TENDER DOCUMENT

TENDER No.: NERO/MMD/664/248

FOR

Tender for Construction of Balance works of Lakhisuri (Platoon Level) near BP 2330/M, Devasura (Company Level) near BP 2327/15S, Dursuri (Platoon level) near BP 2327/1RI BOP’s along Indo-Bangladesh border in the state of Mizoram for Ministry of Home Affairs (Pkg.-II).

FOR

Ministry of Home Affairs

VOLUME – II

NOTICE INVITING TENDER

LETTER OF UNDERTAKING

FORM OF TENDER

ADDITIONAL CONDITIONS OF CONTRACT

TECHNICAL SPECIFICATION & DRAWINGS
ENGINEERING PROJECTS (INDIA) LTD.  
(A Govt. of India Enterprise)  

Tender No. NERO/MMD/664/248               Dated: 25.04.2017

NOTICE INVITING TENDER

Tender for Construction of Balance works of Lakhisuri (Platoon Level) near BP 2330/M, Devasura (Company Level) near BP 2327/15S, Dursuri (Platoon level) near BP 2327/1RI BOP’s along Indo-Bangladesh border in the state of Mizoram for Ministry of Home Affairs (Pkg.-II).

1.0 Engineering Projects (India) Ltd. (A. Govt. of India Enterprises) invites sealed percentage rate tenders in two bids (Techno commercial- Envelope-1 and Price Bid-Envelope-2, Both the envelopes shall be kept in Third envelope as per Instruction to Tenderer attached with tender document) on behalf of Ministry of Home Affairs from interested and eligible contractors for the following works:

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>NAME OF WORK</th>
<th>COST PUT TO TENDER</th>
<th>TIME OF COMPLETION</th>
<th>Earnest Money Deposit (EMD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Construction of Balance works of Lakhisuri (Platoon Level) near BP 2330/M, Devasura (Company Level) near BP 2327/15S, Dursuri (Platoon level) near BP 2327/1RI BOP’s along Indo-Bangladesh border in the state of Mizoram for Ministry of Home Affairs. (Pkg.-II).</td>
<td>Rs. 14,10,72,390.00 (Rupees Fourteen Crore Ten Lakhs Seventy-Two Thousand Three Hundred Ninety Only)</td>
<td>10 (Ten)</td>
<td>Rs 14,10,750.00</td>
</tr>
</tbody>
</table>

The brief scope of work in this tender shall include (but not limited to) Earth work in excavation, P.C.C & R.C.C, Brick masonry, steel work, roof truss, plumbing, sanitary, External & Internal Electrification etc. all complete.

The detailed scope of work is given in tender document.

Time schedule of Tender activities:

(i) Last Date & Time for sale of tender documents: 11.05.2017 up to 17:00 hrs IST except Public Holidays.

(ii) Last Date & Time of submission of Tenders: 12.05.2017 up to 16:00 hrs IST.

(iii) Date & Time of opening of tenders (Techno-Commercial Bid): 12.05.2017 at 16:30 hrs IST.

In case of any unscheduled holiday taking place on the last day of issue of tender/ submission of tender the next working day shall be treated as the scheduled time and day of issue of tenders/ submission of tenders.

2.0 Contractors who fulfill the following basic qualifying requirements are eligible to participate in this tender. The joint ventures are not accepted.
a) Should have completed during last 7 (seven) years following “similar works”
   i. Three similar works each of costing minimum 40% of the estimated cost of this work.
      OR
   ii. Two similar works each of costing minimum 50% of the estimated cost of this work.
      OR
   iii. One similar work costing minimum 80% of the estimated cost of this work.

a. The “similar works” shall mean Building works with RCC framed structure and infrastructure development work mainly etc.

b. The cost of free issue materials shall not be included in the completion cost of works.

c. For evaluation purpose, the completion cost of works mentioned in the completion certificate shall be enhanced by 7% per annum till the end of month prior to date of NIT.

b) Should have had Average Annual Financial Turnover of work amounting to not less than 30% of the estimated cost of the work in the last three consecutive financial years ending 31.03.2016 duly supported by copies of audited balance sheets or certified by a Chartered Accountant.

c) Should not have incurred any loss in more than two years during the immediate last five consecutive financial years ending 31.03.2016. Copies of balance sheet/certificate from Chartered Accountant to be submitted.

d) Should have a Solvency of 40% of the estimated cost issued by a Bank. The Solvency Certificate should not have been issued earlier than one year of last date of submission of the tender.

e) Should have valid Permanent Account Number of Income Tax, Service Tax Registration No. and registered under GST.

f) Should have valid PF Registration No. and valid VAT Registration number in the State of Mizoram. In case the successful bidder does not have theses Registration Nos, he shall be bound to have them within one month from the date of LOI or before release of 1st R/A bill whichever is earlier.

g) The experience certificates issued by Government organization /Semi Government Organisations/State Government/Public Works Department/Central Government /Public Sector Undertakings/Autonomous Bodies/Municipal Bodies shall only be accepted for assessing the eligibility of the tenderer. However, certificates issues by parties such as Public limited companies, Non-Government organizations can be considered only if they are supported by TDS certificates in support of value of work done by the tenderer.

h) Completion certificates from the client shall be in the name of the company who is submitting the tender. The contractor has to produce original documents for their verification as and when demanded by EPI. The tender of any tenderer shall be rejected if on detailed scrutiny; documents submitted along with the tender are found to be unsatisfactory / forged. Later in any stage documents found to be forged, false or fake the order/LOI issued to the respective successful bidder, if any shall stand withdrawn and his EMD shall be forfeited. The decision of EPI in this regard shall be final and the binding on the tenderer.
i) Relevant experience certificates and other documents fulfilling the criteria above duly attested by Gazetted Officer not below the rank of Executive Engineer or self attested or Notary Public fulfilling the qualifying criteria shall be enclosed in Envelope-1. Completion Certificates from clients shall be in the name of the Company who is submitting the tender. The bidder has to produce original documents for verification at the time of opening of tender or as and when demanded. The Tender of any tenderer shall be rejected if on detailed scrutiny, documents submitted along with the tender are found to be unsatisfactory/forged. In case of forged document, EMD of the bidders shall also be forfeited. Even in case of successful bidder, document submitted along with the bid, if found fake/forged at any point of time, LOI issued /contract signed with the bidder shall stand cancelled and EMD /SDPBG submitted by the party shall stand forfeited. The decision of EPI in this regard shall be final and binding on the tenderer.

Issuance of Tender Documents to any tenderer shall, however, not construe that the tenderer is considered to be qualified for the tender work and the same may be rejected if on detailed scrutiny, the documents submitted along with the tender are found to be unsatisfactory / forged.

j) Even though an applicant may satisfy the eligibility criteria, EPI reserves the right for not issuing the tender document if he has record of poor performance such as abandoning work, not properly completing the work, delay in execution of work, poor quality of work, financial failure / weakness etc.

k) Bid Capacity: The bidding capacity of the tenderer should be equal to or more than the estimated cost of the work put to Tender.

The Bidding capacity shall be worked out by the following formula:

$$Bidding\ Capacity = [A \times N \times 2] - B$$

Where,

$A =$ Maximum value of construction works executed in any one year during the last five years taking into account the Completed as well as works in progress ending last day of the month previous to the one in which applications invited.

$N =$ Number of years prescribed for completion of work for which bids have been invited

$B =$ Value of existing commitments and ongoing works to be completed during the period of completion of work for which bids have been invited. The Tenderer is requested to furnish the existing commitments of works under execution along with stipulated period for completion of remaining for each of the work should be furnished in an affidavit on non-judicial stamp paper of value of Rs. 100/- duly certified that the particulars furnished are correct as per the Performa in Annexure-A.

3. Tenderers have to submit confirmation letter whether they are registered under MSME/NSIC Act. or not and if yes, relevant copies of the registration letter (Registered under single point registration scheme of NSIC, Govt of India, Ministry of MSME, Guwahati vide Gazette Notification dated 26.03.2012 along with the form of Memorandum -2 with the concerned DIC) in envelope-1 i.e. Techno-Commercial part and he will be exempted from submission of EMD and tender Processing fee.

All corrigendum and addendum shall be part of tender documents shall be available on EPI website and are to be submitted duly signed and stamped by the tenderer. Even if tenderer fails to submit corrigendum and addendum duly signed by him, he will be deemed to have gone through such addendums/corrigendums if any, and no claim shall be entertained by EPI on account of any omission /error on his part.
The tenderers may note that they are liable to be disqualified and not considered for the opening of Price Bid if:

a) Representation in the forms, statements and attachments submitted in the pre-qualification document are proved to be incorrect, false and misleading.

b) They have record of poor performance during the past 10 (Ten) years such as abandoning the work, rescinding of contract for which the reasons are attributable to the non-performance of the contractor, inordinate delay in completion, consistent history of litigation / arbitration awarded against the contractor or any of its constituents or financial failures due to bankruptcy etc. in their ongoing / past projects.

c) They have submitted incompletely filled in formats without attaching certified supporting documents and credentials to establish their eligibility to participate in the Tender.

d) If the tenderers attempt to influence any member of the selection committee.

4. EPI reserves its right to take appropriate action including disqualification of tenderer(s) as may be deemed fit and proper by EPI at any time without giving any notice to the tenderer in this regard. The decision of EPI in the matter of disqualification shall be final and binding on the Tenderers.

5. Tender documents comprising of the following are available on the website of EPI: www.epi.gov.in, and CPP

**VOLUME-1**
(I) Instructions to Tenderers (ITT) & General Conditions of Contract (GCC).

**VOLUME-2**
(I) Notice inviting Tender, Memorandum, Letter of Undertaking, Form of Tender
(II) Additional Conditions of Contract,
(III) Technical Specifications
(IV) Drawings

**VOLUME-3**
(I) Price Bid/ Bill of Quantity

and the same can be downloaded by the intending bidders directly from the above websites. The tender processing fee of Rs. 14,000/- (Rupees Fourteen Thousand Only) (non-refundable) by Crossed Demand Draft / Pay Order favouring ‘Engineering Projects (India) Ltd.’ payable at Guwahati shall be submitted by the bidder in the Techno Commercial part.

5. The tender documents can also be had from the office of General Manager, Engineering Projects (India) Ltd., 4th Floor, Hindustan Tower, Block – A, Jawahar Nagar, National Highway No.37, Guwahati-781022 (Assam), from 10.00 Hrs to 17.00 Hrs on all working days (Monday to Friday) except Public Holidays, on submission of request letter accompanied by the tender processing fee (non-refundable) of Rs. 15,000/- (Rupees Fifteen Thousand Only) by an account payee Demand Draft / Pay Order (in CTS form only) favouring ‘ENGINEERING PROJECTS (INDIA LTD.)’ payable at GUWAHATI. Issuance of Tender Documents to any Tenderer shall, however, not construe that the Tenderer is considered qualified for the tender work and the same may be rejected if on detailed scrutiny the document submitted along with the tender are found to be unsatisfactory/forged. The decision of EPI in this regard shall be final and binding on the Tenderer.
6. All Tenders shall be accompanied by Tender Processing fee of Rs 14,000/- (who have downloaded from website in the form of crossed Demand Draft or Pay Order of any Nationalized Bank / Scheduled Bank for the full amount favoring ‘ENGINEERING PROJECTS (INDIA) LTD.’ payable at GUWAHATI and Earnest Money Deposit (EMD) of Rs. 14,10,750.00 in the form of Bank Guarantee (as per prescribed format given in G.CC page no.101 to 103 only) /crossed Demand Draft / Pay Order (in CTS form only) of any Nationalized Bank / Scheduled Bank for the full amount favouring ‘ENGINEERING PROJECTS (INDIA) LTD.’ payable at GUWAHATI. The EMD shall be valid for minimum period of 90 days (Ninety Days) from the last day of submission of Tender. Tenders submitted without adequate amount of Tender Processing fee & EMD shall be summarily rejected.

The Terms & Conditions contained in the NIT and tender document shall be applicable.

7. EPI reserves the right to accept any tender or reject any or all tenders or annul this tendering process without assigning any reason and liability whatsoever and to re- invite tender at its sole discretion. The corrigendum, extension, cancellation of this NIT, if any, shall be given on EPI's website: www.epi.gov.in only. The intending Tenderers are requested to visit EPI's website regularly for this purpose.

8. The Price Bid of those bidders who have been pre-qualified techno-commercially based on the documents submitted at the time of bid submission shall be opened with prior intimation to them. However, it is made clear that the offer of the bidders shall be accepted subject to the confirmation of authenticity of the PQ documents/ EMD /Tender Processing fee /BG from the concerned department/ bank.

9. In case of tie-tender, where two firms are bidding lowest, EPI reserves the right to split the work among these bidders and/or EPI will reserve the right to award the tender to any one of such bidder. The decision of EPI in this respect shall be final and binding on the tenderers.

Tender documents shall be submitted to:

General Manager
Engineering Projects (India) Ltd.
North Eastern Regional Office
4th Floor, Hindustan Tower, Block – A,
Jawahar Nagar, Opp. Assam Weigh Bridge
National Highway No.37,
Beltola -781022, Guwahati (Assam)
Tel No. 0361-2134681
Fax No.0361-2223617

For Site Related Queries May Contact:

Shri U. Patowary Site-in-Charge
EPIL, Demagiri
Mob:9436779102
ANNEXURE-A

AFFIDAVIT
(To be typed on Rs. 100/- non-judicial stamp paper)

I/We .......................................aged ..............years son of .............................................do hereby solemnly affirm and declare as follows for and on behalf of the Firm:

LIST OF EXISTING COMMITMENT AND ONGOING WORKS

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Name of Works</th>
<th>Client Name &amp; Address</th>
<th>Work Order Value (in Rs.)</th>
<th>Work Executed till Date (Rs)</th>
<th>Balance Amount of work to be completed (Rs.)</th>
<th>Balance period to complete the works (Total months)</th>
<th>Work to be completed in 14 months (Rs.)</th>
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<td>6 (4 – 5)</td>
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</table>

Balance Commitments during 10 months as per NIT Rs.

It is certified that the above particulars furnished are true and correct. If any information given is found to be concealed at a later date, the Contract will be terminated forthwith without prejudice to the rights thereon consequent on termination and the bidder will be blacklisted. I/We agree for debarring tendering for one year if any facts are suppressed.

Signature of Notary Public

SIGN AND STAMP OF BIDDER
LETTER OF UNDERTAKING  
(TO BE ENCLOSED IN ENVELOPE-1 ON BIDDER’S LETTER HEAD)

Engineering Projects (India) Ltd.
North Eastern Regional Office
4th Floor, Hindustan Tower, Block – A,
Jawahar Nagar, Opp. Assam Weigh Bridge
National Highway No.37,
Beltola -781022, Guwahati (Assam)

Ref: Tender for Construction of Balance works of Lakhisuri (Platoon Level) near BP 2330/M, Devasura (Company Level) near BP 2327/15S, Dursuri (Platoon level) near BP 2327/1RI BOP’s along Indo-Bangladesh border in the state of Mizoram for Ministry of Home Affairs (Pkg.-II).

NIT No.: NERO/MMD/664/248 Dated: 25.04.2017

Sir,

UNDERTAKING FOR ACCEPTANCE OF TENDER CONDITIONS

1. The tender documents for the work as mentioned in “Memorandum” to “Form of Tender” have been issued to me / us by ENGINEERING PROJECTS (INDIA) LIMITED and I / We hereby unconditionally accept the tender conditions and tender documents in its entirety for the above work.

2. The contents of clause 1.2 and 1.3 of the Tender documents (Instructions to Tenderers) have been noted wherein it is clarified that after unconditionally accepting the tender conditions in its entirety, it is not permissible to put any remark(s) / condition(s) (except unconditional rebate on price, if any) in the ‘Price-Bid’ enclosed in “Envelope-2” and the same has been followed in the present case. In case this provision of the tender is found violated at any time after opening “Envelope-2”, I / We agree that my/our tender shall be summarily rejected and EPI shall, without prejudice to any other right or remedy be at liberty to forfeit the full said Earnest Money absolutely.

3. The required Earnest Money for this work is enclosed herewith.

Yours faithfully,

(Signature of the Tenderer)
Seal of Tenderer

Dated: ___________________
FORM OF TENDER

To,
Engineering Projects (India) Ltd.
North Eastern Regional Office
4th Floor, Hindustan Tower, Block – A,
Jawahar Nagar, Opp. Assam Weigh Bridge
National Highway No.37,
Beltola -781022, Guwahati (Assam)

REF: Tender for Construction of Balance works of Lakhisuri (Platoon Level) near BP 2330/M, Devasura (Company Level) near BP 2327/15S, Dursuri (Platoon level) near BP 2327/1RI BOP’s along Indo-Bangladesh border in the state of Mizoram for Ministry of Home Affairs (Pkg.-II).


1. I/We hereby tender for execution of work as mentioned in “Memorandum” to this “Form of Tender” as per tender documents within the time schedule of completion of work as per separately signed and accepted rates in the Bill of Quantities quoted by me/us for the whole work in accordance with the Notice Inviting Tender, Conditions of Contract, Specifications of materials and workmanship, Bill of Quantities Drawings, Time Schedule for completion of jobs, and other documents and papers, all as detailed in tender documents.

2. It is agreed that the time stipulated for jobs and completion of works in all respects and in different stages mentioned in the “Time Schedule for completion of jobs” and signed and accepted by me/us is the essence of the contract. I/We agree that in case of failure on my/our part to strictly observe the time of completion mentioned for jobs and the final completion of works in all respects according to the schedule set out in the said “Time Schedule for completion of jobs” and stipulations contained in the contract, the recovery shall be made from me/us as specified therein. In exceptional circumstances extension of time which shall always be in writing may, however be granted by EPI at its entire discretion for some items, and I/We agree that such extension of time will not be counted for the final completion of work as stipulated in the said “Time schedule of completion of jobs”.

3. I/We agree to pay the Earnest Money, Security Deposit cum Performance Guarantee, Retention Money and accept the terms and conditions as laid down in the “Memorandum” to this “Form of Tender”.

4. Should this tender be accepted, I/We agree to abide by and fulfill all terms and conditions referred to above and as contained in tender documents elsewhere and in default thereof, allow EPI to forfeit and pay EPI, or its successors or its authorized nominees such sums of money as are stipulated in the tender documents.

5. I/We hereby pay the earnest money amount as mentioned in the “Memorandum” to this “Form of Tender” in favour of Engineering Projects (India) Limited payable at place as mentioned in the “NIT/ITT”.

Signature of Contractor
6. If I/we fail to commence the work within 10 days of the date of issue of Letter of Intent and / or I/We fail to sign the agreement as per Clause 84 of General Conditions of Contract and/or I/We fail to submit Security Deposit cum Performance Guarantee as per Clause 9.0 & 9.1 of General Conditions of Contract, I/We agree that EPI shall, without prejudice to any other right or remedy, be at liberty to cancel the Letter of Intent and to forfeit the said earnest money as specified above.

7. I/We are also enclosing herewith the Letter of Undertaking on the prescribed proforma as referred to in condition of NIT.

Date the __________________________ day of __________________________

SIGNATURE OF TENDERER
________________________________________

NAME (CAPITAL LETTERS):
________________________________________

OCCUPATION
________________________________________

ADDRESS
________________________________________

________________________________________

SEAL OF TENDERER
ADDITIONAL CONDITIONS OF CONTRACT

1.0 The following Additional Conditions of Contract shall read in conjunction with General Conditions of Contract. If there are any provisions in these Additional Conditions of Contract, which are at variance with the provisions of General Conditions of Contract, then provisions in these Additional Conditions of Contract shall take precedence over General Conditions of Contract.

2.0 INTRODUCTION:
Construction of Border Out Posts (BOP) for Border Security Forces along Indo-Bangladesh Border (IBB) in Mizoram Sector is a project of Govt. of India, Ministry of Home Affairs and Engineering Projects (India) Ltd. (A Govt. of India Enterprise) has been appointed as an “Executing Agency” for this project. Border Out Post (BOPs) are to be constructed for Border Security Force along Indo-Bangladesh Border (IBB) in Mizoram. The construction of this BOP was earlier awarded to Ms J.A. Brothers alongwith 13 nos. BOPs. Due to continually non-performance of M/s J.A. Brothers 4 nos. of BOPs were withdrawn from the contractor. However, as M/s J.A. Brothers continued to fail in discharging due performance, the contract for construction of balance 9 nos BOPs was also rescinded. The works intended to be taken up under the instant contract pertains to execution of all the balance works required for completion of the BOP, mentioned under NIT Construction of Lakhisuri (Platoon Level) near BP 2330/M, Devasura (Company Level) near BP 2327/15S, Dursuri (Platoon level) near BP 2327/1RI BOP’s along Indo-Bangladesh border in the state of Mizoram. The Karnaphulii River and Harina Nala flowing from South to North are forming the Indo-Bangladesh Border and also coming across while approaching to site. The terrain of this stretch is hilly with rugged dense forest. The Karnaphulli is a perennial river and there is no bridge over this river. There is no bridge over Harina Nala also.

3.0 SCOPE OF WORK
The brief scope of work to be executed for 01 BOP under the present tender shall generally comprise of (but not limited to) the following such as:

- Civil work
- Structural work
- Plumbing work
- Electrical work
- Site development work
- Approach road construction
• Any other work not specified but required to be executed to complete the BOP.

**Civil Construction work:** This will generally comprise of constructing Office Block, Kitchen, Toilet, Barrack Type A Type B, Magazine, Kote, Wireless room, OP Towers, BOP Towers, Garage, Sentry post, Wash, Septic tank with Soak pits, POL store, Bunkers & open court yard with all round peripheral boundary wall of the BOP.

**Services:** Internal water supply & sanitary installation, internal electric installation, external service connection, power wiring & plug, providing lightening conductors, telephone & computers, water tank & underground sump etc.

**Development of site:** Levelling including earth work, internal roads and paths, sewer, filter water supply with distribution lines, unfiltered water supply with distribution lines, storm water drains, horticulture, street lighting with fluorescent lamps etc.

Construction of approach road, brick/ stone masonry retaining walls, tube well with submersible pump including pipe lines/ plumbing & control panels, installation of solar panels, integrated RO plant/ iron removing plant, entry barrier & sign board, rain water harvesting & providing movable fixtures.

Contractor has to arrange to transport their construction materials to site. The Cost of above arrangement shall be deemed to be included in their quoted rates and nothing extra shall be payable to the contractor on this account.

**Stone Quarry:** Stone quarry of sufficient capacity as required shall also be arranged by the contractor. Developing of stone quarry for quarrying the stone of desired quality and quantity shall be in the scope of the Contractor. The cost of this shall be deemed to be included in his quoted rates and nothing extra shall be payable to the contractor on this account.

3.1 The contractor shall also provide all assistance to EPI during handing over the Border Out Post & allied works after their completion to the designated agency nominated by Ministry of Home Affairs. In case the quality at any point is found not as per specification or deficiencies are found, the contractor will get it rectified at its own cost.

4.0 **HANDING OVER THE SITE**

4.1 Although as indicated by Border Security Force, the user of Border out Posts, the land of all BOPs is available. However, handing over of sites for whole BOP area may not be possible in one go due to deficiencies in total area of land required for construction. Therefore, the site may be handed over in parts progressively in phases to the contractor. The contractor shall take up the construction activities
on such released fronts in parts/ phase without any reservation whatsoever. However, in case of any delay in handing over of the site to the contractor, Owner/ EPI shall only consider suitable extension of time for the execution of the work. It should be clearly understood that the Owner/ EPI shall not consider any other compensation whatsoever towards idleness of contractor’s labour, equipments etc.

4.2 The contractor shall make his own arrangement for approach to work site including borrow/ disposal area and for movement of men, materials, machineries, other equipment etc. required for carrying out the work under this contract.

4.3 The access roads/ path near to the work site may or may not be available at all places and at all time. The contractor shall plan his works as per the availability of access roads / path at site. All drainage of works area and all weather truckable/ haulage roads as required by the contractor shall be constructed and maintained during the construction period by the contractor at his own cost.

5.0 PRIORITY OF WORKS

5.1 If during the course of execution of work, EPI / MHA / BSF fixes priority of execution of work/ fixes priority of execution of specific BOP location, the contractor has to deploy resources and plan the work accordingly & nothing extra shall be payable to the contractor on this account.

5.2 The work fronts of Border out Post may be released in progressive manner in phases. Nothing extra shall be payable to the contractor on account of carrying out the work in phases & sequences decided by Engineer-in-charge.

5.3 Contractor must arrange the approach road wherever necessary, nothing extra shall be payable on this account.

6.0 MOBILIZATION OF MEN, MATERIAL & MACHINERY

Further to Clause No. 11.0 for “Mobilization of Men, Material & Machinery” of General Conditions of Contract, it shall be contractor’s responsibility to arrange, operate & maintain the total station instrument and its accessories at his own cost to carry out levels (including initial & final levels of earth work), dimensions and alignment of all parts of the works.

Contractor shall provide Bench Marks and other reference points for the proper execution work and these shall be preserved till the end of work. Some construction materials may be lying at site which was procured by earlier contractor shall utilized for the project & recovery shall be made as per prevailing
market rate basis. Decision in this regard by EPI shall be treated final & binding to the contractor.

7.0 COMPLETION TIME
7.1 The entire scope of the work covered under this contract shall be completed within 10 (Ten) calendar months from the date of issue of Letter of Intent (LOI). The completion time of 10 (Ten) months includes monsoon/rainy season coming during the currency of the contract. Although, time of completion of total work has been stipulated of 08 months from the date of LOI, 50% works of the BOP is to be completed in all respect within six months from the date of LOI. The work shall be performed in time and to achieve the targets, the contractor shall have to plan required mobilization of all resources. Within 10 (ten) days of the date of letter of Intent. The contractor shall submit a Time and Progress Chart (CPM/PERT/Quantified Bar Chart) along with a detailed plan and programme of all the input resources commensurating with the various activities to be executed and get it approved by the Engineer-in-charge. The Chart shall be prepared in direct relation to the time stated in the contract documents for the completion of items/scope of the work. It shall clearly stipulate the forecast milestones of the dates of commencement and completion of various items, sections of the work and may be amended as necessary by agreement between the Engineer-in-charge and the contractor within the limitations of time imposed in the contract documents, to ensure good progress during the execution of the work. The physical report including photographs shall be submitted by the contractor on the prescribed format & at regular intervals (not later than a month) as decided by the Engineer-in-charge. The contractor shall also furnish along with Bar Chart, the methodology of construction, details of all equipment manpower, machineries, etc. required along with the date by which the equipment will be available at the site of work in working condition. All the activities shall be performed and completed strictly in accordance with approved work schedule.

The Engineer-in-charge, shall however, have the right to review the progress and modify the work schedule suiting the site conditions and contractor shall be required to complete the work in accordance thereof without any extra cost whatsoever to the Owner/EPI.

8.0 SITE LABORATORY
As part of the contract the contractor shall establish and maintain a site laboratory for the testing of the construction material under the direction and general supervision of Engineer-in-charge. The laboratory room shall be
constructed and installed with the required and appropriate facilities. Temperature and humidity controls shall be made available wherever necessary during the testing of samples.

All equipments as required shall be provided by the contractor so as to be compatible with the testing requirements specified. The contractor shall maintain the equipment in good working conditions for the duration of the contract. The contractor shall provide approved qualified personnel to run the laboratory for the duration of the contract. The number of staff and equipment available must at all times be sufficient to keep pace with sampling and testing programme as required by Engineer-in-charge.

The contractor shall fully service the site laboratory and shall supply everything necessary for its proper functioning including all transport needed to move equipment and samples to and from sampling points on the site etc.

The contractor shall re-calibrate all measuring devices whenever so required by the Engineer-in-charge and shall submit the results of such measurements without delay.

9.0 TEMPORARY WORKS

9.1 Further to Clause no. 82.00 for “Approval of temporary / Enabling works” of General Condition of contract, as far as possible the labour hutments, bulk Storage facilities and vehicle parking shall preferably be located near the existing Border Out Post of Border Security Force. The area near BOP locations shall be levelled and developed; supply of water and electricity, constructions of approach road to these camps shall be arranged by the contractor at his own cost. In case the land in the vicinity of BOP is not of Govt., the contractor may have hire the land from the owner of the land. The rent / lease amount shall be borne by the contractor.

10.0 PLANT & MACHINERY

The contractor at his own cost shall arrange all Plant & machinery required for execution of work. However, in addition to Plant & equipment mentioned in the NIT, the contractor has to deploy the following minimum plant & machinery at site immediately after award of work:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Description</th>
<th>Minimum Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Excavator</td>
<td>01</td>
</tr>
<tr>
<td>2.</td>
<td>Vibrators (petrol/ electrical)</td>
<td>02</td>
</tr>
<tr>
<td>3.</td>
<td>Concrete mixer</td>
<td>02</td>
</tr>
</tbody>
</table>
4. DG Set (63 KVA) 01

5. Digital theodolite & auto level/ TOTAL STATION 01

6. water tanker 01

7. Tipper 12

8. Vibratory Roller/Static Roller 03

**NOTE:**

a) Any other equipment for site test as outlined in CPWD/BIS specification and as directed by Engineer-in-charge.

b) The quantities of equipments indicated are tentative and can be increased as per the requirement of work or as per the direction of Engineer-in-charge. The above equipment list is indicative and not complete. The contractor has to deploy all the required equipment to complete all the works within stipulated specifications & time period as per contract documents.

c) The contractor will not be allowed to take out equipments from the site without the written permission of Engineer-in-charge.

### 11.0 FACILITIES

The sub-clause 28.3 of the clause No. 28 of General Conditions of Contract (GCC) for furnished office Accommodation & Mobility & communication to be provided by the contractor to EPI shall be replaced and read as under:

<table>
<thead>
<tr>
<th>DISCRIPTION</th>
<th>UNIT</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFFICE WITH FACILITIES-The contractor shall provide office with following facilities till effect liability period.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**A. ACCOMMODATION**

i) Furnished office site accommodation with one conference room as per direction of Engineer-in-charge with basic amenities like two toilets with water borne flushing systems and septic tank and soak pit arrangement, safe drinking water arrangement, lights, other facilities for winter and summer season etc. for EPI Engineer & staff & maintenance of it till defect liability period.

<table>
<thead>
<tr>
<th>Sq. ft.</th>
<th>One no. of 1200 Sq Feet</th>
</tr>
</thead>
</table>

**B. OFFICE EQUIPMENT**

ii) **Consumables:** All consumables like stationery, ink etc. shall be provided by Tenderer till end of defect liability period. (Stationery items are inclusive of visiting cards, rubber stamps letter pads, photocopies papers & other items of daily office use). Amount shall be restricted to Rs. 5,000/- per month.

<table>
<thead>
<tr>
<th>No.</th>
<th>01</th>
</tr>
</thead>
</table>

**C. CONVEYANCE**

Conveyance and other facilities- Vehicle (Good Running Condition) with Driver, fuel with other accessories valuing Rs.4500/- per month for site /related to work. In case of break-down, contractor shall make alternate arrangements immediately. Failing to provide vehicle or replacement in case of break down Engineer-in-charge will hire similar type vehicle and debit cost to contractor’s account.

| Monthly running shall be restricted to | Km | 4000 |

**D. OTHER FACILITIES**

| ii) Full time Office boy cum cook at location decided by Engineer-in-charge. | No. | 01 |

The above facilities should be brand new and of reputed make and all facilities shall be provided and maintained properly (including payment of water & electricity bills etc.) by the PARTY at Project site or at any other office related with execution of this project till completion of work, handing over, defect liability period in all respect at his own cost. The PARTY shall also make stand by arrangement for water & electricity to ensure uninterrupted supply. The equipment/items shall be the property of PARTY at the end of contract. The PARTY shall be responsible for watch and ward of site office and other facilities etc. In case of theft/damage of any equipment/items, the PARTY shall immediately replace the same within a maximum period of two days.

The PARTY shall provide ‘Sign Board(s) as per design approved by EPI and/or Client.

In case the above facilities are not provided by the PARTY within 10 (ten) days of award of work or replacement is not provided within the specified period. EPI shall arrange the same at the risk and cost of the PARTY and make the recoveries from the bills of the PARTY for the same. The decision of EPI shall be final and binding on the PARTY in this regard.

**12.0 PAYMENT ON ACCOUNT**

Further to Clause No.37.00 General Conditions of Contract, the payments shall be released after receipt of payment from MHA. Measurements of work carried out by contractors shall be recorded in the measurement books by Site Engineer. The measurement books shall be the basis of all accounts of quantities of work done.
The total balance executed quantity shall be finalized after successfully handed over the BOP to the client i.e BSF/MHA. Decision of EPI in this regard is to be treated final and binding to the contractor. No claim for delay in this regard shall be entertained.

13.0 ANTI MALARIA MEASURES

13.1 The contractor shall at his own expenses make necessary arrangement for undertaking anti-malaria measures as prescribed by Local Health Authorities or as directed by Engineer-in-charge.

14.0 VALUE ADDED TAXES (VAT) / WORK CONTRACT TAX

The Clause No.13.6 of General Conditions of contract in respect of VAT/ WCT applicable on execution of work is modified to the extent given below. Value added Tax / Work Contract Tax shall be reimbursed as per actual on submission of documentary evidence for payment of VAT/ WCT. For other Taxes the Clause No. 13.6 of GCC shall be applicable. In case of imposition of GST, the amount of GST shall be reimbursed as per actual on submission of documentary evidence.

15.0 SECURITY & SAFETY

15.1 The site is located near Indo-Bangladesh Border (IBB) wherein the movement of personnel is limited and regulated by Security agencies. The contractor has to work as per the permission given by these Security agencies from time to time and contractor must check before quoting for this job, the working hours, restriction in working and safety of their manpower, plant & equipment. The contractor shall mobilize and organize his resources accordingly to complete the work within stipulated time. The contractor shall have no claim on MHA/EPI or any other agency/ department for any loss of man hours/ machinery due to these restrictions/ regulations.

15.2 A general Security cover shall be provided by BSF/ State Police. However, the contractor shall make his own arrangements for security and safety of his manpower, plant & equipment, materials etc. Nothing extra shall be admissible on account of this and no compensation shall be paid by MHA/EPI in case the contractor’s personnel suffer body injury, loss of life or any damages caused to the plant and machinery of the contractor.

16.0 LAND ACQUISITION
16.1 The contractor should note that the Border out Post falls in agricultural land area/forest area. The contractor shall extend all the necessary assistance for obtaining necessary approvals for acquisition of land and clearance from Department of Forest / State Government / Local Authority for carrying out construction of BOP & related work.

17.0 DEFECTS LIABILITY PERIOD:

17.1 Further to clause no.74.0 of General Conditions of contract, the contractor shall be responsible for rectification of defects during defect liability period of 12 months after Handing / Taking Over of completed project.

In case Ministry of Home Affairs appoints an independent and impartial inspection agency to be called as Third Party Inspection Agency. The contractor shall provide all assistance to the Third Party Inspection Agency to carry out the functions assigned to them & if quality at any point is not found as per specification, the contractor will get it rectified at its own cost.

18.0 COMPENSATION FOR DELAY

18.1 The contractor shall ensure adequate progress during the execution of work according to the bar-chart/ work schedule. The contractor shall also maintain monthly progress strictly in accordance with bar chart/ detailed work schedule that will be worked out and mutually agreed upon. If the contractor fails to maintain the above progress or fails to complete the work and clear the site on or before the contract or extended date of completion, he shall without prejudice to any other right or remedy of EPI on account of such breach, pay compensation at the rate of 2.00% (Two percent) of the balance value of work for each month of delay subject to maximum of 10 % (Ten percent) of the total Contract value of work.

In additional to above, the Contractor shall also compensate EPI to the tune of Rs. 50,000/- (Rupees Fifty Thousand only) per month towards extra expenditure on establishment of EPI for extended period of the job, if the delay is due to reasons solely attributable to the Contractor.

19.0 FINAL BILL
The final bill will be submitted by the contractor within 90 days from the date of acceptance of completion of work accompanied by the following documents:

a) Completion of work issued by the Engineer-in-charge specifying the handing over of the work including list of inventories (fittings & fixtures).
b) Computerized stage wise payment schedule.
c) No claim certificate by the contractor.
d) No claim certificate from the sub-agencies/ vendors, if any engaged by the contractor.
e) ‘As built’ drawing
f) Measurement books.
g) Drawings for layout of underground cables and details showing location of sluice valves, electric cable joints etc.
h) All operation and maintenance manuals.
i) All statutory approvals from various State Govt. / Central Govt. /Local bodies/ BSF, if required for completion & handing over of the work as included in scope of contractor.
j) Manufacture’s guarantee of various machines/ equipments installed as part of works.

20.0 MODIFICATIONS OF CLAUSE NO.76.0 OF GENERAL CONDITIONS OF CONTRACT (GCC)

20.1 CLAUSE NO.76.1 OF GCC: DELETED

20.2 CLAUSE NO.76.2: ARBITRATION BETWEEN CENTRAL PUBLIC SECTOR ENTERPRISES INTER SE/GOVERNMENT OF INDIA DEPARTMENTS/ MINISTRIES

i) In the event of any dispute or difference to the interpretation and application of the provisions of the contract, such dispute or difference shall be referred by either party to the arbitration as per the instructions Office Memorandum/ Circulars) issued by Govt. of India from time to time with regard to arbitration between one Government Department and another, one Government and a Public Sector Enterprise and Public Sector Enterprise inter se.

ii) Subject to any amendment that may be carried out by the Government of India from time to time, the procedure to be followed in the arbitration shall
be as is contained in D.O. No.DPE/4 (10/2001-PMA-GL-1 dated 22.01.2004 of Department of Public Enterprises, Ministry of Heavy Industries and Public Enterprises, Government of India or any modification issued in this regard.

21.0 Further to the Clause No.27.0 of General Conditions of Contract in respect of deployment of Technical Staff during execution of work, the contractor shall employ minimum following technical staffs as follows:

1. 01 (One) Civil Engineer (BE) of minimum 05 Years experience.
   Or
   01 (One) Diploma Civil Engineer of minimum 08 Years experience

2. 01 (One) Diploma Electrical Engineer of minimum 05 Years experience.

22.0 CLAUSE NO.76.3 JURISDICTION

The Courts in Delhi / New Delhi alone will have jurisdiction to deal with matters arising from the Contract, to the exclusion of all other courts.
TECHNICAL SPECIFICATIONS

1. The work shall be executed as per the description of item given in the ‘Bill of Quantities’, Specifications, Drawings, General Conditions of Contract, Additional Conditions of Contract, CPWD Specifications, New Delhi, for civil works (updated with correction slips issued upto last date of submission of tender) and latest CPWD specification, New Delhi, for electrical works (updated with correction slips issued upto last date of submission of tender), instructions & orders to the contractor from time to time during pendency of work.

2. For items not covered under latest CPWD specification, for civil works/ latest CPWD specification for Electrical works and in particular specification or nomenclature of the individual item as above, the work shall be done as per latest relevant BIS codes of practice.

3. In case of non-availability of any specification in the above paras or any overlapping provisions, non-clarity on any issue, applicability of particular provision out of above, shall be decided by Engineer-in-charge whose decision shall be final & binding on the contractor.

4. THERMO MECHANICALLY TREATED BARS:

Thermo mechanically treated bars conforming to IS:1786 from preferred manufacturers from enclosed list of make or approved by MHA/EPI shall be used. The other provisions of clause 45.2 of GCC remains unchanged.

5. CEMENT:

Ordinary Portland Cement (OPC) as per IS:8112:1989 shall be used on the works. In case of non-availability of Ordinary Portland Cement, the Portland Pozzolona Cement (PPC) as per IS:1489-1991 can be used. However, in case of using Portland Pozzolona Cement prior approval is to be taken from Engineer-in-charge and recovery of Difference of rates shall be made as per prevailing market rate.

6. CONCRETING:

Concreting shall be machine mixed with equipment approved by the Engineer-in-charge.

7. BRICK WORK

The brick should be minimum class designation 75 conforming to IS 1077: 1992. The brick work for all external walls should be done from outside. The contractor shall be responsible for providing and maintaining sufficiently strong scaffolding so
as to withstand all loads likely to come upon it. Due care shall be taken by contractor to ensure the execution of brick masonry walls in plumbs from outside. The contractor shall arrange sufficient quantity of scaffolding for this purpose so as to complete the project within stipulated time.

8. COLOUR COATED GALVALUME STEEL SHEET

The specification of color coated galvalume steel sheet shall be as under:

I. Bare metal thickness = 0.60 mm (tolerance as per relevant ASTM/Indian standard)

II. Minimum yield strength 550 Mpa

III. Coating:
   • PVDF Top coat of 22-25 microns over 5 micron primer & 8-10 micron alkyd Backer on bottom side as per IS:1446
   • Metallic Coating – Hot dip Aluminum – Zinc alloy coating conforming to AS 1397, A792/A792M or equivalent with coating mass =150 gm/sqm on both sides.
   • Fastening for profile: Profile fixing using tight frame fabricated from 0.80mm GI sheet having 120 gsm & inbuilt stud profile shall be fixed on the structural purlin using stainless steel SDST screws.

The sheet shall be fixed to the respective purlins/runners with self drilling, self-tapping fasteners as per provision mentioned in relevant ASTM/ IS approved by Engineer-in-charge.

9. INSTALLATION PROCEDURES OF THE COLOUR COATED SHEET

Design and workmanship:

I. Before laying and fixing of sheets, the Contractor will check and satisfy himself about the straightness of the Purlins and also check for mutual variations in levels of top surfaces of all the Purlins along the roof slope at 2.0 M intervals along the length of the building. The Contractor shall carry out similar observations to satisfy him about the line and level of the outer surface of all side girths along a plumb line held at 3.0 M intervals along the length of the building. Any deviation of purlins/ side girths by more than ± 2 mm from the reference straight line shall be brought to the notice of the Engineer-in-charge for modification.

II. Laying of sheets shall start only from one end of the roof and shall be continued along building longitudinally towards the other direction to avoid mismatching of profile along lap joints. Fixing of roof sheets shall be carried out from the bottom of the slope keeping maximum projection of 300 mm from the edge of last purlin. Similarly, side/gable sheeting work is to be started from one end of the wall and
from bottom most side/gable runner keeping about 300 mm projection from the edge of the lowest girth or as shown in the approved drawing. The prospective sheeting contractor shall prepare working drawing.

III. Sheet installation shall be carried as per standard practice

IV. The end lap between two sheets on roof shall be 200 mm or more, depending upon roof slopes. Long sheets shall generally be used to minimize end laps.

**Sealing of laps and cut-outs**

I. Where ever the cutouts like truss bracing, opening like ducts, chimneys etc. or where the portable machine (seamer) can’t be moved or reached easily, manual bending up to $180^0$ will be allowed with special hand tools otherwise side lap is to be seamed with full $360^0$ degree double lock system using electric portable seamer at site.

II. The end laps of roof and side laps of wall are to be sealed for preventing water entry with mastic tape or sealing beads of approved make applied along laps at positions directed by Employer/ Consultant. Such sealing material shall have more 15 years of expected service life and shall be capable of withstanding a service temperature of $95^0$ C. The sealants shall be soft enough to not interfere with the installation of the sheets and resilient enough to accommodate any variation of installation that may occur during lying.

III. Foam fillers (flute closures) or equivalent approved materials, which shall be capable of withstanding temperature of $95^0$C and having an expected service life of 15 years, of matching profile to be adopted at interfaces of roof ridge, valley gutters etc. to be adopted along with flashing material, as directed by employer/ Consultant.

IV. Gun applied sealant or sealing beads shall be used to seal joints between individual pieces of flashing. The sealant should be positioned near mid point of the overlap.

V. Gaps at notches and cut outs made in wall sheeting for allowing through the sheeting passage of structural members, pipes etc. shall be closed with suitably shaped flashing and sealed for preventing ingress of rain water by applying flexible sealants of approved make capable of withstanding a service temperature of $95^0$C and having an expected service life of 15 years.

**Fasteners:**

I. Using special size clip made of galvanized steel with clip of stainless steel fixed to perlings using 5.5 mm dia SDST Screws

II. To fill gaps in ridge special made steel fillers matching the profile will be used

III. Mastic tape sealants having longer life used to seal the metal joints

IV. Special A1 rebits of different & suitable size used whenever required
V. The surface of the sheets shall be made free of dust, dirt and oil immediately before fixing of fasteners.

VI. Power tool driven self tapping / drilling, galvanized steel screws of suitable size approved make, having steel washers built monolithically with the screw head and with bonded EPDM washers are to be installed. The coating of the screws should have good corrosion performance and a service life of not less than 15 years in polluted inland environment. All screws shall be driven at right angles to the sheet and the tightening of the screws shall be just enough to properly compress the EPDM washers without signs of over tightening. The screw end shall penetrate through top flange of the purlin/runner after installation.

VII. Fasteners at end laps of sheets are to be fixed along a straight line over the purlins/ runners. On purlins and runners over which sheets are continuous, fasteners [pop rivets] shall be fixed as recommended by manufacturer of sheets/ or as per approved drawings

VIII. Stitch fastening at the side laps of profiled steel sheets shall be placed at the center of the crest and carried out with pop rivets. The spacing of these rivets shall not exceed 450 mm for side laps on roof and 500 mm for side laps on wall.

IX. All plain flashing shall be stitched on crest of profiled sheeting with pop rivets at positions indicated on approved drawing prepared by prospective contractor and as directed by the Engineer in charge.

**Shop Drawings:**

The Contractor should prepare the necessary cutting plan of sheets, details of fixing sheets including flashing and sealing arrangement for total water tightness. The cutting of sheets should be by machine as far as possible.

10. **GENERAL**

10.1 The Materials/ products used on the works shall be one of the preferred Make/ Brands/ Manufactures given in the tender documents/ approved by EPI/MHA.

10.2 Flooring shall be of Kota stone as per drawing/ design & specification. The pattern shown in the drawing if any, can be modified as per site requirement by Engineer-in-charge and nothing extra shall be payable over and above the rate quoted.

10.3 Mosquito proof shutters shall be provided on all external openings (doors & windows etc.) of the barrack, kitchen block of BOP.

10.4 Due care shall be given to HEL of the area while fixing plinth level of structures.

10.5 Built in cupboards shall be provided in the barrack.

10.6 Glaze the dados on kitchen & toilets

10.7 Movable fixtures to be provided in the barracks.

10.8 Plumbing & sanitary work to be executed by licensed/ expert plumber and the plumbing scheme/ drawing to be got approved from Engineer-in-charge.
The contractor shall be responsible for all protection of sanitary, water supply, electrical fittings & fixture against pilferage, breakage during period of installation unit, the completion of work and handed over to BSF.

The electrical works shall be executed only through licensed electrician and the agency shall have to submit the valid license of electricians before starting the work.

It will be the sole responsibility of contractor to obtain all statutory approvals/ compliance required, if any for construction/ implementation of the project including forest clearance and completion clearance from the all relevant statutory bodies for plumbing, sewerage, sanitary and PHE work, fire department for fire protection, fire fighting, electrical works, pollution control authorities etc. and for all other services as included in the scope of contract etc. from the concerned department as required within the stipulated time frame, only statutory charges shall be borne by the owner.

The contractor shall have to execute the work in place and in such a way to facilitate other agency, if any engaged simultaneously for execution of other works required for completion of the Border Out Posts.

Unless otherwise specified in the schedule of quantities, the rates tendered by the contractor shall be all inclusive and shall apply to all heights, leads, depths & nothing extra shall be payable on this account.

On completion of work, the tenderer shall submit four prints of “As built” drawings to Engineer-in-charge at no extra payment.
# LIST OF APPROVED VENDORS

## A. CIVIL WORKS

<table>
<thead>
<tr>
<th>Item</th>
<th>Approved Vendors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Cement (ORDINARY Portland/ Pozzolana)</td>
<td>ACC/GRASIM/AMBUJA/ULTRA TECH/LAFARGE/ STAR/CEMSTAR/TO P CEM</td>
</tr>
<tr>
<td>2. TMT/ Tor Steel</td>
<td>SAIL /TISCO/RINL/SHYAM STEEL</td>
</tr>
<tr>
<td>3. Structural steel</td>
<td>SAIL /TISCO/RINL/SHYAM STEEL/JINDAL</td>
</tr>
<tr>
<td>4. Precast CC Titles</td>
<td>HINDUSTAN TILES/ NIMCO PREFEB/ NITCO KONKRETE</td>
</tr>
<tr>
<td>5. Ceramic Tiles</td>
<td>NITCO/ORIENT/SOMANY/KAJARIA/ANGE JOHNSON/GLORY</td>
</tr>
<tr>
<td>6. RCC Pipes</td>
<td>AKSHAY/KK/HINDUSTAN/PRAGATI</td>
</tr>
<tr>
<td>7. Manhole Covers (SFRC)</td>
<td>KK/HINDUSTAN</td>
</tr>
<tr>
<td>8. Kerb Stone (Precast CC)</td>
<td>NIMCO PREFAB/ SUBHASH FERRO CONCRETE/ HINDUSTAN TILES</td>
</tr>
<tr>
<td>9. Chain link Wire mesh</td>
<td>MITTAL/SHAKTI –WELD MESH</td>
</tr>
<tr>
<td>10. PVC Pipes/ Fittings</td>
<td>SUPREME/ PRAKASH/ORI PLAST/FINOLEX</td>
</tr>
<tr>
<td>11. Float Glass and Mirror</td>
<td>MODIGUARD/ ASAHI/SAINT GOBAIN/ GUARDIAN</td>
</tr>
<tr>
<td>12. Water-proofing Compound</td>
<td>CICO/ CHEMISTIK/ FOSROC/ MBT/ DEGUSSA</td>
</tr>
<tr>
<td>13. Cement/ Concrete Additives</td>
<td>CICO/ CHEMISTIK/ FOSROC/ MBT/ DEGUSSA/ FOSROC/ SIKA</td>
</tr>
<tr>
<td>14. Distemper- Dry/ Oil Board</td>
<td>ICI/ ASIAN/ BERGER</td>
</tr>
<tr>
<td>15. Aluminium Sections for Doors/ windows</td>
<td>HINDALCO/ JINDAL/ NEROLAC</td>
</tr>
<tr>
<td>16. Floor Hardener</td>
<td>SNOWCEM/ CHEMISTIK/FOSROC/SIKA</td>
</tr>
<tr>
<td>17. Cement Paint</td>
<td>SNOWCEM/ ICI/NEROLAC/ BERGER/ASIAN</td>
</tr>
<tr>
<td>18. Primer for steel</td>
<td>ICI/ASIAN/ BERGER/ NEROLAC</td>
</tr>
<tr>
<td>19. Synthetic Enamel Paint</td>
<td>ICI/ ASIAN/ BERGER/ NEROLAC</td>
</tr>
<tr>
<td>20. Plastic Emulsion</td>
<td>ICI/ ASIAN/ BERGER/ NEROLAC</td>
</tr>
<tr>
<td>21. Waterproof ply &amp; Board</td>
<td>DURO/ GRENPLY/ CENTURY/KITPLY</td>
</tr>
<tr>
<td>22. Flash Door Shutter</td>
<td>KITPLY/ SWASTIK/ DURO</td>
</tr>
<tr>
<td>23. Rolling Shutter</td>
<td>DIANA/ RAYMUS/ RAMA</td>
</tr>
<tr>
<td>24. Bituminous Sealant</td>
<td>STP/ LLOYD</td>
</tr>
<tr>
<td>25. PVC door Shutter</td>
<td>RAJSRHI/ SINTEX</td>
</tr>
<tr>
<td>26. PVC Tank</td>
<td>SINTEX/ ELECTROPLAST/ STAR/ LOTUS</td>
</tr>
<tr>
<td>27. W/C Wash Basin</td>
<td>CERA/ PARRYWARE/ HINDUSTAN</td>
</tr>
<tr>
<td>28. C.P. Fittings</td>
<td>PARKO/ HINDUSTAN/ SEIKO/ ORIENT</td>
</tr>
<tr>
<td>29. S.C.I. Pipe</td>
<td>RIF/NITCO/ BENGAL IRON / IISCO</td>
</tr>
<tr>
<td>30. White Cement</td>
<td>BIRLA WHITE/ JK WHITE</td>
</tr>
<tr>
<td>31. Oxidized Aluminium Fittings</td>
<td>EBCO/ DOOR LINE</td>
</tr>
<tr>
<td>32. Gypsum False Ceiling</td>
<td>INDIA GYPSUM/ BORAL</td>
</tr>
</tbody>
</table>
### B. ELECTRICAL WORKS

<table>
<thead>
<tr>
<th>SL. NO.</th>
<th>ITEMS</th>
<th>PREFERRED MAKES</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>CABLES &amp; RELATED ITEMS:</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>A) 33 KV XLPE POWER CABLES</td>
<td>GLOSTER/UNIVERSAL/CCI/ RPG (ASIAN) HAVELLS/SKYTONE</td>
</tr>
<tr>
<td></td>
<td>B) 1.1KV LT POWER CABLES</td>
<td>CCI/GLOSTER/ NITCO/ UNIVERSAL / NATIONAL/ RPG (ASIAN) HAVELLS/ INDUSTRIAL CABLES/ TORRENT/ POLYCAP/ SKYTONE</td>
</tr>
<tr>
<td></td>
<td>C) 1.1KV CONTROL CABLES</td>
<td>ASIAN CABLE/ FINOLEX/ UNIVERSAL/ GLOSTAR/ CCI/ HAVELLS/ NITCO/ POLYCAP/ TORRENT/ SKYTONE</td>
</tr>
<tr>
<td>2.</td>
<td>A) CABLES GLANDS</td>
<td>COMET/ DOWELL/ JAINSON</td>
</tr>
<tr>
<td></td>
<td>B) LUNGS &amp; THIMBLES</td>
<td>DOWELLS / JAINSON</td>
</tr>
<tr>
<td>3.</td>
<td>PRE FABRICATED CABLE TRAY</td>
<td>SLOTCO/ PILCO/ STEELWAYS / INDIANA/ PATNY</td>
</tr>
<tr>
<td>B.</td>
<td>INTERNAL WIRING, EXTERNAL LIGHTING RELATED ITEMS:</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>MCB, MCB DB, AND ISOLATORS</td>
<td>L &amp; T (HAGAR)/ SIEMENS/ MDS (LEGRAND)/ INDO ASIAN/ SCHNEIDER/ STANDARD/ HAVELLS/ GE</td>
</tr>
<tr>
<td>5.</td>
<td>RCCB</td>
<td>L &amp; T (HAGAR)/ SIEMENS/ MDS (LEGRAND)/ INDO ASIAN/ SCHNEIDER/ STANDARD/ HAVELLS/ GE</td>
</tr>
<tr>
<td>6.</td>
<td>MS CONDUIT</td>
<td>ISI MARKED</td>
</tr>
<tr>
<td>7.</td>
<td>INDUSTRIAL SOCKET IN SHEET STEEL INCLOSURE WITH MCB</td>
<td>MDS (LEGRAND)/ INDO ASIAN/ CROMPTON/ BCH/ SCHEIDER/ HAVELLS</td>
</tr>
<tr>
<td>8.</td>
<td>PVC INSULATED COPPER</td>
<td>SKYLINE / GRANDLAY / FINOLEX/</td>
</tr>
<tr>
<td></td>
<td>WIRE (ISI MARKED)</td>
<td>HEVELLS/ POLYCB</td>
</tr>
<tr>
<td>---</td>
<td>-------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>9</td>
<td>CO-AXIAL CABLES</td>
<td>SKYTONE/DELTON/LAPP /FINOLEX</td>
</tr>
<tr>
<td>10</td>
<td>SWITCH, TELEPHONE</td>
<td>MK/SSKAY/ HAVELLS (CRABTREE)/ ANCHOR/</td>
</tr>
<tr>
<td></td>
<td>SOCKET &amp; BOXES (MODULAR TYPE)</td>
<td>NORTH WEST/ CLIPSAL/ INDO ASIAN/ MDS/</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LEGRAND/ (MOSAIC)</td>
</tr>
<tr>
<td>11</td>
<td>PIANO TYPE SWITCHES / SOCKETS (ISI MARKED)</td>
<td>MK/SSKAY/HAVELLS/ ANCHOR/NORTH WEST/</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CLIPSAL</td>
</tr>
<tr>
<td>12</td>
<td>LIGHTING FIXURES</td>
<td>PHILIP/GE/ BAJAJ/WIPRO/CROMPTON/ KESELEC</td>
</tr>
<tr>
<td>13</td>
<td>CEILING FANS</td>
<td>ORIENT/ GEC/ POLAR/ USHA/ CROMPTON/BAJAJ/ KHAITAN/ ALMONARD</td>
</tr>
<tr>
<td>14</td>
<td>EXHAUST FANS</td>
<td>GEC/CROMPTON/KHAITAN/ ALMONARD</td>
</tr>
<tr>
<td>15</td>
<td>OLES -9M. 7M, &amp; 5M</td>
<td>REPUTED (AS PER IS AND SUBJECT TO APPROVAL FROM ENGINEER-IN-CHARGE)</td>
</tr>
<tr>
<td>16</td>
<td>EARTHING PIPES</td>
<td>JINDAL/ TATA/ SAI</td>
</tr>
<tr>
<td></td>
<td>COMMUNICATION SYSTEM:</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>TELEPHONE CABLES</td>
<td>DELTON/HAVELLS/LAPP/ FINOLEX/ NICCO</td>
</tr>
<tr>
<td>18</td>
<td>FIBRE OPTIC CABLE</td>
<td>FINOLEX/ STERLITE/ CLIPSAL/ MODEX</td>
</tr>
<tr>
<td>19</td>
<td>HDPE PIPE</td>
<td>DURALINE/ DUTRON</td>
</tr>
<tr>
<td></td>
<td>LT PANELS, SWITCHGEARS AND RELATED ITEMS:</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>LT PANELS/ FEEDER PILLAR</td>
<td>TRICOLITE/ JAKSON ENGINEERS / L &amp; T/ SCHNEIDER/ GE POWER/ ABB/ C&amp;S/ SUDHIR GENSETS/ SIEMENS</td>
</tr>
<tr>
<td>21</td>
<td>AIR CIRCUIT BREAKER</td>
<td>L &amp; T / GE POWER/ SIEMENS/ ABB / SCHNEIDER/ C &amp; S.</td>
</tr>
<tr>
<td>22</td>
<td>MOULDED CASE CIRCUIT BREAKERS</td>
<td>L &amp; T / GE POWER /SIEMENS/ ABB/ SCHNEIDER/ C &amp; S/ LEGRAND.</td>
</tr>
<tr>
<td>23</td>
<td>FUSE DISCONNECTOR SWITCH/ SWITCH FUSE UNITS</td>
<td>L &amp; T / GE POWER/ SIEMENS/ ABB/ SCHNEIDER/ C &amp; S /HPL.</td>
</tr>
<tr>
<td></td>
<td>Description</td>
<td>Manufacturers</td>
</tr>
<tr>
<td>---</td>
<td>------------------------------------------------------------------------------</td>
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<tr>
<td>24</td>
<td>HRC FUSES</td>
<td>L &amp; T / GE POWER/ SIEMENS/ ABB/SCHNEIDER / C &amp; S.</td>
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<tr>
<td>25</td>
<td>AMMETER, VOLTMETER</td>
<td>AE/ MECO/ UNIVERSAL / RISHAB/ IMP</td>
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<tr>
<td>26</td>
<td>SELECTOR SWITCH, PUSH BUTTON SWITCH/ EMERGENCY SWITCH</td>
<td>KAY CEE/ CONTROL &amp; SWITCH GEARS/ L&amp;T / GE POWER CONTROL/ SIEMENS/BCH.</td>
</tr>
<tr>
<td>27</td>
<td>LED INDICATION LAMPS</td>
<td>AE/C&amp;S / EASUN/KAY CEE/ SIEMENS/ VAISHNOV/ L&amp;T</td>
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<tr>
<td>28</td>
<td>CT’S</td>
<td>AE/KAPPA / UNIVERSAL/ KAYCEE/IMP/C &amp; S/ L&amp;T/ MECO</td>
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<tr>
<td>29</td>
<td>STARTERS</td>
<td>SIEMENS/ L&amp;T/ CUTTER HAMMER/ GE POWER/ ABB/ C&amp;S/ SCHNEIDER</td>
</tr>
<tr>
<td>30</td>
<td>SINGLE PHASING PREVENTOR/ OVER LOAD PROTECTION UNIT</td>
<td>L &amp; T / GE POWER/ SIEMENS/ MINILEC/ ABB/SCHNEIDER</td>
</tr>
<tr>
<td>31</td>
<td>RELAYS</td>
<td>L&amp;T/ AREVA/ABB/SIEMENS</td>
</tr>
<tr>
<td>32</td>
<td>CHANGE OVER SWITCH</td>
<td>HH ELCO/C&amp;S/ INDO ASIAN/HPL/C &amp; S</td>
</tr>
<tr>
<td>33</td>
<td>CONTACTORS</td>
<td>L&amp;T/GE POWER/BCH/CON CORD/GE/ C &amp;S</td>
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<tr>
<td>34</td>
<td>KWH, PE, FREQUENCY METER</td>
<td>JAIPUR METER/ AE/ HAVELLS/ L &amp;T/ AREVA/ SECURE/ GENUS</td>
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<tr>
<td>35</td>
<td>PUSH BUTTONS</td>
<td>L &amp; T / SIEMENS/BCH/CON CORD/ GE/ C &amp; S</td>
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<tr>
<td>36</td>
<td>TIMERS</td>
<td>L &amp; T /BCH/ MDS/ INDO ASIAN/ SCHNEIDER/SIEMENS/ADVANI ORLIKON POWER CONTROL</td>
</tr>
<tr>
<td>37</td>
<td>DIGITAL METERS</td>
<td>ENERCON/NEPTONE/ AE/ L &amp; T</td>
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<tr>
<td>38</td>
<td>INTELLIGENT MULTI FUNCTION</td>
<td>ENERCON/NEPTUNE/AE/L &amp; T</td>
</tr>
<tr>
<td>39</td>
<td>PROTECTION &amp; OTHER RELAYS</td>
<td>AREVA/ L&amp;T/ ABB/ SIEMENS</td>
</tr>
</tbody>
</table>

In the event, any item is to be produced other than the preferred make specified above, proposal seeking approval for the same from the Competent authority is to be made in advance and procurement action to be initiated only after receipt of formal approval for the same.