & TTSP POLE RESPECTIVELY FOR B/M.
2. STAY ROD EYE SHALL NOT EXTEND ABOVE SOIL MORE THAN 150mm.
3. REFER FOR CONSTRUCTION STANDARD, SECTION IX-2D.

CSG-09	CONSTRUCTION STANDARDS STAYS AND ANCHORS	NEPAL ELECTRICITY AUTHORITY

S.No.	MATERIAL (HT-STAY)	QTY.	UNIT	MATERIAL (LT-STAY)	QTY
1	HT STAY SET (600 x 600 MM PLATE AND ROD)	1	NOS	LT STAY SET (300 X 300 MM PLATE AND ROD)	1
2	HT TURN BUCKLE	2	NOS	LT TURN BUCKLE	2
3	HT THIMBLES	2	NOS	LT THIMBLES	2
4	POLE CLAMP(TC6)	2	NOS	POLE CLAMP(TC8)	1
5	HT STAY INSULATOR	2	NOS	STAY INSULATOR	2
6	PREFORM TIE FOR STAY WIRE 7/8 SWG	8	NOS	PREFORM TIE FOR STAY WIRE 7/12 SWG	8
7	7/8" SWG STAY WIRE	24	M	7/12" SWG STAY WIRE	20
8	HT EYE BOLT	0	NOS	LT EYE BOLT	0

CONSTRUCTION STANDARDS **HT AND LT – DOUBLE STAY**	**NEPAL ELECTRICITY AUTHORITY**

TYPE C



NOTE:

1. REFER CSG-M1 & CSG-M2 FOR PSC & TTSP POLE RESPECTIVELY FOR B/M.
2. SPAN OF STAY SHALL BE LIMITED TO A MAXIMUM LENGTH OF 50 METERS.
3. REFER FOR CONSTRUCTION STANDARD, SECTION IX-2D.

CSG-10	CONSTRUCTION STANDARDS STAYS AND ANCHORS	NEPAL ELECTRICITY AUTHORITY

NOTES

A. PLOT APPROXIMATE GROUND LINE PROFILE UNDER PROPOSED SAY.

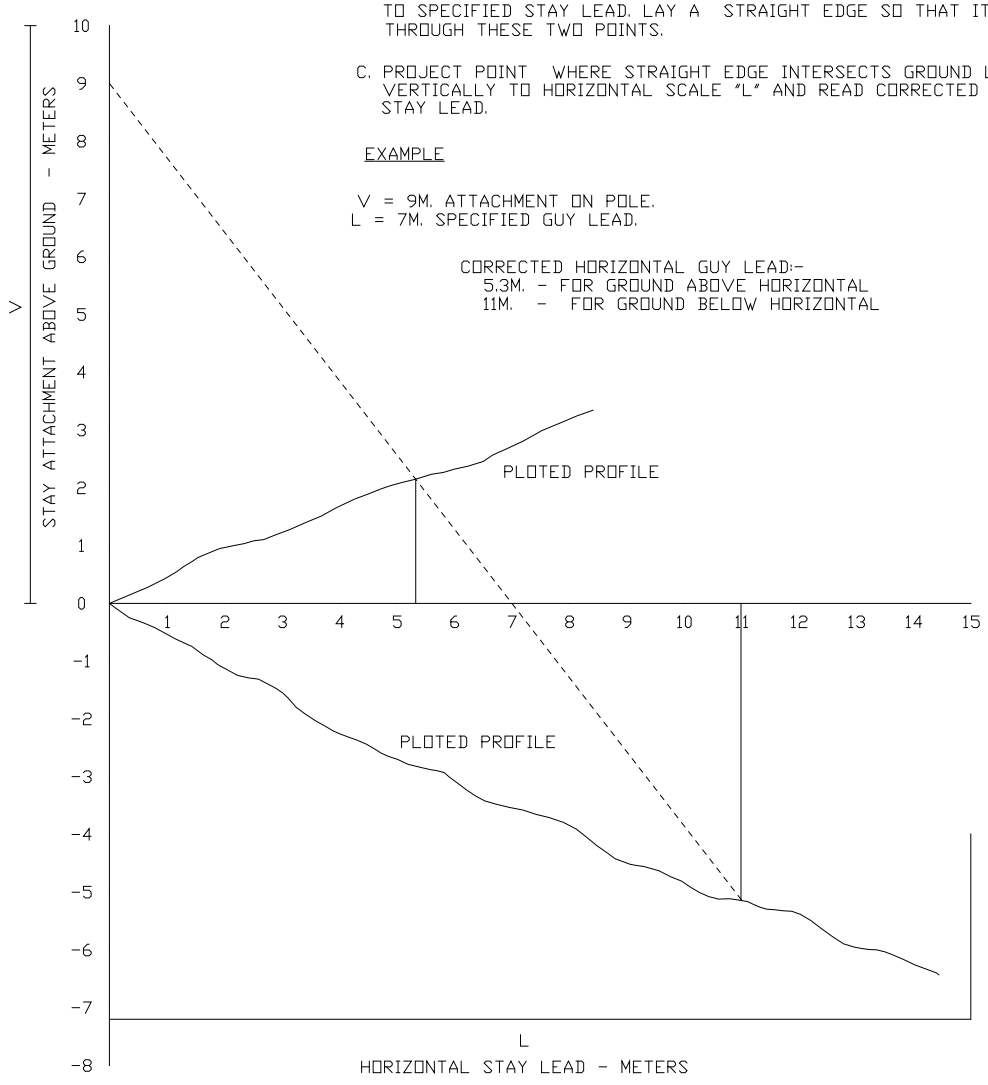
B. SELECT A POINT ON VERTICAL SCALE "V" CORESPONDING TO GUY ATTACHMENT ON POLE , SELECT A POINT ON HORIZONTAL SCALE "L" CORESPONDING TO SPECIFIED STAY LEAD. LAY A STRAIGHT EDGE SO THAT IT PASSES THROUGH THESE TWO POINTS.

C. PROJECT POINT WHERE STRAIGHT EDGE INTERSECTS GROUND LINE PROFILE VERTICALLY TO HORIZONTAL SCALE "L" AND READ CORRECTED HORIZONTAL STAY LEAD.

EXAMPLE

V = 9M. ATTACHMENT ON POLE.
L = 7M. SPECIFIED GUY LEAD.

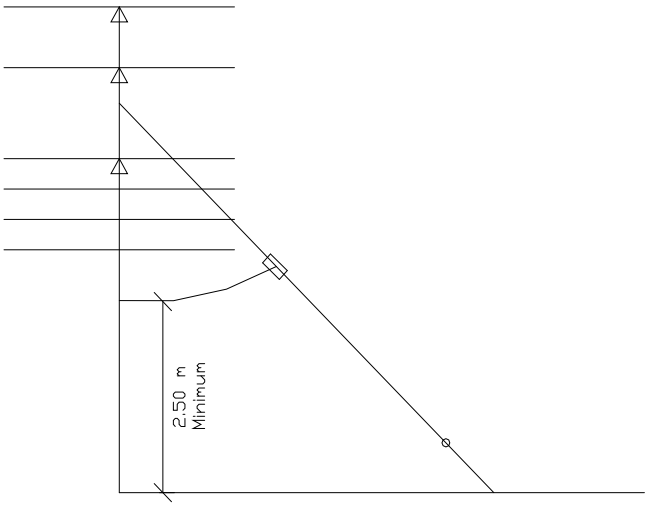
CORRECTED HORIZONTAL GUY LEAD:-
5.3M. - FOR GROUND ABOVE HORIZONTAL
11M. - FOR GROUND BELOW HORIZONTAL

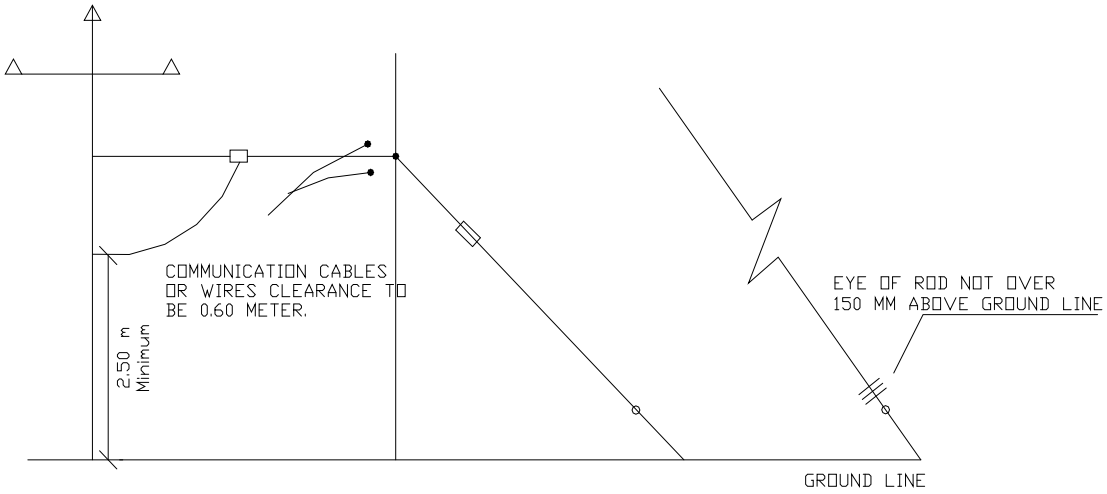


CSG-11	CONSTRUCTION STANDARDS STAYS AND ANCHORS	NEPAL ELECTRICITY AUTHORITY

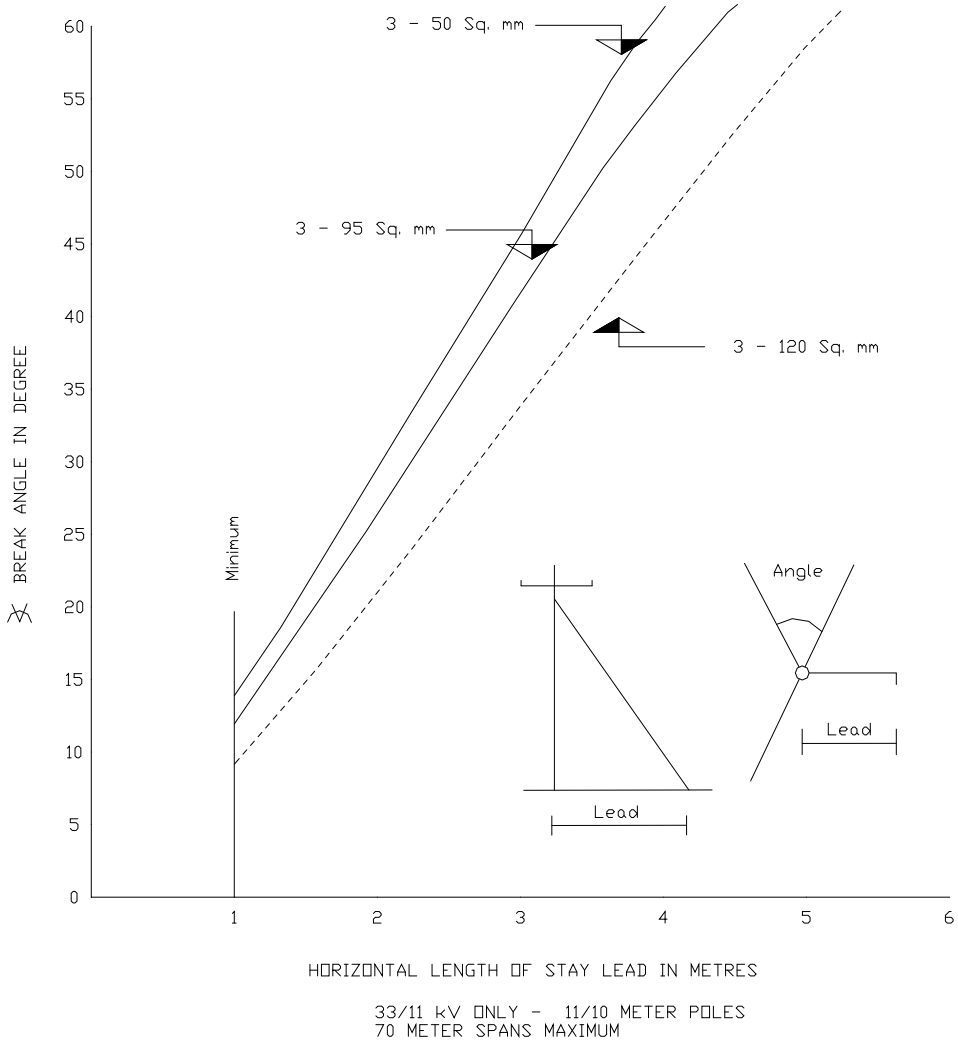
S.No.	MATERIAL (HT-STAY)	QTY.	UNIT	MATERIAL (LT-STAY)	QTY
1	HT STAY SET (600 x 600 MM PLATE AND ROD)	1	NOS	LT STAY SET (300 X 300 MM PLATE AND ROD)	1
2	HT TURN BUCKLE	2	NOS	LT TURN BUCKLE	2
3	HT THIMBLES	1	NOS	LT THIMBLES	1
4	POLE CLAMP(TC6)	1	NOS	POLE CLAMP(TC8)	1
5	POLE CLAMP(TC8)	1	NOS		
6	HT STAY INSULATOR	2	NOS	STAY INSULATOR	2
7	PREFORM TIE FOR STAY WIRE 7/8 SWG	8	NOS	PREFORM TIE FOR STAY WIRE 7/12 SWG	8
8	7/8" SWG STAY WIRE	25	M	7/12" SWG STAY WIRE	20
9	HT EYE BOLT	0	NOS	LT EYE BOLT	0
10	POLE 11M	1	NOS	POLE 9M	1

CONSTRUCTION STANDARDS **HT AND LT – FLYING STAY**	**NEPAL ELECTRICITY AUTHORITY**

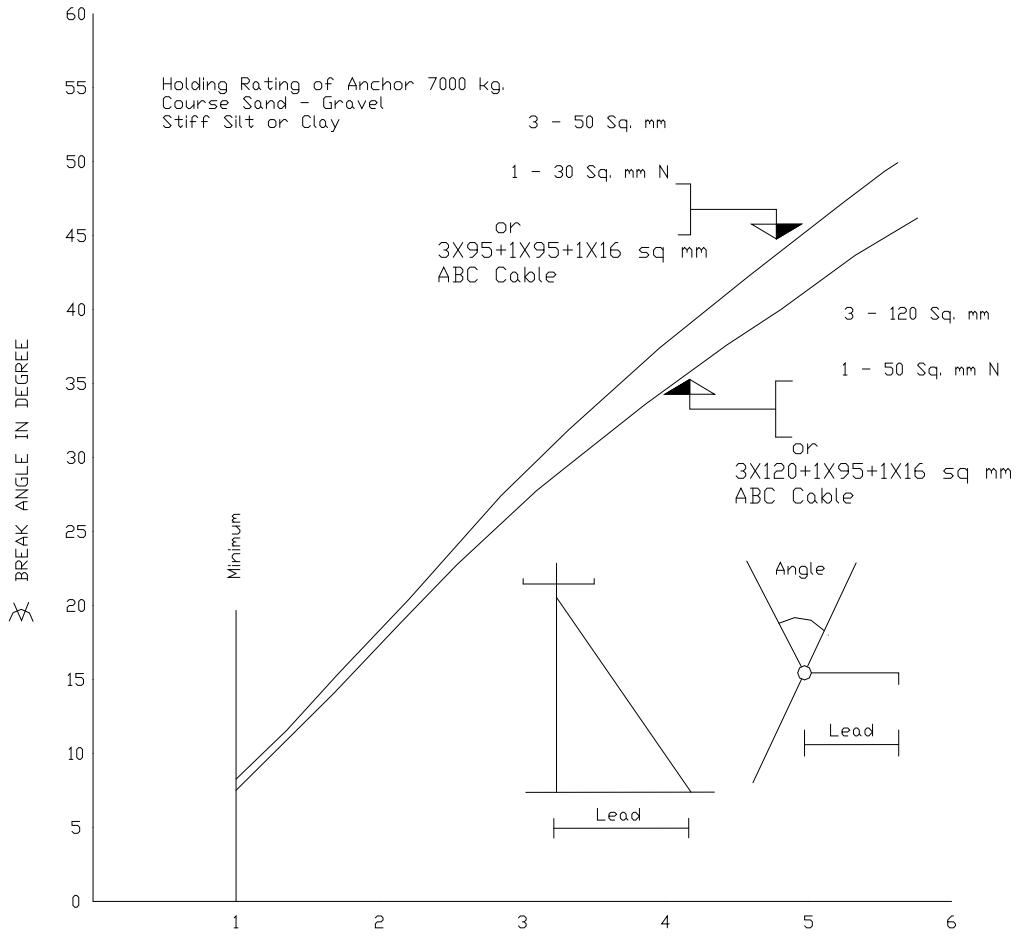




CSG-12	CONSTRUCTION STANDARDS STAYS AND ANCHORS	NEPAL ELECTRICITY AUTHORITY

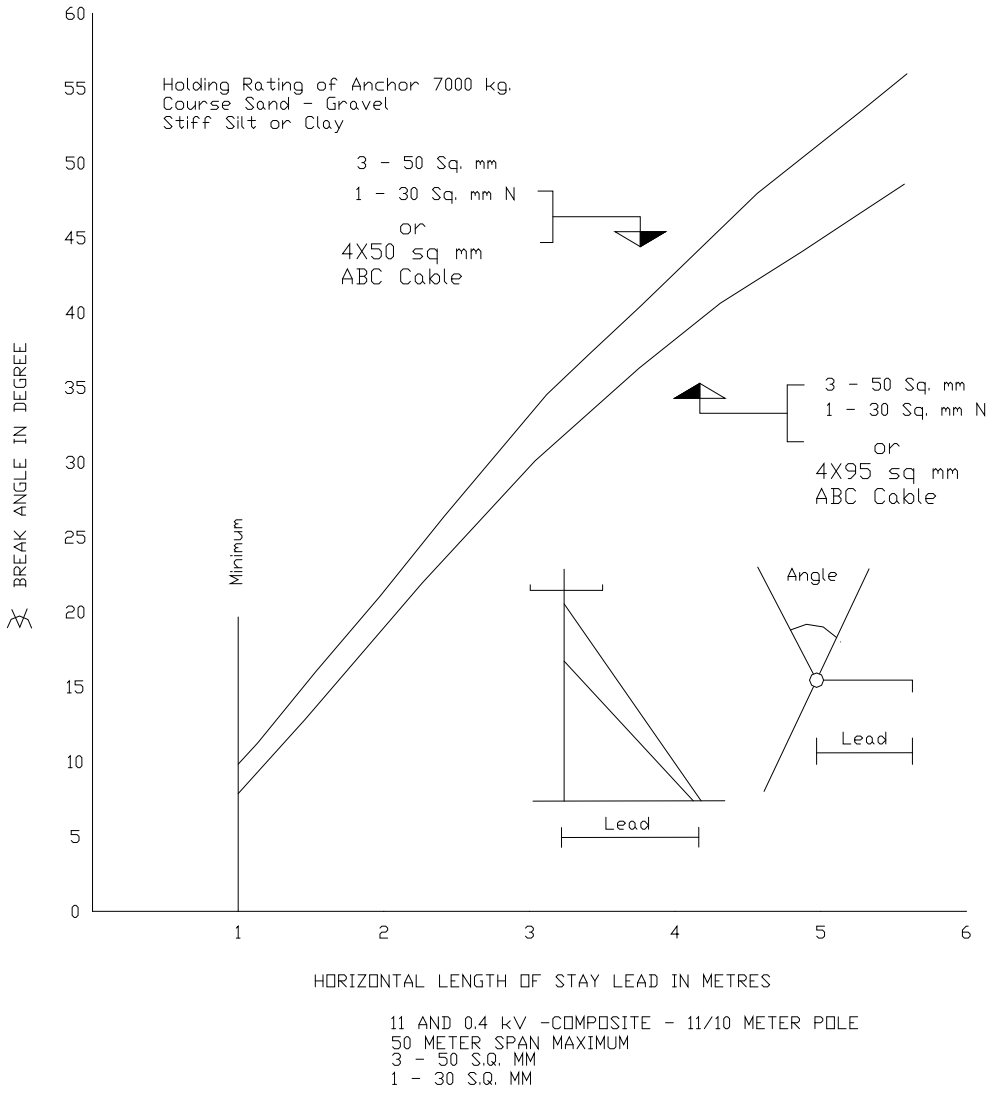


CSG-13	CONSTRUCTION STANDARDS MINIMUM LEAD FOR SIDE ANGLE STAYS	NEPAL ELECTRICITY AUTHORITY



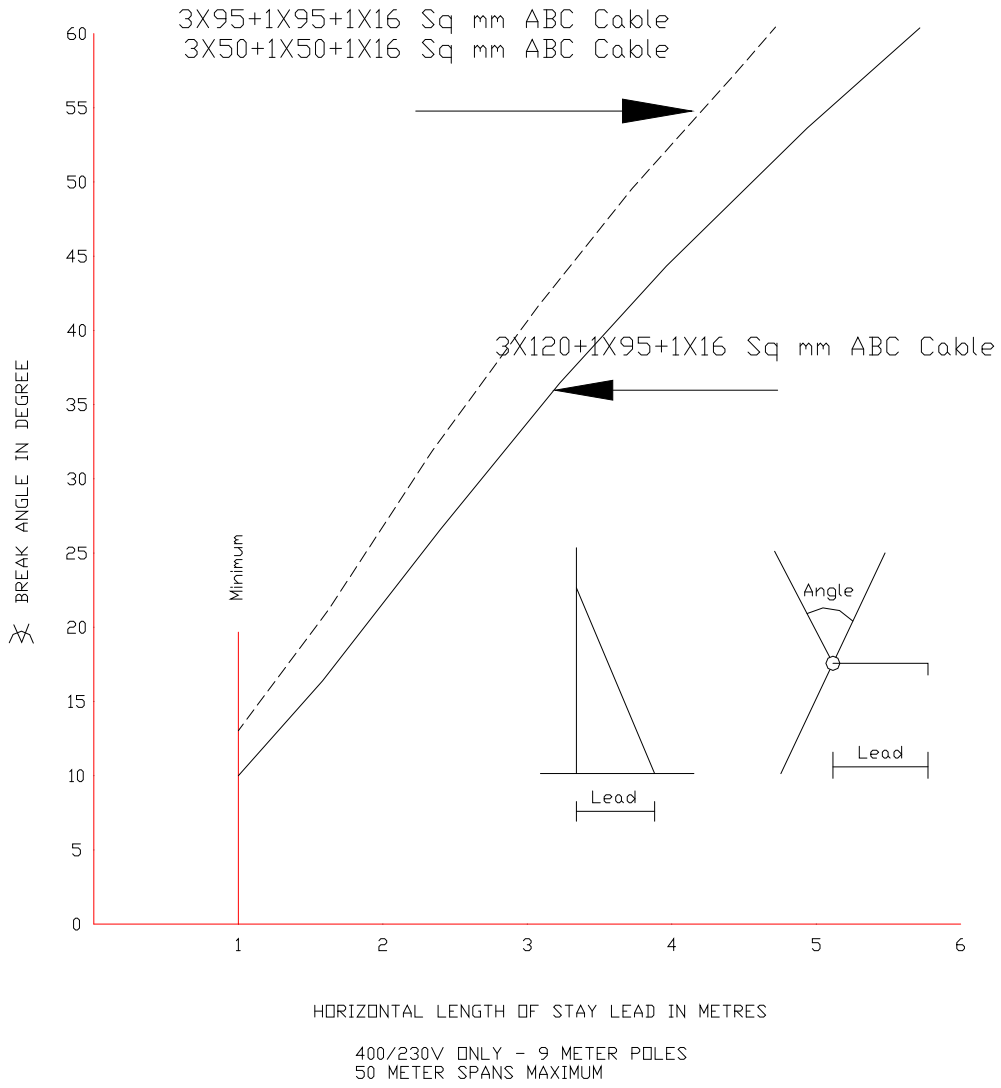
11 AND 0.4 - COMPOSITE - 11/10 METER POLE
50 METER SPAN MAXIMUM
3 - 120 S.Q. MM

CSG-14	CONSTRUCTION STANDARDS MINIMUM LEAD FOR SIDE ANGLE STAYS	NEPAL ELECTRICITY AUTHORITY

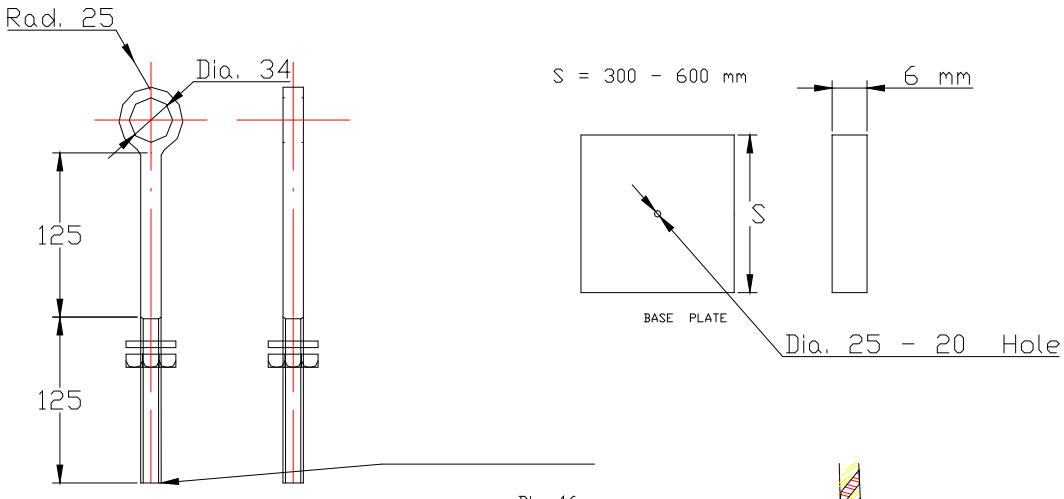


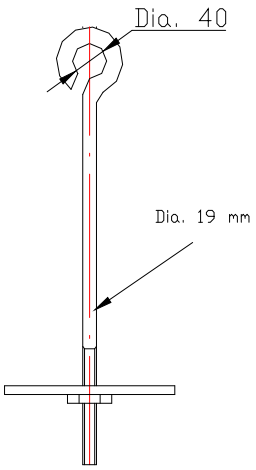
11 AND 0.4 kV -COMPOSITE - 11/10 METER POLE
50 METER SPAN MAXIMUM
3 - 50 S.Q. MM
1 - 30 S.Q. MM

CSG-15	CONSTRUCTION STANDARDS MINIMUM LEAD FOR SIDE ANGLE STAYS	NEPAL ELECTRICITY AUTHORITY



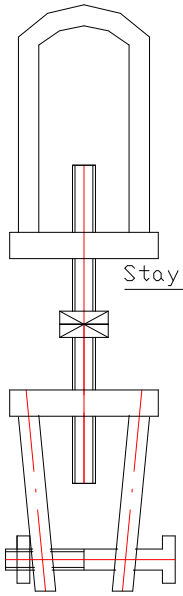
CSG-16	CONSTRUCTION STANDARDS MINIMUM LEAD FOR SIDE ANGLE STAYS	NEPAL ELECTRICITY AUTHORITY



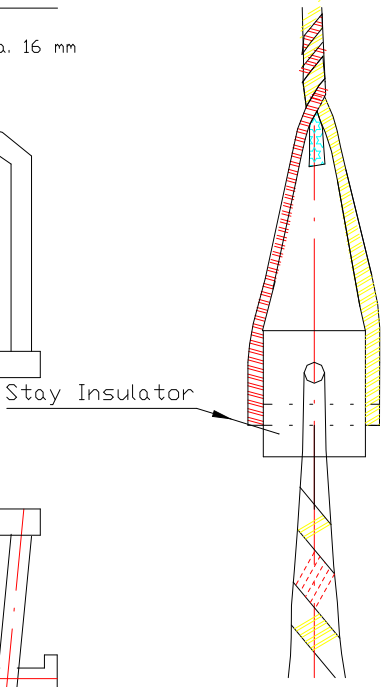


STAY ROD

S. N.	Description	Unit	HT Stay	LT Stay
1	Length of Stay Rod	mm	2440	1800
2	Diameter of Stay Rod	mm	19	16
3	Length of threaded portion	mm	300	

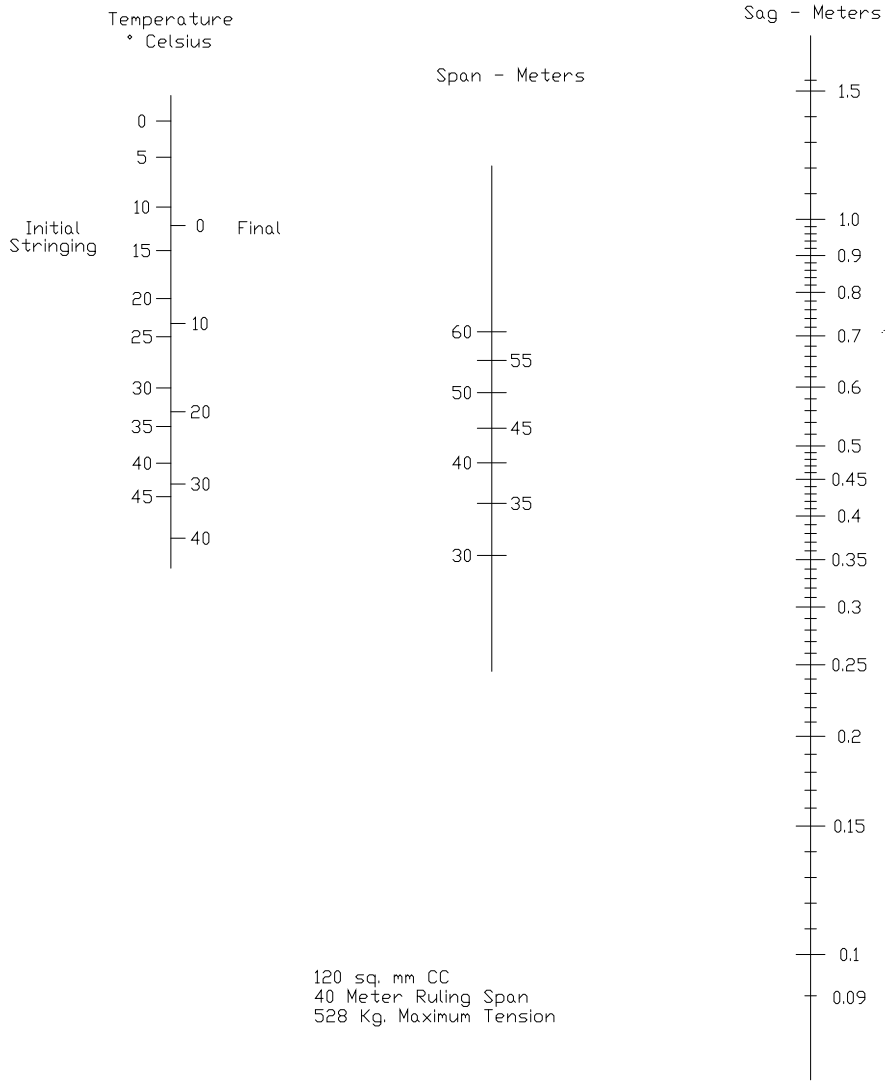


TURN BUCKLE

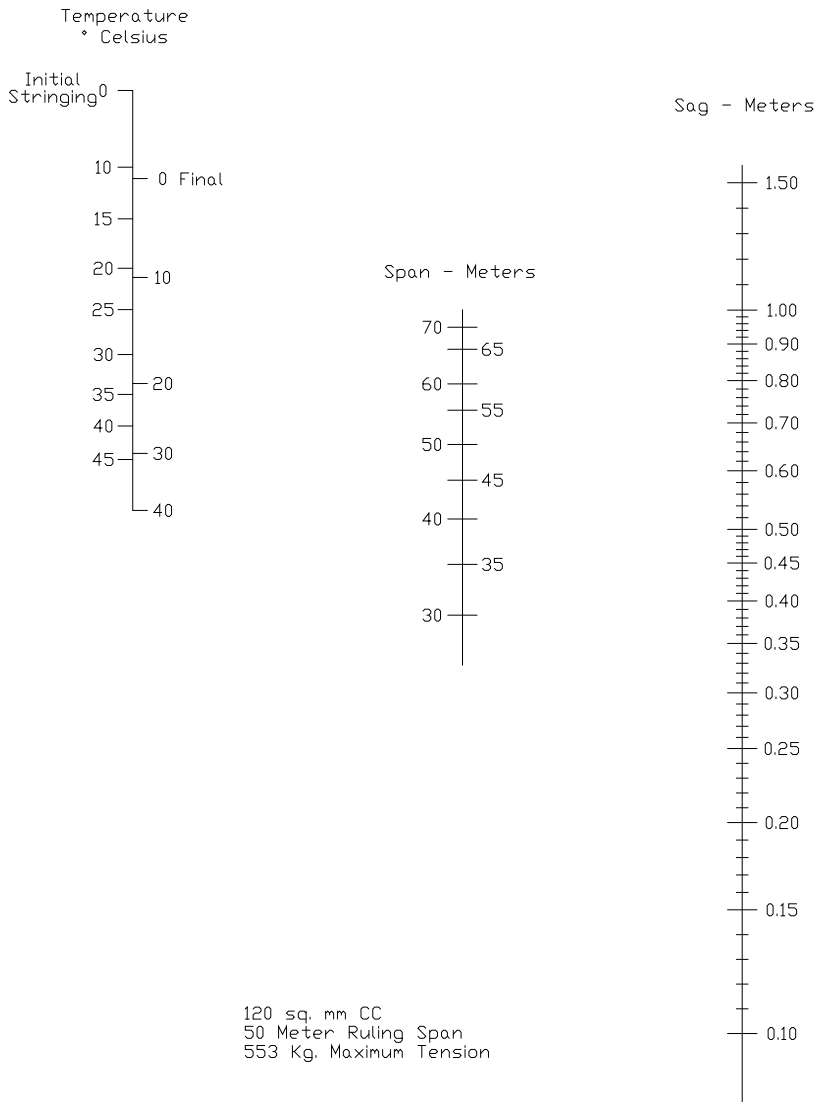


PREFORMED WIRE ASSEMBLY WITH STAY INSULATOR

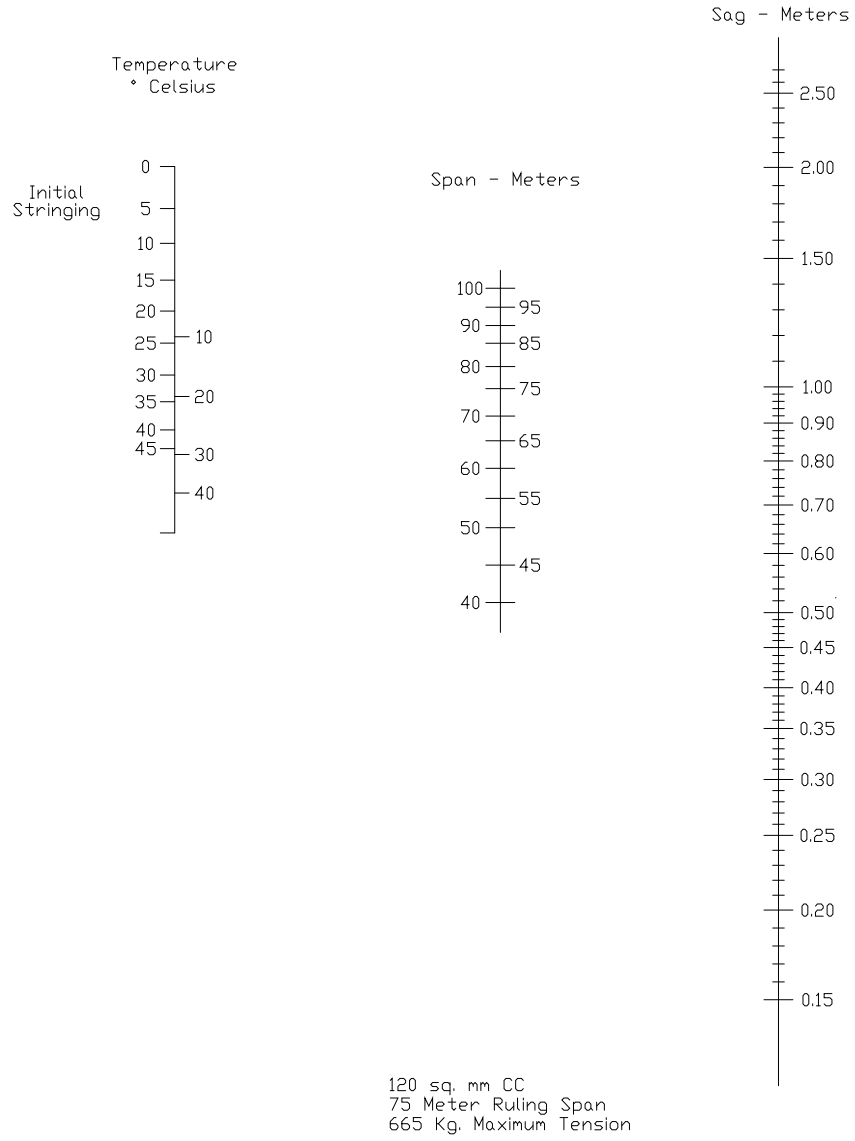
CSG-17	CONSTRUCTION STANDARDS Hardware for Stay Set	NEPAL ELECTRICITY AUTHORITY



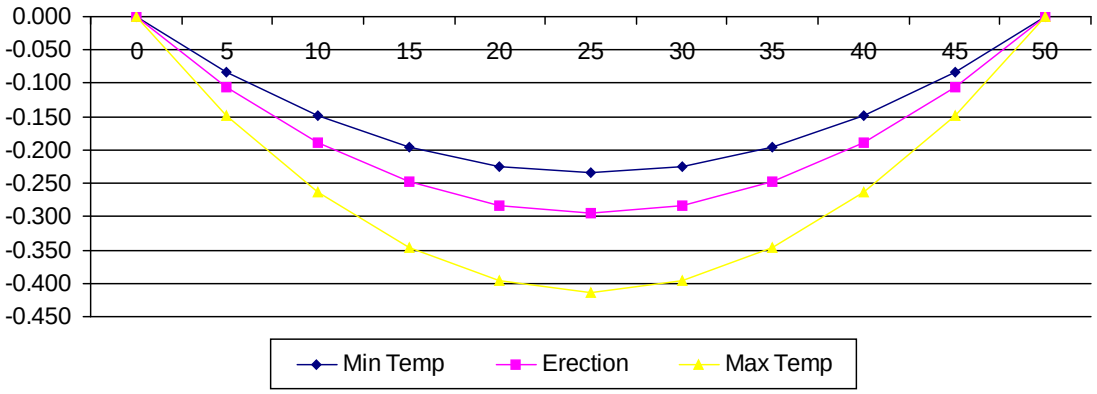
CSG-18	CONSTRUCTION STANDARDS SAG CHART 120 SQ.MM CC	NEPAL ELECTRICITY AUTHORITY



CSG-19	CONSTRUCTION STANDARDS SAG CHART 120 SQ.MM CC	NEPAL ELECTRICITY AUTHORITY



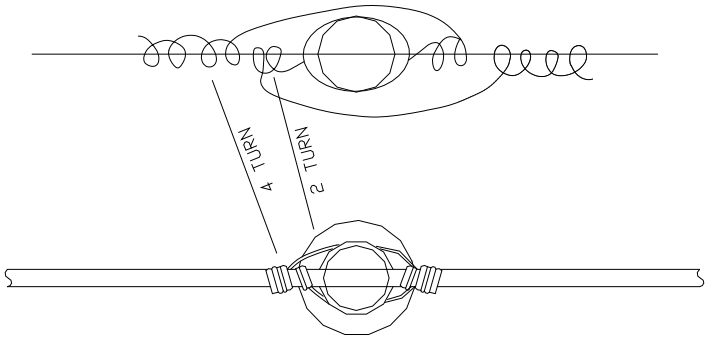
CSG-20	CONSTRUCTION STANDARDS SAG CHART 120 SQ.MM CC	NEPAL ELECTRICITY AUTHORITY



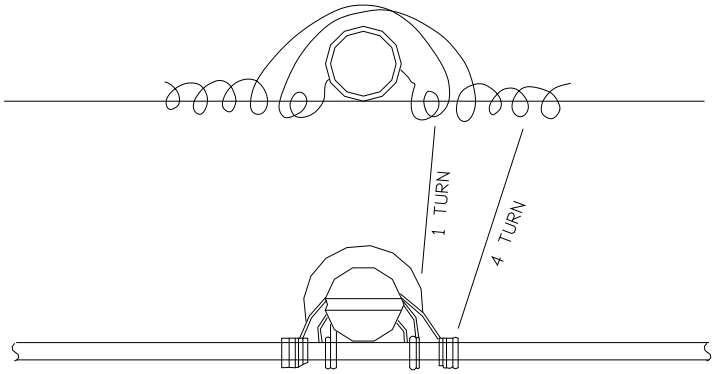
CSG-28	**CONSTRUCTION STANDARDS** **ABC-SAG CHART 95 SQ MM**	**NEPAL ELECTRICITY AUTHORITY** **DISTRIBUTION SYSTEM REHABILITATION PROJECT**

JUMPER TIES

TOP GROVE



SIDE GROOV

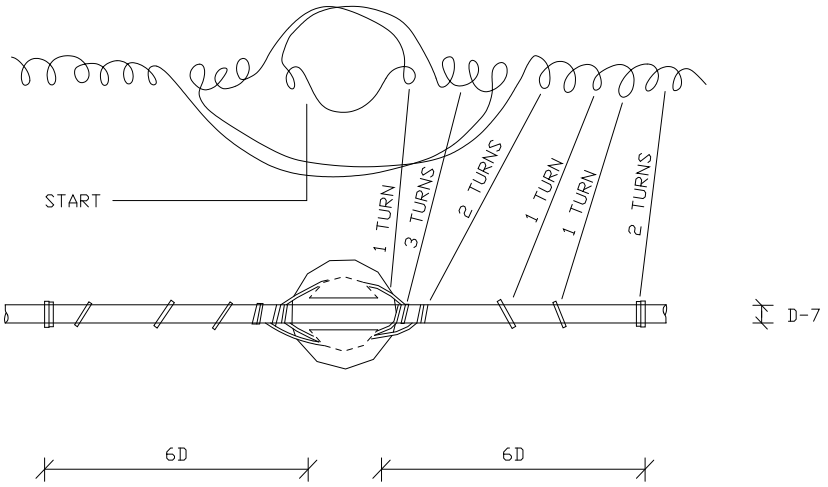


NOTES

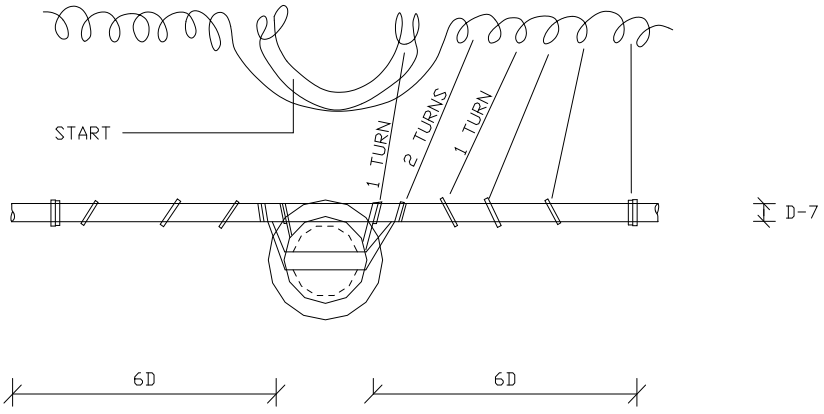
1. TIE WIRE ASSEMBLY SHOULD BE AS TIGHT AS CAN BE WRAPPED.
2. TURNS MAY BE IN EITHER DIRECTION, AS LONG AS ONE-HALF THE TURNS OPPOSE THE OTHER HALF TO PREVENT LOOSENING OF THE TIE.
3. USE ONLY FOR SECURING JUMPERS ON STRUCTURES.

CSG-29	CONSTRUCTION STANDARDS INSULATOR TIES	NEPAL ELECTRICITY AUTHORITY

TOP GROVE

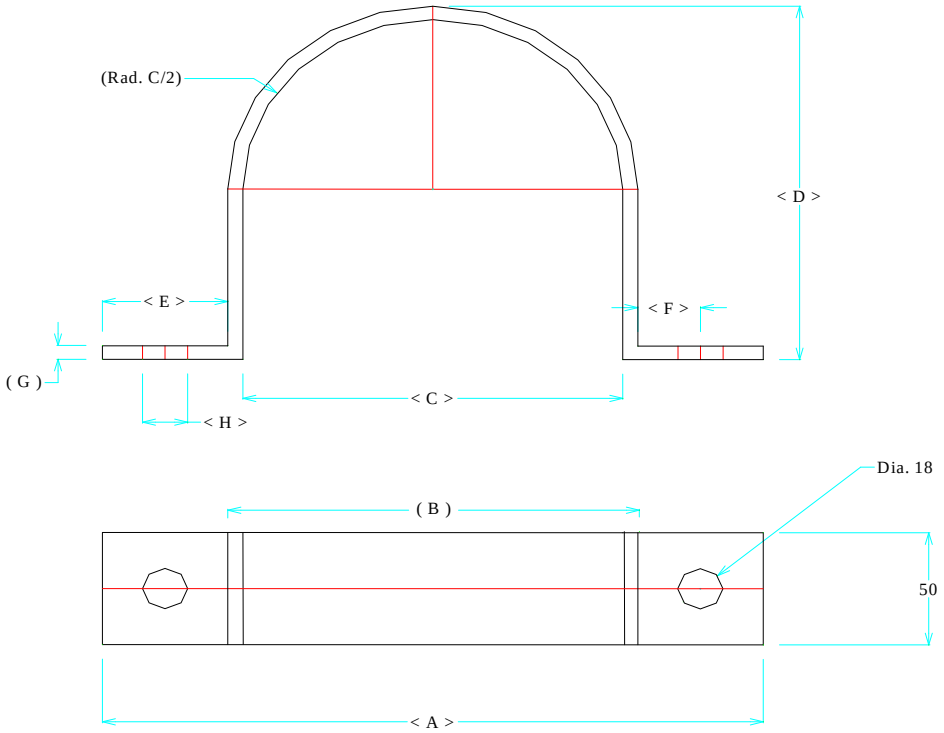


SIDE GROVE



NOTE
1. HAND TIES TO BE USED ONLY WHEN PREFORMED TIES NOT AVAILABLE.
2. CLINCH LAST TWO TURNS TIGHT WITH PLIERS.
3. SOFT DRAWN - TIE WIRE, TO BE USED FOR ALL TIES.

CSG-30	CONSTRUCTION STANDARDS INSULATOR TIES	NEPAL ELECTRICITY AUTHORITY

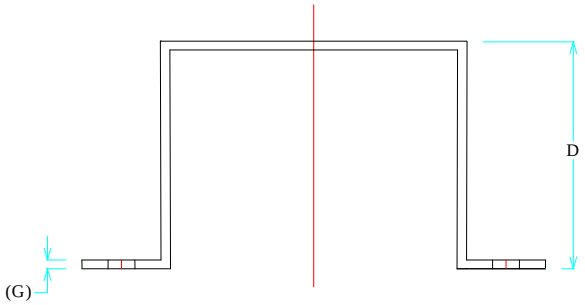


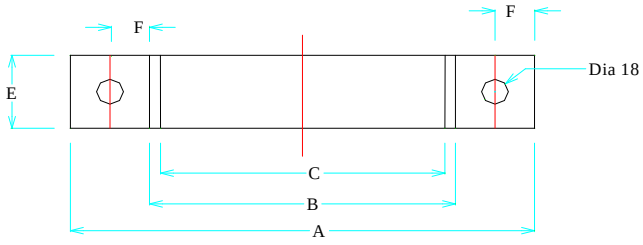
Type	Unit	A	B	C	D	E	F	G	H	Remarks
TC1	mm	285	185	173	179	50	25	6	18	
TC2	mm	297	197	185	191	50	25	6	18	
TC3	mm	307	207	195	201	50	25	6	18	
TC7	mm	334	234	222	228	50	25	6	18	
TC4	mm	347	247	235	241	50	25	6	18	
TC5	mm	397	297	285	291	50	25	6	18	

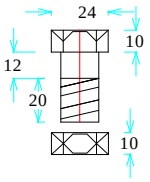
Note :- Dimensions are subject to approval prior to manufacture.

NEPAL ELETRICITY AUTHORITY

All Dimension in mm	Semicircular Clamp for Tubular pole DWG. 1H	Drawn by		
		Checked by		
		Approved by		





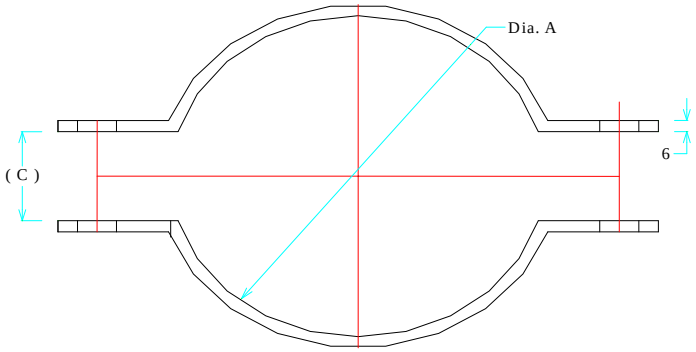


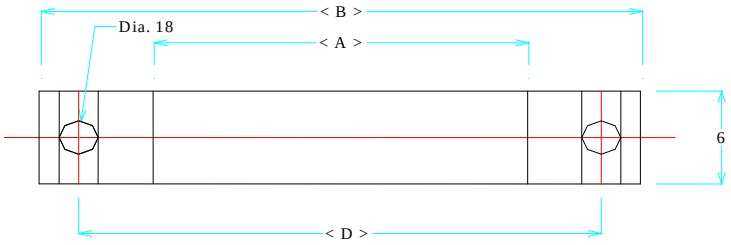
Type	Unit	A	B	C	D	E	F	G	Remarks
PC1	mm	295	195	183	150	50	25	6	
PC2	mm	306	206	194	150	50	25	6	
PC3	mm	262	162	150	204	50	25	6	
PC4	mm	316	216	204	150	50	25	6	
PC5	mm	354	254	242	150	50	25	6	
PC6	mm	402	302	290	150	50	25	6	

Note :- Dimensions are subject to approval prior to manufacture.

NEPAL ELETRICITY AUTHORITY

All Dimension in mm	Rectangular Clamp for PSC pole DWG. 2H	Drawn by		
		Checked by		
		Approved by		





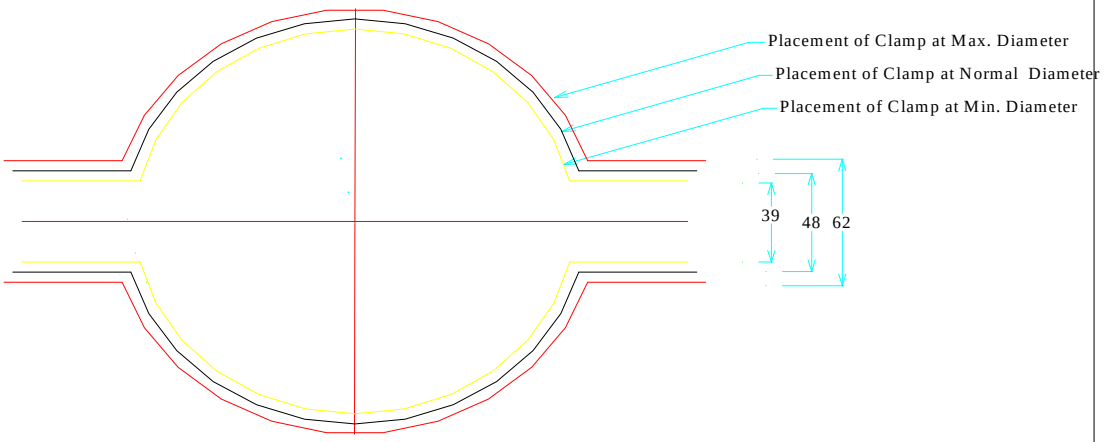
Type	Unit	A	B	C	D	Remarks
TC6	mm	200	302	50	268	
TC8	mm	155	257	50	223	

Note :- Dimensions are subject to approval prior to manufacture.

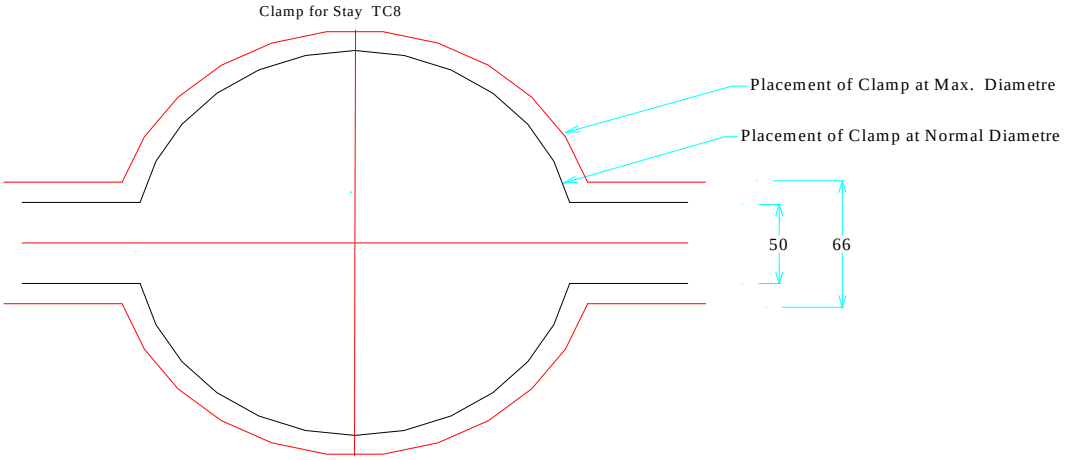
NEPAL ELECTRICITY AUTHORITY

All Dimension in mm	Semicircular Stay Clamp for Tubular Pole DWG. 3H	Drawn by		
		Checked by		
		Approved by		

Clamp for Stay TC6



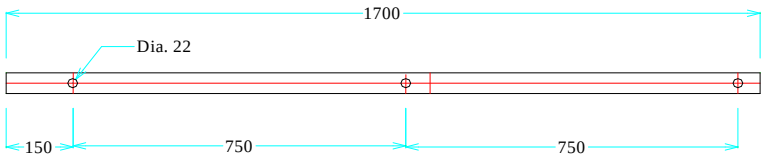
Clamp for Stay TC8



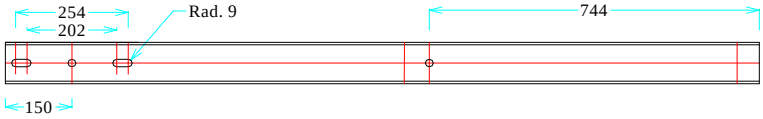
Note :- Dimensions are subject to approval prior to manufacture.

NEPAL ELECTRICITY AUTHORITY				
All Dimension in mm	Placement of Semicircular Stay Clamp for Tubular pole DWG. 4H	Drawn by		
		Checked by		
		Approved by		

Off Set Cross Arm for 11 kV (100 x 50 x 6.4 x 1700 mm)

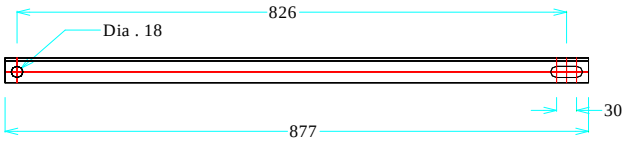


Top View



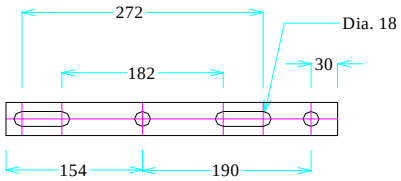
Front View

Bracing Angle For 11kV Off Set
(877 x 40 x 40 x 5 mm)

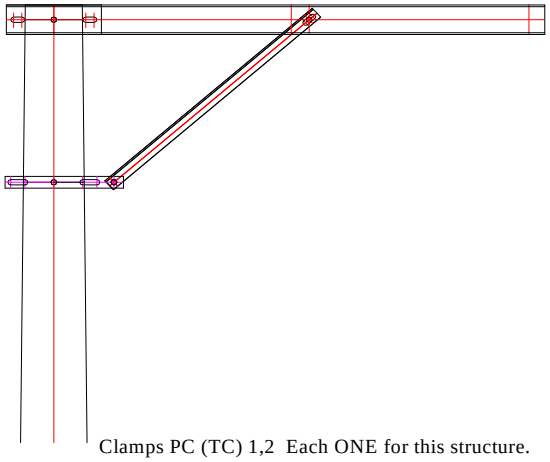


Front View

Flat Brace for 11kV Off Set
(374 x 40 x 6 mm)



Front View

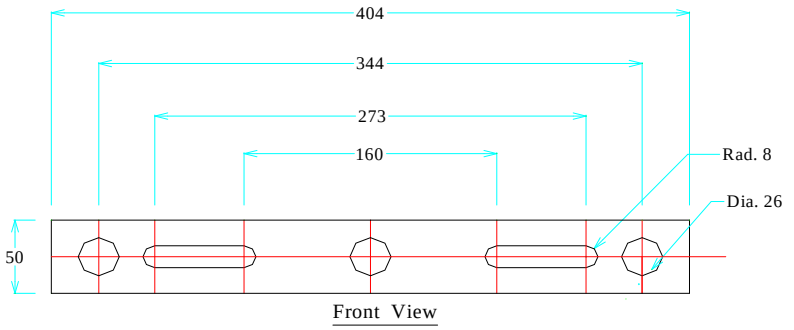


Clamps PC (TC) 1,2 Each ONE for this structure.

Note :- Dimensions are subject to approval prior to manufacture.

NEPAL ELECTRICITY AUTHORITY				
All Dimension in mm	Off Set Cross Arm Assembly for 11 kV DWG. 5H	Drawn by		
		Checked by		
		Approved by		

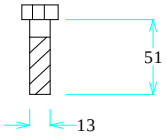
Strap for 33 kV Pin Insulator String.(404 x 50 x 6 mm)



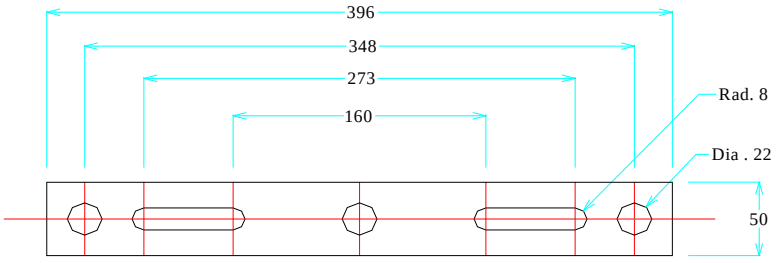
Front View

Top View

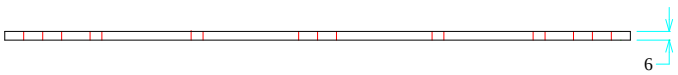
N/B 13 X 51 mm



Strap for 11 kV Pin Insulator String (396 x 50 x 6 mm).

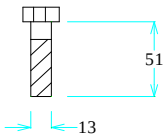


Front View



Top View

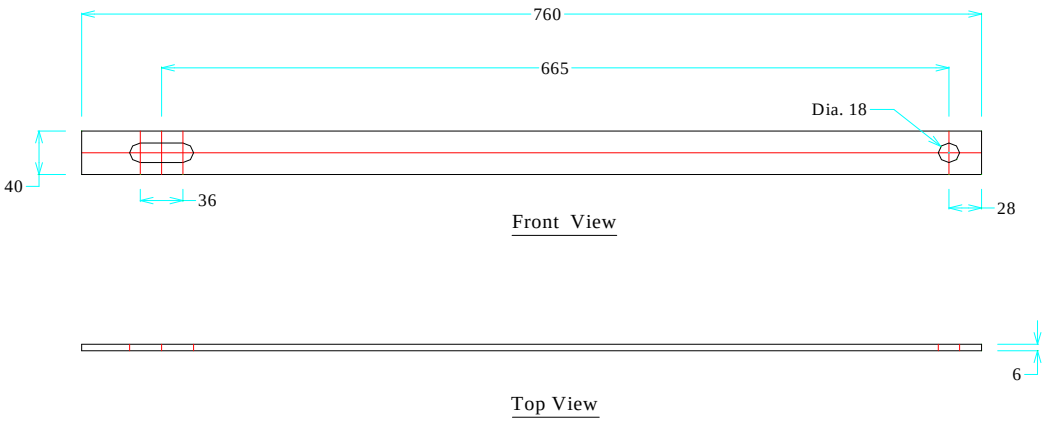
N/B 13 X 51 mm



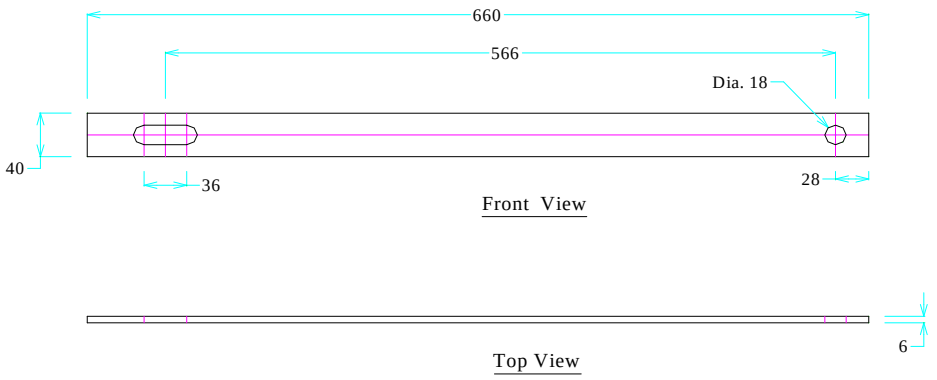
Note :- Dimensions are subject to approval prior to manufacture.

NEPAL ELECTRICITY AUTHORITY				
All Dimension in mm	Strap for Pin Insulator string (11 kV) DWG. 6H	Drawn by		
		Checked by		
		Approved by		

Cross Arm Brace for 33 kV (760 x 40 x 6 mm)



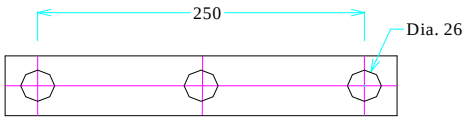
Cross Arm Brace for 11 kV (660 x 40 x 6 mm)



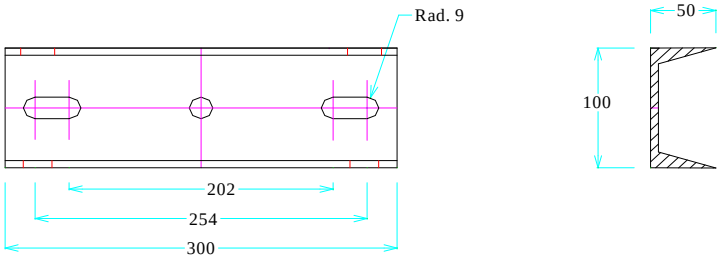
Note :- Dimensions are subject to approval prior to manufacture.

NEPAL ELECTRICITY AUTHORITY				
All Dimension in mm	Cross Arm Brace for 11 kV. DWG. 7H	Drawn by		
		Checked by		
		Approved by		

Cross Arm for 33 kV (300 x100 x 50 x 7.5 mm)

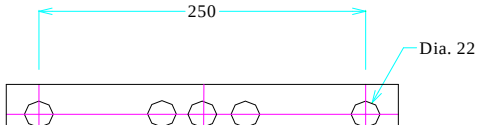


Top View

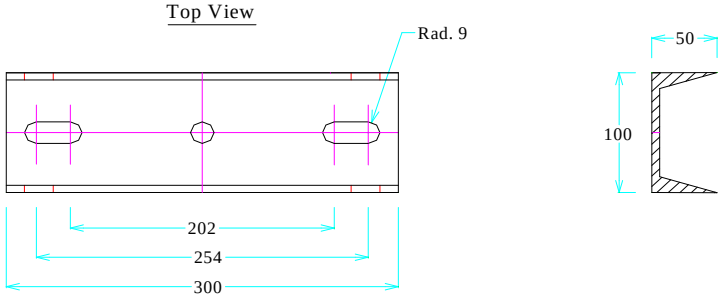


Front View

Cross Arm for 11 kV (300 x 100 x 50 x 6.4 mm)



Top View

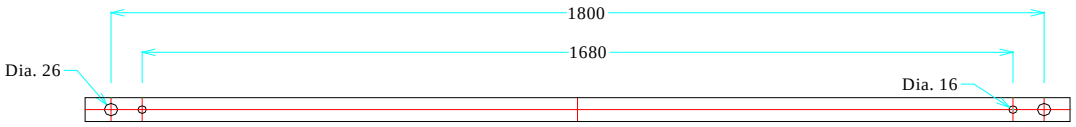


Front View

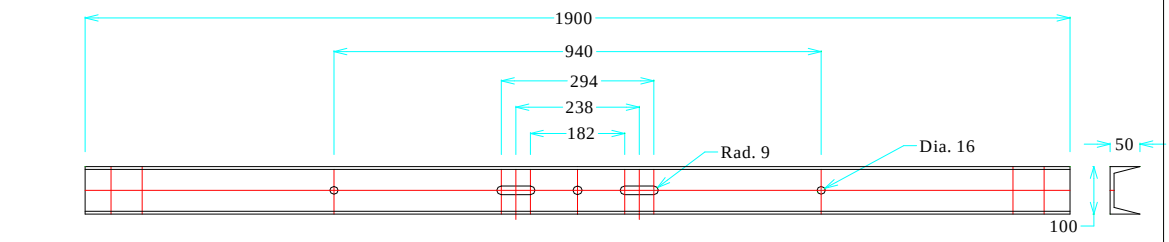
Note :- Dimensions are subject to approval prior to manufacture.

NEPAL ELECTRICITY AUTHORITY				
All Dimension in mm	Cross Arms for 11 kV. DWG. 8H	Drawn by		
		Checked by		
		Approved by		

Cross Arm for 33 kV (1900 x 100 x 50 x 7.5 mm)

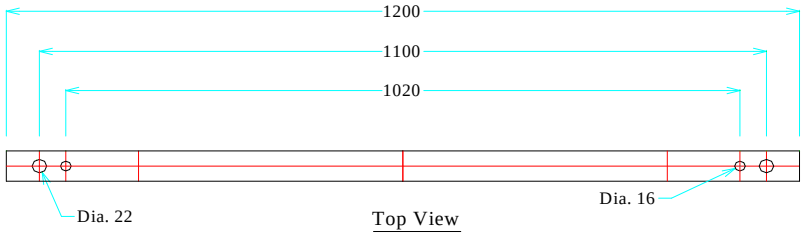


Top View

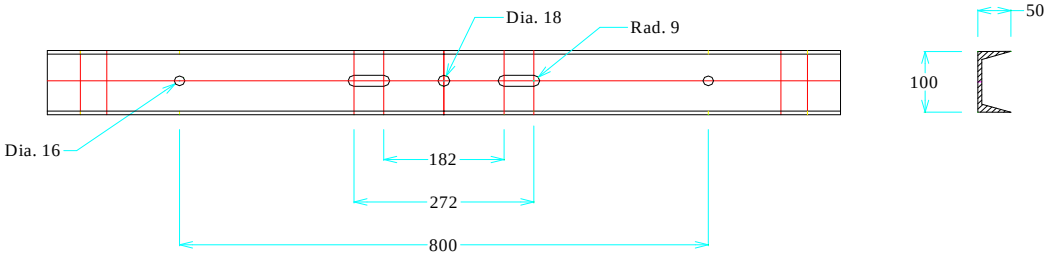


Front View

Cross Arm for 11 kV (1200 x 100 x 50 x 6.4 mm)



Top View

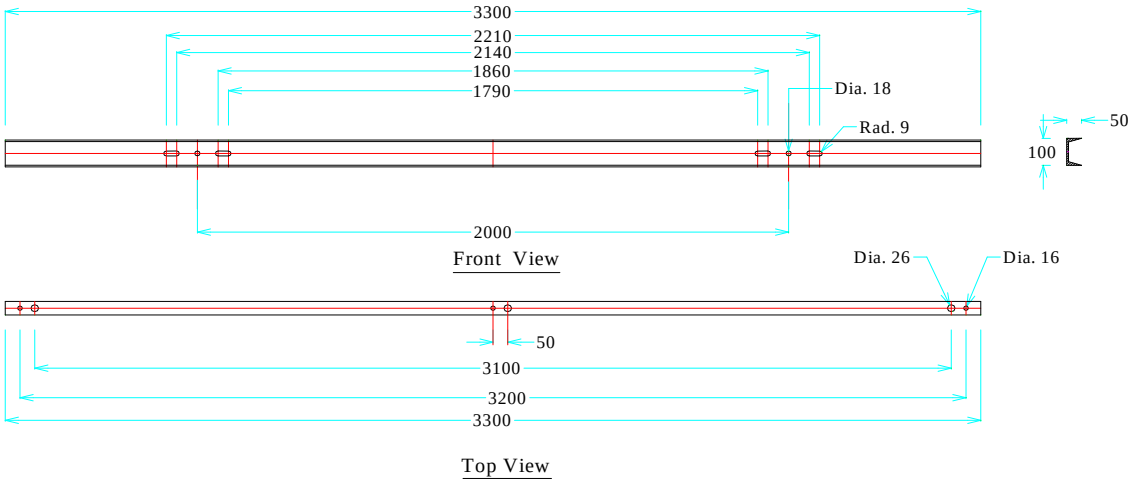


Front View

Note :- Dimensions are subject to approval prior to manufacture.

NEPAL ELECTRICITY AUTHORITY				
All Dimension in mm	Cross Arms for 11 kV. DWG. 9H	Drawn by		
		Checked by		
		Approved by		

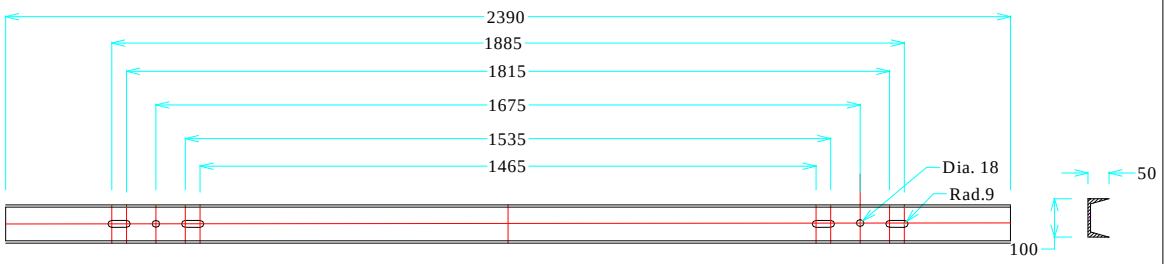
Cross Arm for 33 kV H-Pole (3300 x 100 x 50 x 7.5 mm)



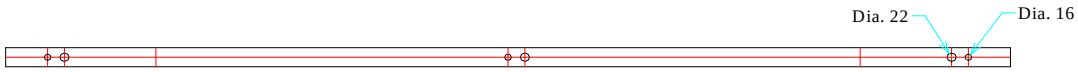
Front View

Top View

Cross Arm for 11 kV H-Pole (2390 x 100 x 50 x 6.4 mm)



Front View

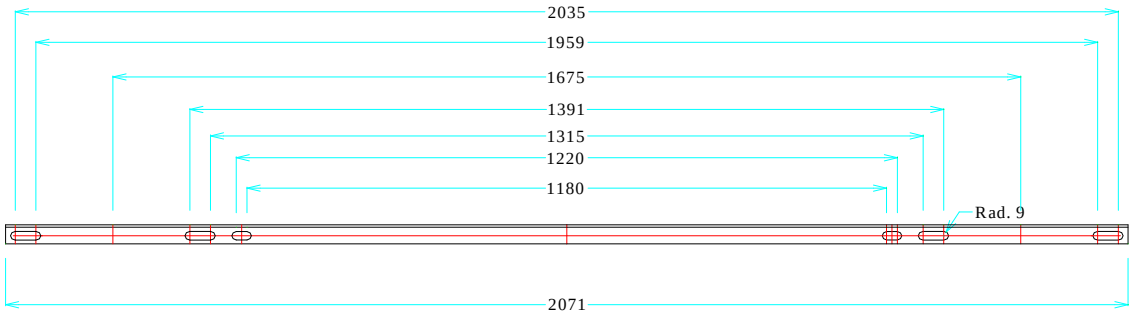


Top View

Note :- Dimensions are subject to approval prior to manufacture.

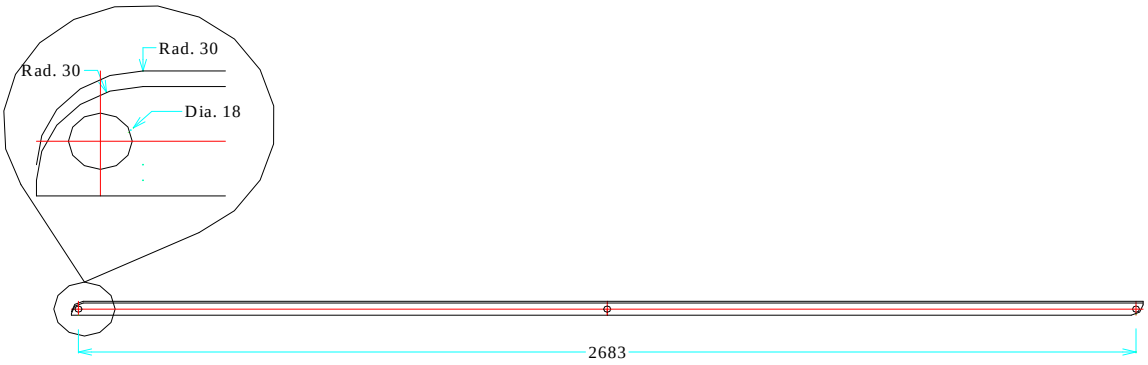
NEPAL ELECTRICITY AUTHORITY				
All Dimension in mm	Cross Arms for 11 kV H - Pole Structure. DWG. 10H	Drawn by		
		Checked by		
		Approved by		

Bracing Angle for 11 kV H-Pole (2071 x 40 x 40 x 5 mm)

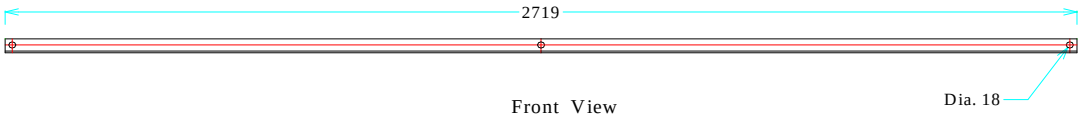


Front View

Bracing Angle for 11 kV H-Pole (2719 x 40 x 40 x 5 mm)



Front View

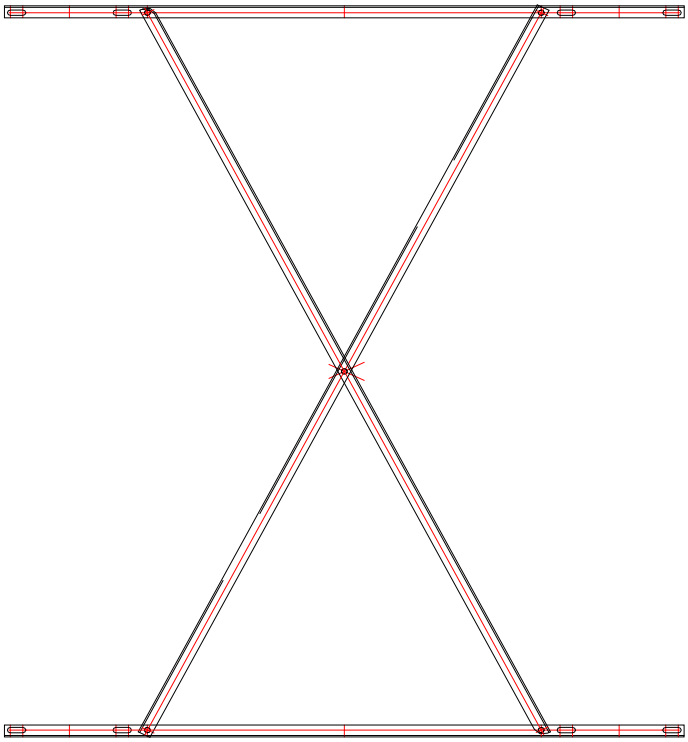


Front View

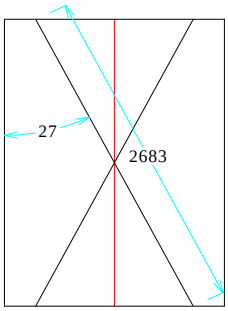
Note :- Dimensions are subject to approval prior to manufacture.

NEPAL ELECTRICITY AUTHORITY				
All Dimension in mm	11 kV Angle Bracing for H - Pole Structure. DWG. 11H	Drawn by		
		Checked by		
		Approved by		

11 kV H- Pole Cross Bracing



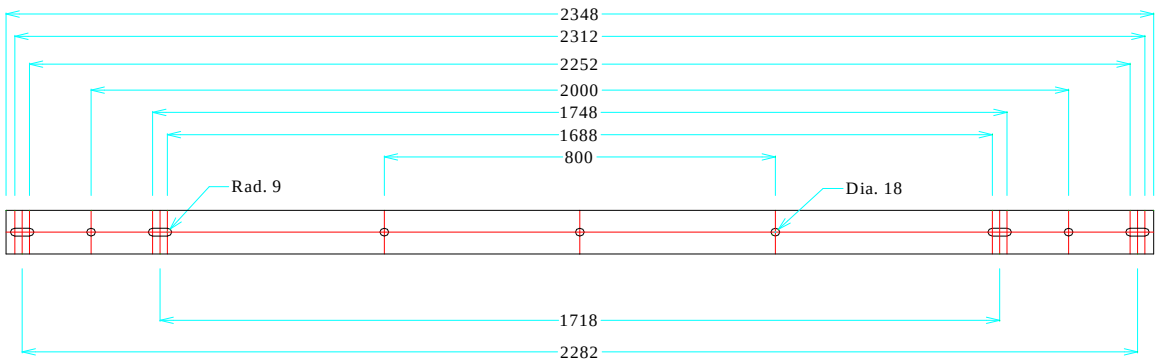
Front View



Note :- Dimensions are subject to approval prior to manufacture.

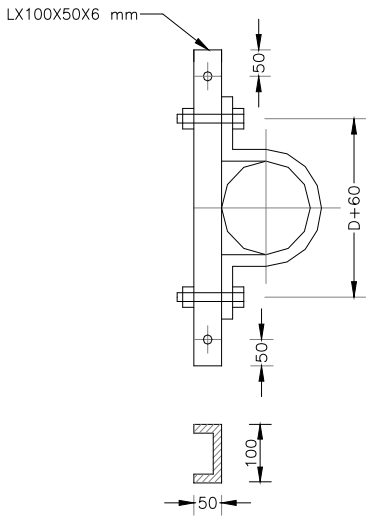
NEPAL ELECTRICITY AUTHORITY				
All Dimension in mm	11 kV Angle Bracing Assembly for H - Pole Structure. DWG. 12H	Drawn by		
		Checked by		
		Approved by		

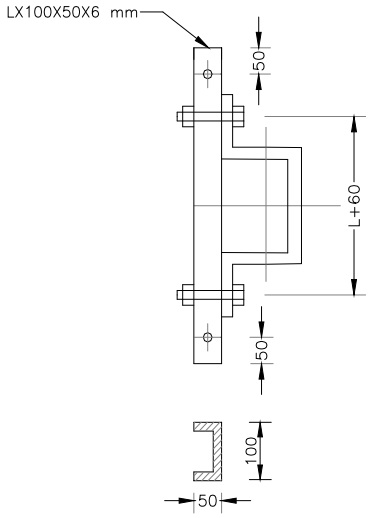
Cross Arm For LA and DO (100 x 50 x 6.4 x 2348 mm)



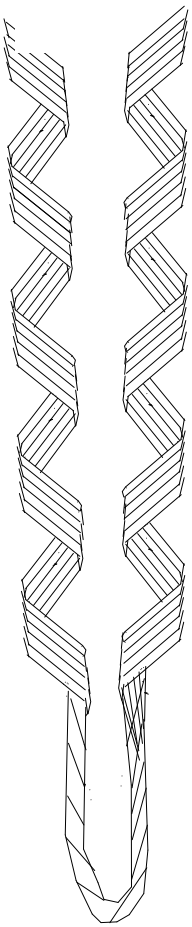
Note :- Dimensions are subject to approval prior to manufacture.

NEPAL ELECTRICITY AUTHORITY				
All Dimension in mm	Cross Arm For LA and DO 100 x 50 x 6.4 x 2348 mm DWG. 15H	Drawn by		
		Checked by		
		Approved by		

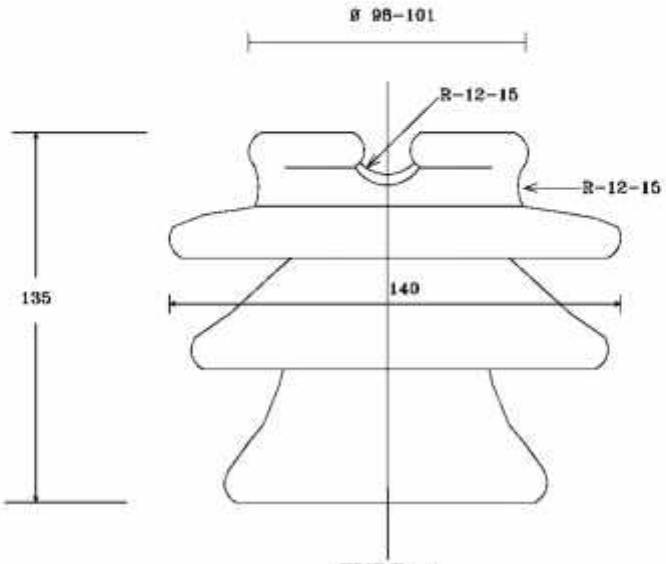




DRAWING NO.	POLE CLAMP	NEPAL ELECTRICITY AUTHORITY



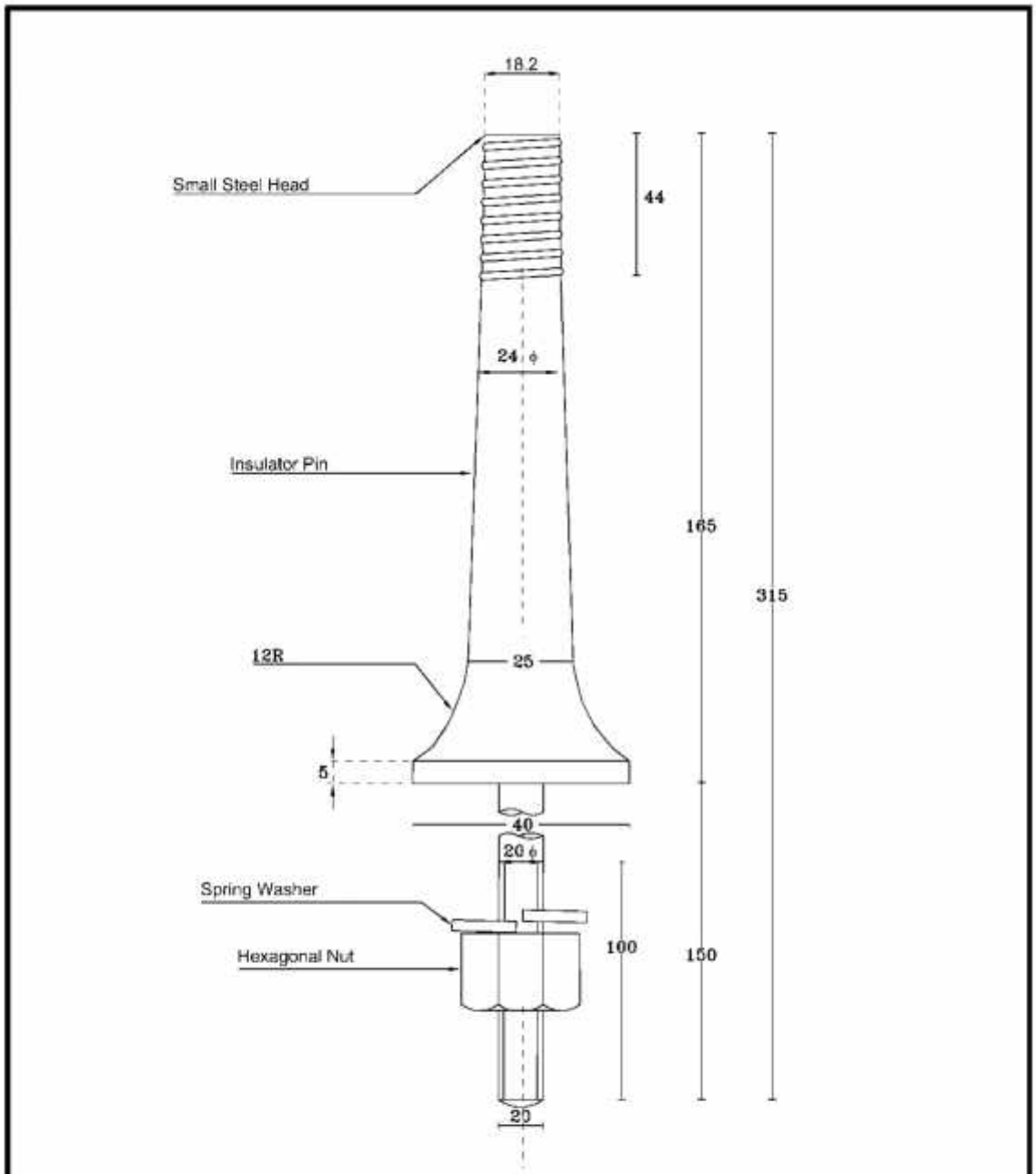
DRAWING NO.	PREFORMED WIRE PRODUCTS	NEPAL ELECTRICITY AUTHORITY



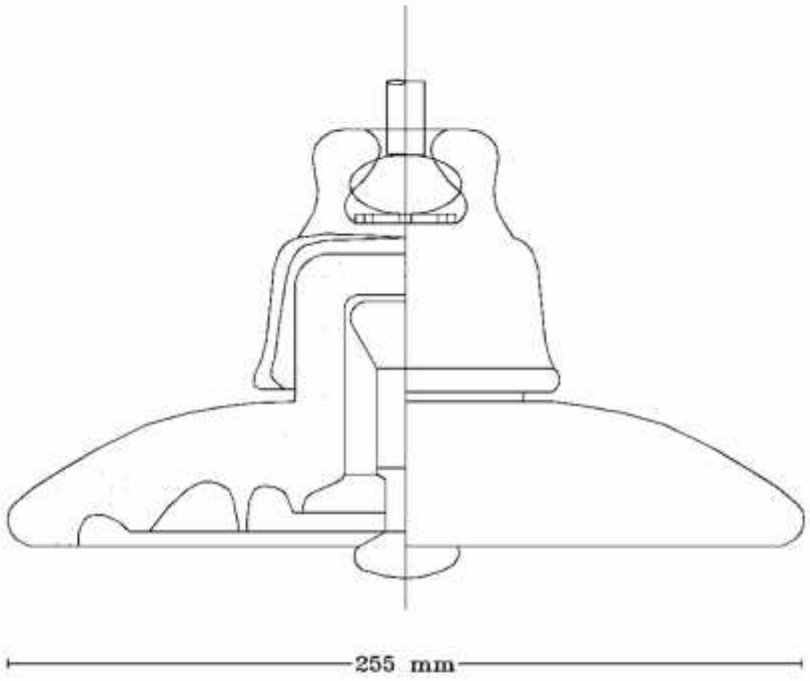
TYPE A

Applicable Standard IS : 731

Drawing		
CS11-LM-01	**11 kV Pin Insulator**	NEPAL ELECTRICITY AUTHORITY

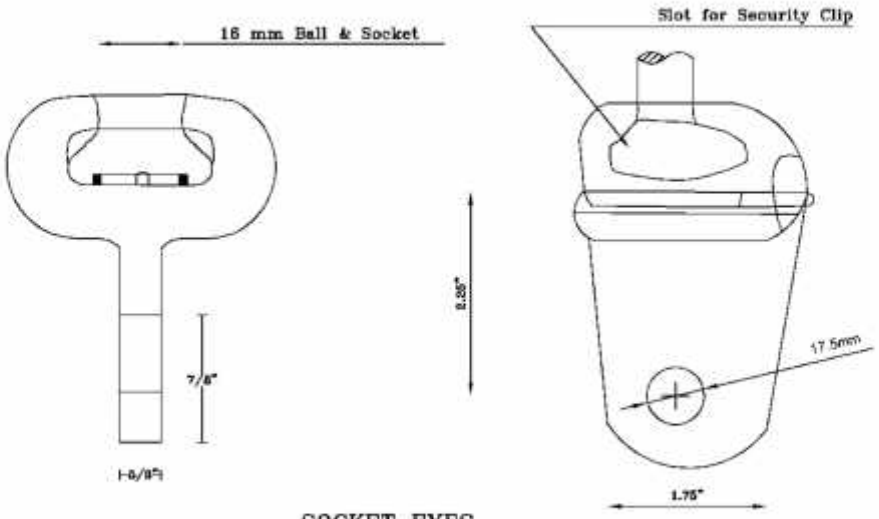


Drawing		
CS11-LM-04	**Insulator Pin**	NEPAL ELECTRICITY AUTHORITY

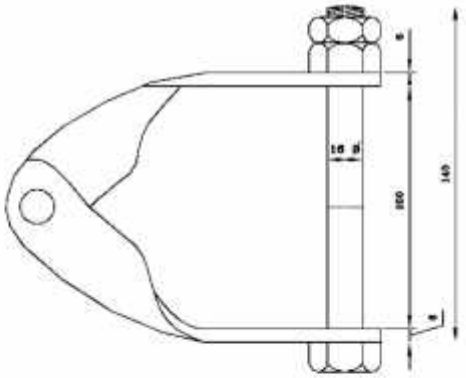


Applicable Standard IS : 731 & IS : 3188

Drawing		
CS11-LM-02	**Disc Insulator**	NEPAL ELECTRICITY AUTHORITY

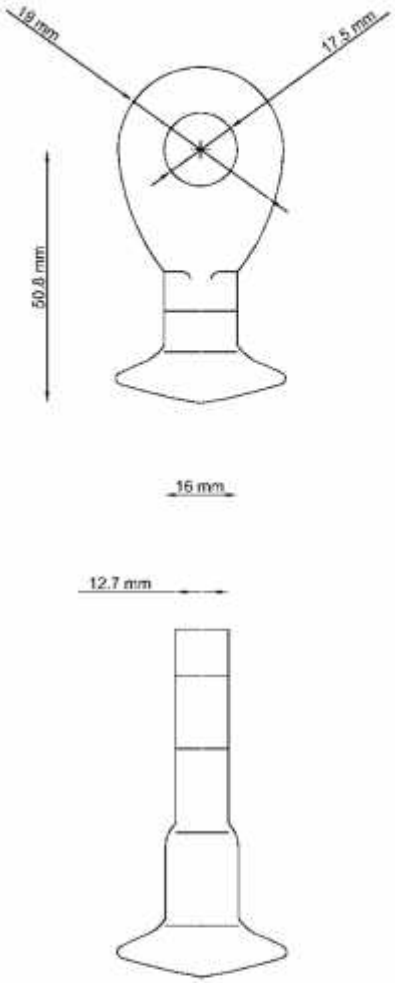


SOCKET EYES



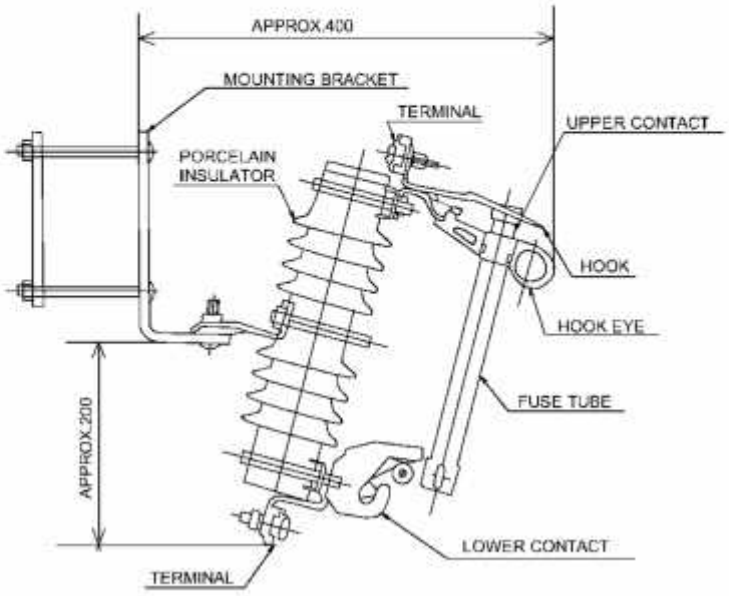
BACK STRAP

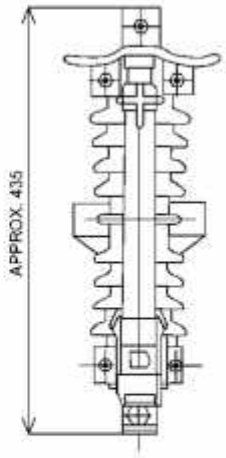
Drawing **CS11-LM-05**	**Hardwares for Tension Set**	NEPAL ELECTRICITY AUTHORITY



BALL EYES

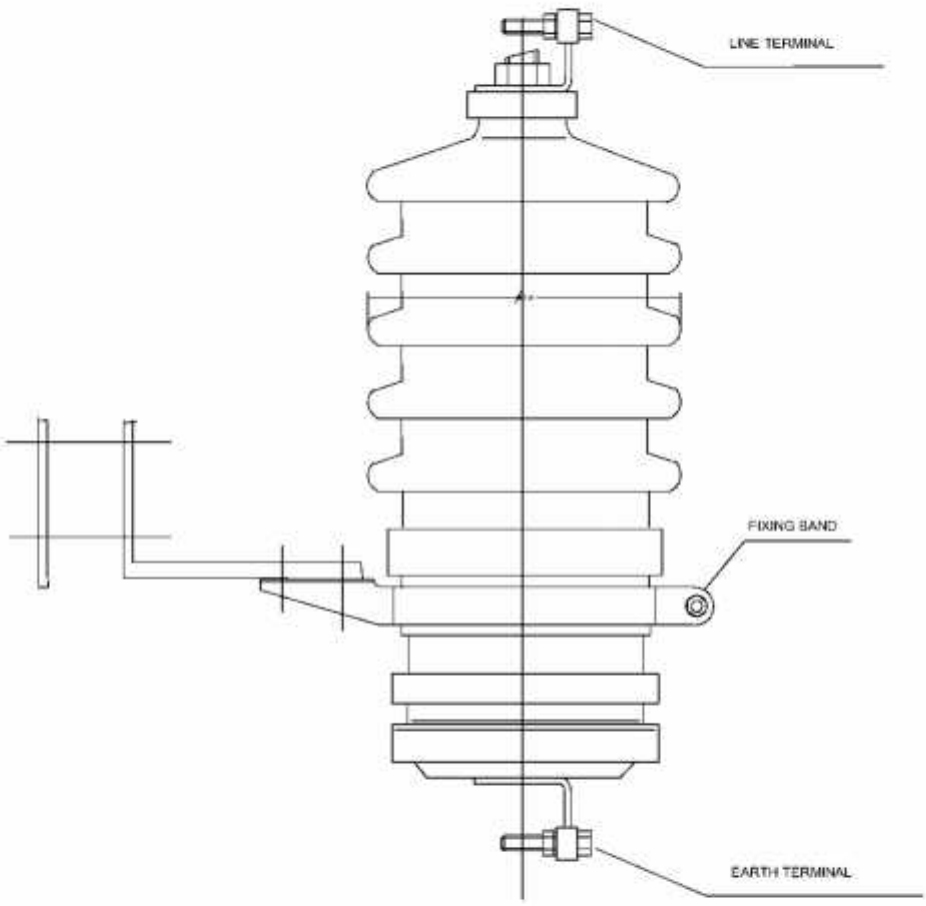
Drawing **CS11-LM-06**	**Hardwares for Tension Set**	NEPAL ELECTRICITY AUTHORITY





Terminal : Bolted Type Suitable for copper wire 8mm Porcelian color : Brown/white

Drawing CS11-LM-11	**Distribution Cut Out**	NEPAL ELECTRICITY AUTHORITY



Drawing CS11-LM-12	**Lightning Arrester**	NEPAL ELECTRICITY AUTHORITY