

INDEX

Ser No	Description	Page No.
1.	Index page	1
2.	Tender forwarding letter & NIT	2 - 9
3.	PQ Documents including various forms & self evaluation by bidders	10 - 45
4.	<u>DEPMC</u> Instruction to the Bidders (i) Instruction and owner scope of services (ii) Detailed Engineering and Project Management Consultant's scope of services	46 - 62
5.	Financial Proposal	63 - 67
6.	Form of Contract	68 - 76
7.	Bank Guarantee (Appendix A)	77 - 78
8.	List of PCDA's / CDA's (Appendix B)	79
9.	Approximate numbers of Dwelling Units (Appendix C)	80
10.	Guidelines for DPR (Appendix D)	81 - 96
11.	Cost Estimate Part I (Appendix E)	97
12.	Cost Estimate Part II (Appendix F)	98
13.	Project Manager Team of consultant for Project Management (Appendix G)	99 - 101
14.	Format for Curriculum Vitae (Appendix H) & Consultant team during defect liability period (Appendix 'J')	102 - 103
15.	Errata / Amendment to APPENDIX 'A' to NOTICE INVITING E-TENDER	
16.	BOQ	104
17.	Errata / Amendment	
18.	Relevant Correspondence	
19.	Acceptance letter	

Signature of Consultant

Dy. Director (Contracts)
For Accepting Officer

SECTION - I
NOTICE INVITING e-TENDER AND
APPENDIX 'A' FOR DETAILED
ENGINEERING AND PROJECT
MANAGEMENT CONSULTANCY
(DEPMC) SERVICES

LETTER INVITING BID (e-Tender System)

Tele :72-6733(Mil)/0364-2534846
 Fax :0364-2537640
 E-Mail: ceshiz-ec-army@nic.in

मुख्यालय मुख्य अभियन्ता
 HQ Chief Engineer
 शिलॉंग आंचल
 Shillong Zone
 एस. ई. फाल्स
 Spread Eagle Falls
 शिलॉंग-७६३०११
 Shillong-793011

89601/MAP/PH-III/137 WE/ 09 /E-8

20 March 2018

Ms _____

**DETAILED ENGINEERING & PROJECT MANAGEMENT CONSULTANCY SERVICES FOR
 CONSTRUCTION OF 454 DUS (24 OFFRS, 28 JCOs & 402 ORS) INCLUDING ALLIED
 SERVICES AT LEIMAKHONG & RANGAPAHAR UNDER MAP PH-III**

Dear Sir (s),

1. Bids are invited by **HQ Chief Engineer Shillong Zone, Spread Eagle Falls, Shillong – 793 011**, Ministry of Defence, Government of India for and on behalf of President of India hereinafter referred as **“Accepting Officer”** for the subject works.
2. The brief scope of services is given in tender and in prequalification criteria.
3. The bid must be accompanied by tender cost of ₹ 2,000/- and “Earnest Money” as per NIT (The Consultancy firms which have Valid MSME Registration for similar consultancy works shall be exempted for tender cost of ₹ 2,000/- and Earnest Money Deposit), failing which your financial bid i.e. (Step-II)(Cover-II) will be treated as non responsive and will not be opened. It may be noted that if any firm revokes his offer during validity period, his Earnest Money shall be forfeited.
4. The Consultant is required to quote his rates in financial bid in Cover-II (Excel Sheet) required to be uploaded on or before last date and time for closing of bid.
5. Accepting Officer reserves the right to accept or reject the lowest or any offer without assigning any reason thereto.

Thanking you,

Yours faithfully,

**Dy Dir (Contracts)
 For Accepting Officer**

NOTICE INVITING E-TENDER**DETAILED ENGINEERING & PROJECT MANAGEMENT CONSULTANCY SERVICES (DEPMC)**

1. A tender of the type as mentioned in Appx 'A' to this Notice of Tender is invited for DEPMC contract as per particulars given therein.
 2. The estimated cost of the project for which DEPMC services are required is as indicated in the aforesaid Appx 'A'. This estimate however is not a guarantee and is merely given as a rough guide and if the work costs more or less, tenderer will have no claim on that account.
 3. Tender shall be accompanied by Earnest Money (for amount refer aforesaid Appx 'A') in the form of deposit at call receipt / FDR from Scheduled Banks issued in favour of **GE 868 EWS**, payable at **Rangapahar** as mentioned in Appendix 'A'.
 4. The period of completion of the project is as indicated in Appx 'A'. The DEPMC Contract is to be completed as per schedule indicated in the tender.
 5. Critical dates related to the tender are mentioned in website <https://defproc.gov.in>.
- NOTE:** Submission of bid for tender on online portal does not constitute any guarantee for opening of bid of the applicant. Opening of bid will be decided by the Accepting Officer based on prequalification (PQ) criteria as detailed in PQ documents. The contractor will be informed regarding non-opening of tender.
6. Tender, PQ documents & NIT has been uploaded on <https://defproc.gov.in>. Desirous consultants shall download the documents from above site.
 7. The tender shall be received online by the **HQ Chief Engineer Shillong Zone, Spread Eagle Falls, Shillong – 793 011** up to the due date mentioned in the aforesaid Appx 'A' or as amended thereafter.
 8. Under no circumstances will a father and his sons or other close relations who have business dealing with one another be allowed to tender for the same contract as separate competitors. A breach of this condition will render the tenders of both the parties liable for rejection.
 9. **HQ Chief Engineer Shillong Zone, Spread Eagle Falls, Shillong – 793 011** will be Accepting Officer here-in-after referred to as such for the purpose of this contract.
 10. The Accepting Officer reserves his right to accept tender submitted by a Public Sector undertaking giving price preference over other tenders, which may be lower as are admissible under the Government policy. No claim for any compensation or otherwise shall be admissible from such tenderers whose tenders may be rejected on account of the said policy.
 11. The tenderers are advised to visit the site by making prior appointment with the PM in sufficient time.
 12. **CWE 137 WE** shall be the Project Manager (PM) for this DEPMC work.
 13. A tenderer shall be deemed to have full knowledge of all related documents samples, site etc. whether he has inspected them or not.
 14. Any tender which proposes any alterations to any of the conditions laid down or which proposes any other conditions of any description, whatsoever is liable to be rejected.
 15. The submission of tender by a tenderer implies that he had read this notice and the conditions of contract and has made himself/herself aware of the scope and details of services to be provided for the project.
 16. Tenderers must be careful to upload a bonafide tender complete with all the documents forming part of the tender failing which the Accepting Officer may at his absolute discretion, reserve the right of forfeiting a portion of earnest money, deposited by the tenderer. A bonafide tender must satisfy each and every condition laid down in this notice.
 17. The Accepting Officer does not bind himself to accept the lowest or any tender or to give reason for not doing so.
 18. This notice of tender shall form part of the contract.
 19. Consultant(s) are required to upload scanned copy of "Earnest Money Deposit" along with the Tender Document as desired in NIT, failing which the bid will be treated as non-bonafide and will not be opened.
 20. The Consultant shall be disqualified if:

(a) The consultant has been blacklisted/ banned for business dealings with any of the Government Departments/ Ministry/ DG MAP/ MES at any time starting from 5 years before the deadline for submission of proposals till finalization of proposals, except in cases where such blacklisting/banning has been withdrawn by Competent Authority or has ceased to be effective on the deadline for submission of the proposals, for which satisfactory evidence is to be produced.

(b) Any previous contract of the consultant had been terminated due to Consultant's failure by Director General Married Accommodation project (DG MAP/ MES), at any time starting from 2 years before the deadline for submission of proposals, provided, there is no stay order or declaration by any Court against such termination of the Contract by the DG MAP/MES or such termination of the Contract has been revoked by DG MAP/MES.

(c) The consultant has suffered bankruptcy/insolvency or it is in the process of winding-up or there is a case of insolvency pending before any Court on the deadline of submission of proposals or thereafter till finalization of proposals.

(d) The consultant has been declared by DG MAP/MES to be a poor performer and the period of poor performance is still in force on the deadline for submission of proposals.

21. The consultant shall submit an affidavit that they are not liable to be disqualified on account of clauses mentioned above.

22. The following affidavit/ documents of bidder(s) shall be uploaded and details of these shall be filled up in Form 'H' duly annexed.

(a) Affidavit from firm as mentioned above.

(b) Experience and Degree/ Diploma Certificates of Engineers & Architects.

(c) Photographs of Proprietor/ Partners/ Directors of firm.

(d) MSME Registration Certificate for MSME Registered Bidder only.

(e) Affidavit that no near relative(s) of the bidder or their employees/agents is/are working as Gazetted/ Commissioned Officer/ Junior Engineer in DG MAP/ MES/ Corps of Engineers/ Ministry of Defence. If his/ their near relative(s) is/ are working in such capacity, he/ they shall furnish details. The bidder's bid shall not be considered for tender for the works in entire area under whose control his/ their near relatives are working as Gazetted/Commissioned Officer.

Note: - (i) All affidavits shall be given on non-judicial stamp paper of Rs. 100/- duly signed by authorized bidder and attested by the Magistrate/Notary public.

(ii) All the document uploaded by bidder shall be signed by authorised representative of firm.

23. The bidder shall upload the following documents in support of character and antecedents and details shall be filled up in Form 'J'.

(a) The certificate of character and antecedents of Proprietor(s)/Partner(s)/Director(s) and their agents affixed with photograph(s) and signed by appropriate authority not below the rank of SP of the district to which the individual belongs or copy of valid passport of Proprietor(s)/Partner(s)/Director(s) and their agents.

Note: -

(i) If the bidder makes misleading or false representation or deliberately suppresses information in the form, affidavits, statements and enclosures required in the prequalification documents, the bid shall be rejected and the Firm shall be banned for 5 years in MES and DG MAP.

(ii) In the absence of above documents bidder(s) shall be disqualified.

24. The department reserves the right to physically verify the performance of consultant for work already finished/ being executed and other details furnished by the consultant. The department also reserves the right to reject any prospective application without assigning any reason and restrict the list of Pre-Qualified consultants to any number as deemed fit.

25. The consultant shall upload self assessment form as detailed in Section V in the format given as Form "K" & "L".

26. Original DD/ Bankers Cheque as cost of Tender fee & FDR as cost of EMD and original Affidavits shall only be submitted before opening of Cover-I to **HQ Chief Engineer Shillong Zone, Spread Eagle Falls, Shillong – 793 011.**

27. The Consultancy firms which have valid MSME Registration for similar consultancy works shall be exempted from submitting tender cost and Earnest Money Deposit. Hard copy of no other documents is required except mentioned above. Documents uploaded in Cover-I shall only be considered for deciding eligibility.

28. **Methodology and Work Plan:** The firm will be required to upload an undertaking that the methodology and work plan for the project will be decided by the consultant in consultation with contractor and employer as per stipulation in the construction contract agreement for which the consultancy services are contemplated. It will be ensured that the work plan and methodology prepared is in compliance to requirement.

Signature of Consultant
Dated: _____

Dy. Dir (Contracts)
for Accepting Officer

SINGLE STAGE TWO COVER SYSTEM FOR ISSUE OF TENDER ONLINE**APPENDIX 'A' TO NOTICE INVITING E-TENDER**

- Para 1. Name of Work : **Detailed Engineering & Project Management Consultancy Services for Construction of 454 DUs (24 Offrs, 28 JCOs & 402 ORs) including allied services at Leimakhong & Rangapahar under MAP Ph-III**
- Para 2. (a) Estimated Cost of Project : **₹ 14,302.55** Lakhs (At par Market)
 (b) Estimated Cost of this Tender : **₹ 404.79** Lakhs (At par Market)
- Para 3. (a) Amount of Earnest Money : **₹ 4,80,000.00**
 (b) Cost of Tender : **₹ 2,000.00** in the shape of DD/Bankers Cheque from any Scheduled Bank in favour of **GE 868 EWS** and payable at **Rangapahar**
- Para 4. Period of completion of PROJECT : 04 (Four) Years
- Para 5, 6 & 7 (A) **Critical Dates** : Refer critical dates on website <https://defproc.gov.in>
- (B) **Eligibility Criteria**
- (a) Minimum eligibility criteria (Step-I) shall be as described in Section-IV of tender documents, and based on:-
 (i) Annual financial turnover of last three (03) years.
 (ii) Past experience of similar completed consultancy works.
 (iii) Bidding Capacity.
 (iv) Financial Soundness (Solvency and working capital requirement).
 (v) Minimum strength of technical manpower.
- (b) The Final eligibility of opening of financial bid shall be based on technical evaluation, which shall be carried out in Step-II with marking system and bidders scoring 70% or more in this step shall be considered eligible for opening of Cover-II.
- (c) **Financial Evaluation** :- This shall be done on the basis of rates quoted by the bidders in the BOQ of Cover-II. All bidders shall be awarded relative marks on lowest financial bid marks.
- (d) **Final Selection** :- The final selection of bidder shall be based on QCBS (quality and cost based selection) given in PQ criteria of the tender documents. The bidder achieving the highest combined score after technical and financial evaluation will be considered as the successful bidder.

Notes:-

- The acceptance of tender shall be based on evaluation of bids by quality & cost based selection (QCBS) as detailed in PQ documents.
- The tenderers shall note that the DD/Bankers cheque of **₹ 2,000.00** only in favour of **GE 868 EWS** as Cost of the tender documents. The DD of **₹ 2,000.00** as cost of tender documents shall be non-refundable. Tender cost shall be returned to such bidders, whose Cover II is not opened. Please note that Cover II (Price bid) will be opened only in respect of qualified and eligible contractors who fulfill the eligibility criteria according to their technical bid submitted in Cover I (Technical Bid).
- Uploading the bid does not constitute any guarantee for opening of price bid of tenderer. Opening of Price bid (Cover II) will be decided by the Accepting Officer based on the eligibility criteria specified in PQ documents and other considerations such as past track record, financial position & experience of similar works executed by the tenderer/applicant etc. The Accepting Officer shall receive applications (Cover I & Price Bid Cover II) upto the last date & time of bid submission/extended date of bid submission as applicable and as mentioned above. The applicant / tenderer will be informed regarding non-opening of Cover II (Price bid) if he is not found eligible.
- No applicant / tenderer shall be entitled for any compensation whatsoever for rejection of his technical bid / non-opening of Cover II (Price bid).
- For complete details refer our website at <https://defproc.gov.in> and www.mes.gov.in.
- The scanned copy of DD as referred above with application & other particulars of earnest money etc. be uploaded upto closing date & time of uploading of tender and hard copy of all documents uploaded in Cover

I shall be so forwarded to HQ CE Shillong Zone, Military Engineer Services, PO : Spread Eagle Falls, Shillong - 793 011 as to be received within seven days of bid submission end date failing which Cover II will not be opened.

7. The bidder/ tenderer shall also ensure compliance the **EPF & MP Act 1952** by the sub-contractor, if any engaged by the contractor for the subject work.
8. Scanned copy of GST registration letter along with registration number as applicable to be uploaded in Cover I of e-bid system. **In absence of this Cover I shall be liable for rejection.**
9. The provision regarding cost of tender, cost of EMD and purchase preference for all registered firms / bidders under **Ministry of Micro, Small & Medium Enterprises** shall be applicable as per **Micro, Small & Medium Enterprises Act 2006** and **public procurement policy Micro, Small & Medium Enterprises (MSEs) order-2012** including all amendments issued by **GOI on and before** bid submission end date of 'T' bid.
10. **EARNEST MONEY DEPOSIT (EMD)** mentioned in Para 3 (a) above, shall be submitted in the form Deposit at Call Receipt / FDR from a Scheduled Bank in favour of **GE 868 EWS**, payable at **Rangapahar** valid for not less than three months from the due date of receipt of tender. It may be noted that if any firm revokes, withdraws, impairs or modifies his offer during validity period, its Earnest Money shall be forfeited and he shall be debarred from re-tendering. No claim whatsoever will be entertained at a later date on this account.
11. All disputes arising out of or in respect of this tender before acceptance shall be decided by Court of appropriate jurisdiction at **Shillong** only. After acceptance of the subject tender, ARTICLE 17 (SETTLEMENTS OF DISPUTES) of Contract agreement shall be applicable.
12. In case of rejection of technical/prequalification bid, contractor may appeal to next higher Engineer authority i.e. HQ CE Eastern Command on email **ceengrkl-mes@nic.in** or **jtdgcontceengrkl-mes@nic.in** against rejection, whose decision shall be final and binding. However contractor/bidder shall not be entitled to any compensation whatsoever for rejection of technical/prequalification bid.

-sd-

(इकबाल सिंह)
(IQBAL SINGH)
संयुक्त निदेशक (सविदा)
JT DIR (CONTRACTS)
कृते स्वीकृति अधिकारी
FOR ACCEPTING OFFICER

89601/MAP/PH-III/137 WE/ 02 /E-8 Dated 05 Feb 2018

मुख्यालय मुख्य अभियन्ता
HQ Chief Engineer
शिलांग आंचल
Shillong Zone
एस. ई. फाल्स
Spread Eagle Falls
शिलांग-७९३०११
Shillong-793011

Distributions:

1. Builders Association of India, G-1/G-20 Commerce Centre, 7th Floor Tardeo, Bombay-400034
2. MES BAI, 'C' Row No 8, Bawri Mansion, Dhan kheti, Shillong,-793001, Meghalaya
3. MES BAI (Regd) Shillong Branch, C/o Gulesta Fabcy Market, G.S. Road, Shillong – 793 001
4. MES BAI (Regd) (Eastern Region) C/0 M/s S Chaturvedi & Co, Sood Bhawan, Pranami Mandir Road, Sevoke Road, Siliguri-1, Dist Darjeeling
5. MES BAI (Regd), Silchar Branch Office, Masimpur, PO Arunachal, Silchar (Assam)
6. MES BAI (Regd), Tezpur Branch Office C/O Chinmoy Traders, Bishnu Rabha Road, Tezpur - 784 001
7. MES BAI (Regd), Tenga Valley Branch, PO Tenga Market - 790 016 West Kameng, (Arunachal Pradesh)
8. Command/Zonal Chief Engineers_____
9. All CsWE under CE Shillong Zone_____
10. All GEs/GE (I) /AGE(I)under CE Shillong Zone_____
11. GE 868 EWS
12. GE 869 EWS
13. CWE 137 WE
14. GPO, Shillong
15. State Bank of India, Shillong
16. Municipal Corporation Shillong
17. Executive Engineer, CPWD, Shillong
18. Executive Engineer, State PWD, Shillong
19. Station Master, O/A Shillong
20. Station Master, Rly, Guwahati
21. Cantonment Board, Shillong
22. CE Setuk, C/o 99 APO
23. CE Vartak, C/o 99 APO,
24. CE Pushpak, C/o 99 APO
25. CE Udayak, C/o 99 APO

SECTION -II
GENERAL INFORMATION ON BID
SUBMISSION ONLINE

INFORMATION RELATED TO SUBMISSION OF BID ON WEB SITE

1. The bidders are required to submit soft copies of their bids electronically on the MES Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the MES Portal, prepare their bids in accordance with the requirement and submitting their bids online on the MES Portal. More information useful for submitting online bids on the MES Portal shall be obtained at: <http://eprocuremes.gov.in>

2 Registration on e-Procurement Portal

- (a) Bidders are required to enroll on the e-Procurement module of the Military Engineer Services eProcurement Portal (URL <https://defproc.gov.in>) by clicking on the link “Online bidder Enrollment” on the MES Portal which is free of charge.
- (b) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their account.
- (c) Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the MES Portal.
- (d) Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II of Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g sify/TCS/Code/eMudhra etc), with their profile.
- (e) Only one valid DSC shall be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSCs to others which may lead to its misuse.
- (f) Bidder then logs in to the site through the secured log-in by entering their user ID/Password and the password of the DSC/e-Token.

3. Method to Search the Tender Document

- (a) There are various search options are built in the MES Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tender, wherein the bidders shall combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a tender published on the MES Portal.
- (b) Once the bidders have selected the tenders they are interested in, they shall download the required documents/tender schedules. These tenders can be moved to the respective “My Tenders” folder. This would enable the MES Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
- (c) The bidder shall make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification/ help from the Helpdesk.

4. Preparation of Bids

- (a) Bidder shall take into account all corrigendum of PQ and tender document published before submitting their bids.
- (b) Bidder shall go through the tender advertisement and the tender documents carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents including the names and content of each of the document that need to be submitted. Any deviations from these shall lead to rejection of the bid.
- (c) Bidder shall prepare in advance the bid documents to be submitted as indicated in the tender document/schedule in PDF/XLS/RAR/DWF/JPG format. Bid documents shall be scanned with 100 dpi with black and white option which helps in reducing the size of the scanned documents.

(d) To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g PAN Card copy, annual reports, auditor Certificates etc) has been provided to the bidders. Bidders can use "My Space" or "Other important Documents" while submitting a bid, and need not upload same documents again and again. This will lead to a reduction in the time required for bid submission process.

5. **Submission of Bids**

(a) Bidder shall log into the e-procurement portal well in advance for bid submission so that they can upload the bid in time i.e on or before the closing date and time of submission of bid. No tender/Bid in any other electronic or physical form like email/fax/by hand /through post will be considered.

(b) The authorize representative of firm shall digitally sign the bid documents and upload them one by one as indicated in the Pre-qualification documents and tender documents.

(c) Bidder has to select the payment option as "Offline" to pay the tender fee and EMD as applicable and enter details of Fee and EMD.

(b) Bidder shall prepare the tender fee and EMD as per the instructions specified in the tender document. The hard copy of tender fee and shall be posted/couriered/given in person to the concerned official latest by the last date of bid submission or as specified in the tender documents. The details of the DD/any other accepted instrument, physically sent, shall tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.

(e) The server time (which is displayed on the bidder's dashboard) will be considered as the standard time for referring the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders shall follow this time during bid submission. Critical dates & time as appearing on the e-procurement portal shall only hold good, if different from any critical dates & time mentioned in tender documents / NIT / corrigendum, etc. and no compensation whatsoever shall be admissible to any bidder on such account.

(f) All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured socket layer 128 bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid openers public keys. Overall, the uploaded PQ and tender documents become readable only after the tender opening by the authorized bid openers.

(g) The uploaded PQ documents and tender document become readable only after the opening by the authorized bid openers.

(h) Upon the successful and timely submission of bids (i.e after clicking "Freeze Bid Submission" in the portal), the portal will give a successful bid submission message and a bid summary will be displayed with the bid no. and the data & time of submission of the bid with all other relevant details.

(j) The bid summary has to be printed and kept as an acknowledgment of the submission of the bid. This acknowledgement shall be used as an entry pass for any bid opening meetings.

6. **Assistance to Bidders.** Any queries relating to PQ documents and the tender documents and the terms and conditions contained therein shall be addressed to the Tender Inviting Authority or the relevant contact person indicated in the documents or can be sent through Email/ Fax.

7. **Method of Uploading and Signing the Documents**

(a) If the bidder firm is an individual, the documents shall be signed by him above his full typewritten name and current address.

(b) If the bidder firm is a proprietary firm, the documents shall be signed by the proprietor with his full typewritten name and the full name of his firm with its current address.

(c) If the bidder is a partnership firm the documents shall be signed by all the partners of the firm above their full typewritten names and current addresses or alternatively by a partner holding the Power of Attorney for the firm. In the later case a certified copy of the Power of Attorney shall be uploaded. In both cases, a certified copy of the partnership deed and current addresses of all the partners of the firm shall also be uploaded.

(d) If the bidder firm is a Public/ Private sector limited company or a corporation, the documents shall be signed by a duly authorized person holding Power of Attorney for signing the document by uploading a Copy of the Power of Attorney. The bidder's firm shall also upload a copy of the Memorandum of Articles of Association duly attested by a Public Notary.

8. **Final Decision Making Authority.** The Accepting Officer is the final decision making authority and has following rights:-

(a) The Accepting Officer reserves the right to accept or reject any uploaded tender and to annul the pre-qualification process and reject all uploaded tenders at any time, without assigning any reason or incurring any liability to the bidders.

(b) In case change(s) is/are noticed in state of information provided by the bidder after submission of PQ documents and tender documents, the Accepting Officer reserve the right to reject his/her bid before next step of process without incurring any liability to the applicant bidders.

9. All pages of the PQ documents uploaded shall be serially numbered with proper marking of relevant Annexure(s) in support of it.

10. Prospective bidders shall seek clarification if required on the pre-qualification document and tender documents before the due date of seeking clarification from the Accepting Officer and submit his online PQ documents and tender documents on or before the closing date and time of submission of bid.

Signature of Consultant

Dy. Director (Contracts)

SECTION –III
INSTRUCTIONS ON EVALUATION OF BID

**INSTRUCTIONS AND CRITERIA FOR EVALUATION OF BIDS BY QUALITY & COST
BASED SELECTION (QCBS)**

1. The selection of lowest bidder shall be based on Quality and Cost Based Selection (QCBS). The complete procedure of selection shall involve three steps. The bidder(s) shall read the criteria specified in each step carefully and upload the bid accordingly. Uploading of bid by bidder will imply that he has read all the criteria and conditions of all steps as well as final selection and has made himself/ herself/ themselves aware of these criteria and conditions. Representation on this account later shall be rejected in toto and no reason whatsoever shall be furnished by the tender issuing authority for such rejection.

2. The composition of bid for e-tendering shall be single stage two cover system. The cover-I shall contain "Technical Bid" and it shall be assessed over two steps. Cover-II shall contain the "Financial Bid". The financial bid shall be validated and password protected before uploading by bidder. The bid shall be submitted online on MES portal i.e. <https://defproc.gov.in>. The bidder price shall freeze on the date of closing bid. All documents forming part of tender document such as tender forwarding letter, instruction to tenderers, conditions etc. shall be uploaded in PDF/RAR format.

3. The details of step -I under Cover-I i.e. Technical Bid is as under:-

(a) **Step I (Cover I): Minimum Eligibility Criteria**

(i) This step involves minimum eligibility criteria as described in Section IV here-in-after. The bidder shall upload the minimum eligibility criteria documents on web site for scrutiny. Minimum eligibility criteria will be based on the following:-

- (aa) Annual Financial Turnover for last three years
- (ab) Past experience of similar completed consultancy works in last seven years
- (ac) Bidding Capacity
- (ad) Financial Soundness (Solvency and working capital requirement)
- (ae) Minimum strength of technical manpower

(ii) Further details on above criteria are given at Para 1 to 5 of Section IV. The details of above minimum eligibility criteria shall be properly filled up in the Form "A", Form "B", Form "C", Form "D-1", Form "F" and Form "G" with all supporting documents. A team of officers shall scrutinize the minimum eligibility criteria and only such firms, which fulfill the minimum eligibility criteria, shall be considered for Step-II (Cover-I) Technical Evaluation.

(b) **Step II (Cover I): Technical Evaluation**

(i) Details of technical evaluation of Step II are given at Section V.

(ii) The technical evaluation criteria of this step include evaluation of work experience, financial strength, technical human resource, technical software and experience in Conventional technology of the bidder. Marks will be awarded to the bidder as per following distribution: -

(aa) Work Experience:	40 Marks
(ab) Financial Strength:	30 Marks
(ac) Technical human resources:	25 Marks
(ad) Methodology & Work Plan (Technical Software):	05 Marks

Total : 100 Marks

(iii) The bidders shall submit details of EPF (EPF Number of employee) /TDS (Form 16A/Form 16)/ Payment details from company account of technical persons in respect of their technical human resource for proof of their employees for year ending Mar 2018.

(iv) Only those bidders who secure 70 and above marks in this step shall be eligible for consideration for financial bid.

(c) **Cover II: Financial Evaluation of bid**

(i) The financial bid of eligible bidders of Cover-I (Technical evaluation) shall be opened on date notified in tender documents. All bidders shall be awarded marks based on

lowest financial bid marks which shall be considered 100 and criteria of marks awarded to other bidders are described in Section VI.

(ii) The Financial Score in respect of each bidder will be calculated proportionately as per formula given in Section VI. The maximum Financial Score will be of lowest bidder and will be 100.

4. **Final Selection**

(a) The final selection of bidder shall be based on QCBS (quality and cost based selection). Final score will be arrived at by adding Technical Score and Financial Score with weightages of 70% and 30% respectively. Technical Score will be arrived at by adding marks of Step-II Cover-I. Exact formula for calculating the Final Score has been given at Section VI.

(b) The bidder achieving the highest combined Technical and Final score (first rank) will be considered for acceptance of this consultancy work.

5. **Acceptance:**

Name of successful bidder along with details of cost etc shall posted on the department website after award to bidder has been made.

6. **Definitions**

(a) **Accepting Officer** Means the President of India, acting through the **Chief Engineer Shillong Zone, Spread Eagle Falls, Shillong – 793 011.**

(b) **Bidders** Means the individual, proprietary firm, partnership firm, limited company private or public or corporation.

(c) **Year** Means Financial Year unless stated otherwise.

(d) **Financial Turnover** Means Turnover from "Architecture / Engineering /Project Management Consultancy Services" works only.

(e) **Similar Consultancy works** Means Consultancy for "Architecture / Engineering / Project Management Consultancy for RCC Structures for Residential/Commercial/Institutional buildings for any number of storeys".

7. **Organization Information**

Bidders are required to submit the following information in respect of his organization in Form 'D': -

(a) Name & Postal / Address, Telephone & Fax number, e-mail ID etc.

(b) Copies of original documents defining the legal status, place of Registration and principal place of business.

(c) Name of Directors and Officers to be involved with the work, with designation of individuals authorized to represent the organization.

(d) Information on any litigation in which the applicant was involved during the last seven years, including any current litigation.

8. **Blank**

9. **Letter of Transmittal** The applicant shall submit the letter of transmittal attached with pre-qualification documents. Letter of transmittal shall be given on an affidavit of Non-Judicial Stamp Paper of Rs. 100/- duly notarized (Refer Section VII).

10. **Acceptance / Rejection Criteria** The Accepting Officer reserves the right, without being liable for any damages or obligation to inform the applicant, to: -

(a) Amend the scope and value of tender.

(b) Reject any or all of the applications without assigning any reason.

(c) Reject applications based on the performance of firms in earlier executed projects with HQ DG MAP or any other organization where this firm has worked.

(d) Any effort on the part of the applicant or his agent to exercise influence or to pressurize Accepting Officer would result in rejection of his application. Canvassing of any kind is prohibited.

11. Bids for participation in pre-qualification procedure will be submitted online. All the prospective bidders are requested to go through Instructions for Online Bid Submission and get themselves registered on MES portal by fulfilling requisite criteria laid there-in-after and in tender documents.
12. All information called for in the enclosed forms shall be furnished against the relevant columns in the forms. If for any reason, information is furnished on a separate sheet, this fact shall be mentioned against the relevant columns. Even if no information is to be provided in a column, a "NIL" or "no such case" entry shall be made in that column. If any particulars / query are not applicable in case of the applicant, it shall be stated as "not applicable". The applicants are cautioned that not giving complete information called for in the application forms or not giving it in clear terms or making any change in the prescribed forms or deliberately suppressing the information shall result in the applicant being summarily disqualified. Applications made by post, telegram or telex or Fax will not be entertained.
13. The application shall be type written clearly and uploaded in PDF form.
14. Overwriting shall be avoided. Corrections, if any, shall be made by neatly crossing out, initialing, dating and rewriting. Pages of the pre-qualification document are numbered. Additional sheets, if any added by the applicant, shall also be numbered by him. They shall be submitted as a package with signed letter of transmittal.
15. References, information and certificates from the respective clients certifying suitability, technical knowledge or capability of the bidder shall be signed by an officer not below the rank of Executive Engineer / Project Manager or equivalent for Govt work and shall be certified by CMD /MD/ President/ Vice President or owner of the company for private work. By uploading such documents, the prospective bidder shall be deemed to have taken full responsibility of its authenticity as these documents shall bear their digital signature.
16. The bidder shall furnish any additional information which he thinks is necessary to establish his capabilities to successfully complete the envisaged work. He is, however, advised not to furnish superfluous information. No information shall be entertained after submission of pre-qualification document.
17. Any information furnished by the bidder found to be misleading or false representation or deliberately suppressed information either immediately or at a later date, would render him liable to be debarred from tendering / taking up of work of DG MAP project and the bidder shall be banned for five years for participating in any bid of MES/ DG MAP.

Signature of Consultant

Dy. Director (Contracts)

**SECTION -IV
TENDER EVALUATION
(STEP-I) (COVER-I):
MINIMUM ELIGIBILITY CRITERIA**

TENDER EVALUATION (STEP-I) (COVER-I): MINIMUM ELIGIBILITY CRITERIA

The bidder must satisfy the under mentioned minimum eligibility criteria: -

1. Past Experience of Similar Completed Consultancy Works (Form 'B') Experience of having successfully completed similar consultancy works during the last 7 years ending last day of the month previous to the one in which tender has been uploaded, mentioning configuration, no of storeys of building and technology adopted in which tenders are invited which shall be either of the following: -

(a) Three completed similar consultancy works costing (Construction cost) not less than the amount equal to 40% of estimated project cost specified in tender.

or

(b) Two completed similar consultancy works costing (Construction cost) not less than the amount equal to 50% of estimated project cost specified in tender.

or

(c) One completed similar consultancy works costing (Construction cost) not less than the amount equal to 80% of estimated project cost specified in tender.

Note: -

(i) The past experience in similar nature of consultancy work shall be supported by certificates issued by an officer not below the rank of Executive Engineer. In case the work experience is of Private sector experiences certificate shall be supported with copies of Letter of Award and copies of Corresponding TDS Certificates (Form 16A/Form 26AS). Value of work will be considered equivalent to the amount of TDS certificates(Form 16A/Form 26AS).

(ii) The value of executed works shall be brought to the current level by enhancing the actual value of work done at a simple rate of 7% of per annum, calculated from the date of completion to last day of the month previous to the one in which tender has been uploaded.

(iii) The definition of completed works costing (Construction Cost) is as under: -

"RCC Structures for Residential / Commercial / Institutional Buildings for any number of storeys for which completion certificate/ Phased completion certificate as per contract has been issued by the Department / Private Client shall be considered for past experience".

(iv) The bidder shall fill up the detail in form "B" attached with supporting documents for evaluation of minimum eligibility criteria referred above.

2. Annual Financial Turnover for Last Three Consecutive Years

(a) Average annual financial turnover of consultant in last three year shall not be less than 1.25% of Estimated Cost of this Project in NIT.

(b) At the time of submission of prequalification, the tenderer shall upload Affidavit/Certificate from Chartered Accountant mentioning Financial Turnover of last 3 years. There is no need to upload entire voluminous balance sheet. However, one page of summarized balance sheet (Audited) and one page of summarized Profit & loss Account (Audited) for last 03 years shall be uploaded. In case of non finalization of balance sheet of 2017-18 provisional balance sheet certified by Chartered Accountant shall be acceptable.

(c) The bidder shall not have incurred any losses during last three years ending Mar 2018.

(d) The bidder shall fill up the detail in Form "A" attached with supporting documents for evaluation of minimum eligibility criteria referred above.

3. Bidding Capacity

(a) The bidding capacity of the bidder shall be equal to or more than the estimated cost of the consultancy work. The bidder shall be qualified if their available bidding capacity is equal or more than the total value of the bid value. The available bid capacity shall be calculated as under: -

Assessed Available Bidding Capacity = A x N x 2 - B

Where,

A = Maximum Value of consultancy works executed in any one year during the last seven years ending **31 Mar 2018** taking into account the completed as well as works in progress. Enhancement @7% per annum shall be considered for arriving value of 'A'.

N = Number of years stipulated for completion of project work for which pre-qualification criteria has to be considered which shall be taken as four for this project

B = Value of existing commitments (Balance Consultancy Fee) of ongoing consultancy works to be completed during the execution of project work for which pre-qualification criteria is to be considered. This also includes value of lowest bid(s) if any, pending with DG MAP for acceptance and proportionate value of Joint Venture Work shall be considered.

(b) At the time of submission of prequalification, the tenderer shall upload Form "C" attached with supporting documents for calculating value of **A and B** for evaluation of **Bidding Capacity** as referred above. Form "C" should be dually certified by Chartered Accountant.

4. Financial Soundness (Solvency and Working Capital Requirement)

(a) The bidders' solvency shall be not less than 0.8% of estimated cost of this project as specified in NIT.

(b) The bidder shall upload a solvency certificate from his Bankers on the format as per Form 'F'. The certificate shall indicate the code number of the Bank, Name, Designation and Personal code number of the signatory to certificate complete postal address and telephone number of branch.

(c) The working capital of bidder shall also not be less than 0.125% of the estimated cost of this project as specified NIT. Working capital certificate from nationalized/schedule bank shall be uploaded as per Form 'G' The working capital shall be judged from balance sheet/certificate of bank/bank statement **for last 06 months**/over draft facility from bank/fixed deposit receipts with bank.

5. Minimum Strength of Technical Manpower

(a) The consultant shall have minimum strength of Qualified Graduate/Post Graduation Architect/Engineer as defined herein after on its regular roll as per Estimated Cost of this Project (ECP).

Ser. No.	Qualification & Experience	Minimum Number
		For ECP INR (0 to 400 Cr)
1	Chief Architect/ Team Leader (B.Arch) with minimum 20 years experience.	1
2	B. Arch minimum 15 years experience or Diploma in Arch with minimum 20 years of experience.	1
3	B. Arch minimum 05 years (but less than 15 years) experience or Diploma in Arch with minimum 10 years (but less than 20 years) of experience	1
4	Civil Engineer (Degree Holder) with minimum 15 years experience or Diploma in Civil with minimum 20 years of experience.	1
5	Civil Engineer (Degree Holder) with minimum 05 years (but less than 15 years) experience or Diploma in Civil with minimum 10 years (but less than 20 years) of experience.	1

6	Structural Engineer (M Tech in Structural Engineering) with minimum 10 years experience.	0
7	Degree in Mechanical / Electrical / Public Health & Environment Engineering with minimum 08 years experience or Diploma in Mechanical / Electrical / Public Health & Environment Engineering with minimum 13 years experience.	0
Total		05

Signature of Consultant

Dy. Director (Contracts)

SECTION - V
TENDER EVALUATION
(STEP –II) (COVER-I):
TECHNICAL EVALUATION

TENDER EVALUATION (STEP-II) (COVER-I): TECHNICAL EVALUATION

1. **Step -II: (Technical Evaluation)** This shall be based on marks awarded to bidders based on work experience, financial strength, technical persons, technical software and experience in new construction technology for consultancy work. Marks system for the evaluation of Step-II is as under:-

2. **Work Experience:** (Ref Para 1 Section IV) : The maximum marks for Work Experience shall be 35. The marks will be assessed as under: -

SI No	Eligibility Status	Maximum Marks (35)
(i)	Having successfully completed cumulative value of similar project / projects equal to 80% of the estimated cost of the project.	60%
(ii)	Having successfully completed cumulative value of similar project / projects equal to 160% of the estimated cost of the project.	80%
(iii)	Having successfully completed cumulative value of similar project / projects equal to 240% or more of the estimated cost of the project.	100%

Note: (i) The pro-rata percentage shall be considered for assessing marks when works experience eligibility status falls in between of above said criteria.
(ii) While arriving at cumulative value of similar Project / Projects, only those projects having value not less than the amount equal to 40% of the estimated cost of the project will be considered.
(iii) Section IV Para 1 Notes. (i) to (iv) will be applicable for considering above works experience

3. **Financial Strength:** (Ref Para 2 Section IV): The maximum marks for Financial Strength shall be 25. The marks will be assessed as under: -

SI No	Eligibility Status	Maximum Marks (25)
(i)	Average annual financial turnover equal to the eligibility criteria as per Para 2 Section IV.	60%
(ii)	Average annual financial turnover equal to the eligibility criteria as per Para 2 Section IV.	80%
(iii)	Average annual financial turnover three times or more than the eligibility criteria as per Para 2 Section IV.	100%

Note: The pro-rata percentage shall be considered for assessing marks when financial eligibility status falls in between of above said criteria.

4. **Technical Personal:** (Ref Para 5 Section IV): The maximum marks for Technical Persons shall be 30. The marks will be assessed as under: -

SI No	Eligibility Status	Maximum Marks (30)
Architect		
(a) Chief Architect/Team Leader (Max Marks under this head is 4)		
(i)	B. Arch with experience of 20 years	03
(ii)	B. Arch with experience of more than 25 years	04

(b) Subordinate Architect (Max Marks under this head is 8)		
(i)	Bachelor's Degree in Architecture with 15 years experience or Diploma in Arch with 20 years of experience	02 (Each)
(ii)	Bachelor's Degree in Architecture with 05 years experience or Diploma in Arch with 10 years of experience	01 (Each)
Engineer		
(a) Civil Engineer (Max Marks under this head is 10)		
(i)	Senior Civil Engineer (Degree Holder with 15 years experience or Diploma in Civil with 20 years experience)	02 (Each)
(ii)	Civil Engineer (Degree Holder with 5 years experience or Diploma in Civil with	01 (Each)

	10 years experience)	
(b) Electrical Engineer (Max Marks under this head is 2)		
(i)	Electrical Engineer (Degree Holder with 5 years experience or Diploma in Electrical with 10 years experience)	01 (Each)
(c) Structural Engineer (Max Marks under this head is 4)		
(i)	Structural Engineer (M Tech in Structure) with 10 years experience	02 (Each)
(d) MEP Design Expert (Max Marks under this head is 2)		
(i)	Degree in Mechanical / Electrical / Public Health & Environment Engineering with minimum 08 years experience or Diploma in Mechanical / Electrical / Public Health & Environment Engineering with minimum 13 years experience	01 (Each)
Note: The pro-rata marks shall be considered for assessing marks when technical personnel eligibility status falls in between of above said criteria.		

5. Methodology & Work Plan [Conventional Construction Technology]: -

(A) Technical Software The maximum mark for Technical Software shall be **05**. The marks will be assessed as under:

Sl No	Eligibility Status	Maximum Marks (05)
(a)	Auto Cad Licensed software (Max Marks under this head is 1.5)	
(i)	Auto Cad licensed software 05 users	1.0
(ii)	Auto Cad licensed software more than 05 users	1.5
(b)	Revit licensed software (Max Marks under this head is 1.5)	
(i)	Revit licensed software 05 users	1.0
(ii)	Revit licensed software more than 05 users	1.5
(c)	STAAD licensed software (Max Marks under this head is 1.5)	
(i)	STAAD licensed software 02 users	1.0
(ii)	STAAD licensed software more than 02 users	1.5
(vii)	Primavera licensed software	0.5
Note: Bidder shall submit requisite documents in support of above license software		

6. Methodology & Work Plan [Conventional Construction Technology]: -

(B) Experience in New Technology (where required). The marks will be assessed as under:

Sl No	Eligibility Status	Maximum Marks (05)
(a)	Relevant experience of project of value minimum costing 50% of estimated cost of proposed project with new advanced construction technology	03
(b)	Relevant experience of project of value minimum costing 75% of estimated cost of proposed project with new advanced construction technology	04
(c)	Relevant experience of project of value minimum costing 100% of estimated cost of proposed project with new advanced construction technology	05
Note:		
(i) The pro-rata marks shall be considered for assessing marks when minimum costing falls in between the above said criteria.		
(ii) Bidder shall submit requisite documents in support of above experience.		
(iii) The value of executed works shall be brought to the current level by enhancing the actual value of work done at a simple rate of 7% per annum, calculated from the date of completion to last day of the month previous to the one in which tender has been updated.		

7. Self- Assessment. The bidder will carry out self-assessment and fill the Form “K” and “L” and upload it along with Tender Document which will be verified by the Board of Officers.

Signature of DEPMC

Dy. Director (Contracts)

SECTION – VI
TENDER EVALUATION
(STEP –III) (COVER-II):
FINANCIAL BID

FINANCIAL EVALUATION OF BID STEP-III (COVER-II)

1. Bidders with 70 or more marks in Step-II only will be considered for financial evaluation of bid.
2. Bidders shall go through the complete tender of consultancy services as uploaded in web site to quote the rates in BOQ in prescribed performa of uploaded BOQ.
3. The lowest financial bid (Fm) will be given a financial score (Sf) of 100 points. The financial scorers (Sf) of the other financial bids will be determined using the following formula:-

$$\mathbf{Sf= 100x Fm/F;}$$

In which Sf is the financial score, Fm is the lowest financial bid, and F is the financial bid under consideration of other bidders.

Final Selection

4. Combined technical score of Step II as explained here-in-before shall be “St” which is as under:

$$\mathbf{St = Total marks of bidder in Step-II.}$$

5. The final selection shall be based on QCBS i.e. Quality and cost based selection. The financial bid of only those bidders whose documents are found to be in order and who qualify in Step-I and Step-II of technical bid evaluation will be opened on the same day or next day after finalization of technical bid evaluation.

6. Bids of these consultancy services will finally be ranked as under in accordance with their combined technical (St) and financial (Sf) scorers:

$$S= St \times Tw + Sf \times Fw;$$

Where S is the combined score of bidder and Tw and Fw are weightage assigned to Technical bid and financial Bid. The value of Tw and Fw shall be 0.70 (Zero point seven) and 0.30 (zero point three) respectively.

7. The bidder achieving the highest combined technical and financial score will be considered to be the successful lowest bidder and will be considered for acceptance of this consultancy tender, subject to reasonability of financial bid.

Signature of Consultant

Dy. Director (Contracts)

SECTION –VII
LETTER OF TRANSMITTAL
&
FORMS WITH SELF-ASSESSMENT OF
STEP-II COVER -I

LETTER OF TRANSMITTAL**(ON RS 100/- NON-JUDICIAL STAMP PAPER DULY NOTARIZED AND ALSO ON LETTER HEAD OF THE COMPANY)**

From:

Mar 2018

To

HQ Chief Engineer
Shillong Zone
Spread Eagle Falls
Shillong-793011

Subject: 1. Detailed Engineering & Project Management Consultancy Services for Construction of 454 DUs (24 Offrs, 28 JCOs & 402 ORs) including allied services at Leimakhong & Rangapahar under MAP Ph-III.

Sir,

Having examined the details given in Pre-Qualification Press Notice & Pre-Qualification Document for the above work, I / We hereby submit the pre-qualification document and other relevant information.

1. I / We hereby certify that all the statements made and information supplied in the enclosed Forms "A" to "L" and accompanying statement are true and correct and no pertinent information has been suppressed by us.
2. I / We have furnished all information and details necessary for pre-qualification and have no further pertinent information to supply.
3. I / We submit the requisite certificate for annual turnover, work completed, work in hand, balance sheet, profit & loss account and authorize the Accepting Officer to approach organizations, employers, firms and corporation to verify our competence and general reputation.
4. I / We hereby affirm and declare that above details / information's are correct to the best of my knowledge and records available. In case of any fake/ wrong details, my/ our application shall be treated as non-bonafide and I/ We understand that my/ our firm will be banned for a period of five years.
5. I/We submit the following certificates in support of details of consultancy work having successfully completed.

Certificate From**Name of Work(s):**

(a).

(b)

(c)

Enclosures:..... Nos.

Seal of Applicant

Date of Submission

Signature of Applicant(s)

FINANCIAL INFORMATION

1. **Financial Analysis** – Under mentioned details to be furnished duly supported by figures in balance sheet/profit & loss account for the last three years duly certified by the Chartered Accountant, as submitted by the applicant to the Income Tax Department (Copies to be attached).

- (a) Gross Annual Turn Over of similar consultancy services only
- (b) Profit/Loss.

S. No.	Item	Years (Last three financial year)		
1	Gross annual turn over			
2	Profit / Loss			

Signature of Applicant(s)

Signature of Chartered Accountant with Seal
and Registration Number

DETAILS OF SIMILAR WORKS & NEW TECHNOLOGY WORK COMPLETED DURING THE LAST SEVEN YEARS ENDING LAST DAY OF MONTH PREVIOUS TO THE ONE IN WHICH TENDER UPLOADED

S. No.	Name of Consultancy Service/ Project & location	Owner or Sponsoring Organisation	Total Construction Cost in crores	Configuration / Type of construction (RCC framed/ Shear wall / Precast etc.)	Date of commencement as per contract	Stipulated date of completion	Actual date of completion	Litigation/ arbitration cases which are over and Litigation/arbitration cases pending/ in progress with details #	Name & address/ telephone number of Executive Engineer/ Project Manager or equivalent to whom reference shall be made	Reasons for delay and compensation charged if any	Nature of Consultancy Services (Architecture/ Engineering/ PMC)
1	2	3	4	5	6	7	8	9	10	11	12

Note: -

- The applicant shall upload the copy of commencement of work/ work order and completion certificate from owner/employer giving detail of commencement, completion and amount of work for verification.
- In case the firm is having past experience of having projects consisting of various nature of works (like industrial, infrastructure works etc.), only similar nature of works (as defined in tender) shall be considered for eligibility/evaluation purpose. For this purpose the bidder shall submit a certificates issued by an officer not below the rank of Executive Engineer certifying the cost of building component only and also the cost of building with new construction technology, if any. In case the work experience is of Private sector experiences certificate shall be supported with copies of Letter of Award and copies of Corresponding TDS Certificates (Form 16A/Form 26AS). Value of work will be considered equivalent to the amount of TDS certificates (Form 16A/Form 26AS).

Indicate gross amount claimed and amount awarded by the Arbitrator.

Signature of Applicant(s)

(A) Maximum Value of consultancy works executed in any one year during the last seven years ending 31 Mar 2018 taking into account the completed as well as works in progress.

S. No.	Item	Last 07 Years						
1	Gross Annual Turn over							

(B) Value of existing commitments (Balance Consultancy Fee) of ongoing consultancy works to be completed during the execution of project work for which pre-qualification criteria is to be considered.

S. No.	Name Of Consultancy Services/ Project & Location	Owner Or Sponsoring Organisation	Total Construction Cost in crores	Configuration / No. of Storeyes & Type of construction (RCC framed/ Shear wall / Precast etc.)	Date of commencement as per contract	Stipulated date of completion	Cost of total Consultancy fees in crores	Percentage progress of work till years ending last day of month previous to the one in which tender uploaded	Cost of Balance Consultancy Fees yet to be claimed in crores	Slow Progress if any, and reasons there of #	Name & address/ telephone number of Executive Engineer/ Project Manager or equivalent to whom reference shall be made	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13

Indicate reasons for slow progress whether it was due to financial problems, labour problems, delay in issuance of drawings, change of drawings/details, material procurement problems, shortage of materials, non workable quoted rates, increase in quantities / any other reasons to be stated.

Signature of Chartered Accountant with Seal and Registration Number

Signature of Applicant(s)

FORM – “D”

STRUCTURE & ORGANISATION OF CONSULTANCY FIRM

1	Name & Address of the Firm	
2	Telephone No. / Telex No. / Fax No. of Firm	
3	Legal status of the Firm (attach copies of original document defining the legal status)	
4	(i) An Individual.	
	(ii) A Proprietary Firm.	
	(iii) A Firm in Partnership.	
	(iv) A Public/ Private sector limited company or corporation.	
5	Particulars of registration with various Government bodies (upload attested photocopy)	
	Organization / Place of registration	Registration
	(i)	
	(ii)	
	(iii)	
6	Names & Titles of Directors & Officers with designation to be concerned with this consultancy work.	
7	Designation of individuals authorized to act for the organization.	
8	Has the firm ever required to suspend consultancy service for a period of more than six months continuously after commencement of the consultancy service? If so, give the name of the project and reasons of suspension of work.	
9	Has the firm or any constituent partner in case of partnership firm, ever abandoned the awarded consultancy work before its completion? If so, give name of the project and reasons for abandonment.	
10	Has the firm, or any constituent partner in case of partnership firm, ever been debarred / black listed for tendering in any organization at any time? If so, give details.	
11	Details of the litigation in which the firm was involved in last five years including any current litigation.	
12	Has the firm or any constituent partner in case of partnership firm, ever been convicted by a court of law? If so, give details.	
13	In which field of consultancy service the firm has Specialization and interest?	
14	Any other information considered necessary but not included above	
15	Name of sister concern/ firm having same person(s) on Board of Directors	

Signature of Applicant(s)

DETAILS OF PERMANENT TECHNICAL PERSON EMPLOYED BY THE FIRM

S. No.	Designation	Name of employee	Qualification (Degree/Diploma)	Year of passing of Requisite Qualification	Years of Professional experience & details of work carried out	Age	Remarks
1	2	3	4	5	6	7	8
(i)	Chief Architect/Team Leader	(i)					
(ii)	Subordinate Architect	(i)					
		(ii)					
						
(iii)	Junior Architect	(i)					
		(ii)					
						
(iv)	Senior Civil Engineer	(i)					
		(ii)					
						
(v)	Junior Civil Engineer	(i)					
		(ii)					
						
(vi)	Structural Engineer	(i)					
		(ii)					
						
(vii)	MEP Expert	(i)					
		(ii)					

Note:-

- Upload the complete detail of qualification and experience duly annexured.
- Step-I Tender Evaluation shall be carried out based on technical personnel to be employed considering the above uploaded details.
- Experience prior to requisite qualification degree/diploma shall not be considered.
- The proof for deduction of EPF (EPF Number of employee)/TDS (Form 16A/Form 16)/Payment details from company account for year ending Mar 2018 of technical persons shall also be uploaded.
- Any employment of technical manpower after 31 March 2018 shall not be considered for the purpose of evaluation.

Signature of Applicant(s)

DETAILS OF DD/FDR/BGB/BANKERS CHEQUE SUBMITTED

Srl. No.	Name of work (s) & location	Name of the Bank	DD/FDR/BGB/BANKERS CHEQUE_No. & Date	Amount in Rs.	Remarks
1	2	3	4	5	6

Signature of Applicant(s)

FORM OF SOLVENCY CERTIFICATE FROM NATIONALISED/ SCHEDULE BANK

This is certified that to the best of our knowledge and information M/s Shri/ Smt..... having address a customer of our bank are/is respectable and can be considered solvent upto Rs. (Rupees).....). The certificate is issued without any guarantee or responsibility on the bank or any of the officers.

(Signature)

Name, Designation and Personal Code No. of Signatory & Seal of Bank

Note: In case of partnership firm, certificate to include names of all partners as recorded with the Bank.

Signature of Applicant(s)

FORM OF WORKING CAPITAL CERTIFICATE FROM NATIONALISED/ SCHEDULED BANK

This is certified that M/s/Shri/Smt. having address..... has/have been maintaining a saving bank account/current account/fixed deposit account with this branch of bank since..... and the firm is having working capital of approximately Rs..... and/ or the firm is enjoying overdraft/credit facilities upto limit of Rs..... This certificate is issued without any guarantee or responsibility on the bank of any or the officers.

(Signature)

Name, Designation and Personal Code No. of Signatory & Seal of Bank

Signature of Applicant(s)

DETAILS OF AFFIDAVITS UPLOADED

Srl. No.	Description of Affidavit	Remarks
1	2	3

Signature of Applicant(s)

DOCUMENTS IN SUPPORT OF VERIFICATION OF CHARACTER AND ANTECEDENTS

Srl. No.	Description of Document	Remarks
1	2	3

NOTE:-

- (i) The uploaded certificate shall have no cuttings / overwriting and should be legible.
- (ii) Photographs of bidders and verification of antecedents in case of Government undertaking/ PSUs/ CPSE is not necessary.
- (iii) Verification of antecedents of bidder's representatives/ labours deployed at site in connection with consultancy work under the contract, will be done by bidder as per security requirements of User Unit(s) / installation(s) and all expenses in connection with such verification of antecedents by Police Authority/Security Agency concerned shall be borne by the consultant.

Signature of Applicant(s)

SELF ASSESSMENT FORM FOR TECHNICAL EVALUATION (STEP II) (COVER I)

1. Work Experience					
Sl No	<u>Evaluation of Work Experience (Refer Para 2 Section V)</u>	Maximum Marks 40	Cumulative cost of Projects executed	Marks Obtained	Supporting Documents
Name of the Project carried out during last seven years		Cost of completed Projects and enhanced as per Note (ii) Para 1 Section IV			
(i)					
(ii)					
(iii)					
(iv)					
(v)					

2. Financial Strength					
Sl No	<u>Evaluation of Financial Strength (Financial Turnover) (Refer Para 3 Section V)</u>	Maximum Marks 30	Average Financial turnover	Marks Obtained	Supporting Documents
Financial Year		Gross annual financial turnover			
(i)	Yr _____				
(ii)	Yr _____				
(iii)	Yr _____				

SELF ASSESSMENT FORM FOR TECHNICAL EVALUATION (STEP II) (COVER I)

3. Technical Personal				
Sl No	Evaluation of consultant's Technical manpower (Refer Para 4 Section V)	Maximum Marks 25	Marks Obtained	Supporting Documents
	Strength of Technical Manpower	Technical Manpower held		
<u>Architect</u>				
(a) Chief Architect/Team Leader one number (Minimum 20 Yr, 20-25 Yr, >25 Yr) (Maximum Marks under this head is 4)				
(i)	Chief Architect/Team Leader	One number with ___ Yr Experience		
(b) Subordinate Architect (Maximum Marks under this head is 5)				
(i)	B. Arch minimum 15 years experience or Diploma in Arch with minimum 20 years of experience.	_____ Nos		
(c) Junior Subordinate Architect (Maximum Marks under this head is 4)				
(i)	B. Arch minimum 05 years experience or Diploma in Arch with minimum 10 years of experience.	_____ Nos		
<u>Engineer</u>				
(a) Senior Civil Engineer (Maximum Marks under this head is 4)				
(i)	Civil Engineer (Degree Holder) with minimum 15 years experience or Diploma in Civil with minimum 20 years of experience.	_____ Nos		
(b) Junior Civil Engineer (Maximum Marks under this head is 3)				
(i)	Civil Engineer (Degree Holder) with minimum 05 years experience or Diploma in Civil with minimum 10 years of experience	_____ Nos		
(c) Structural Engineer (Maximum Marks under this head is 3)				
(i)	Structural Engineer (M Tech in Structural Engineering) with minimum 10 year experience	_____ Nos		
(d) MEP Design Expert (Maximum Marks under this head is 2)				
(i)	Degree in Mechanical/ Electrical/ Public Health and Environment Engineering with minimum 08 year experience or Diploma in Mechanical/ Electrical/ Public Health and Environment Engineering with minimum 13 year experience	_____ Nos		
Total Marks =				

SELF ASSESSMENT FORM FOR TECHNICAL EVALUATION (STEP II) (COVER I)

4. Methodology & Work Plan				
Sl No	Evaluation of Technical Software Users {Refer Para 5(A) Section V}	Maximum Marks 05	Marks Obtained	Supporting Documents
	Technical Software	Number of Users License		
Licensed Software				
(a) Auto CAD				
(i)	Numbers of user licensed software			
(b) Revit/ DataCAD/ MicroStation				
(i)	Numbers of user licensed software			
(c) STAAD/ RISA 3D/ ETABS/ SAP/ STRAP/MIDAS				
(i)	Numbers of user licensed software			
(d) Primavera/ Microsoft Project				
(i)	Numbers of user licensed software			
Total Marks =				

TOTAL MARKS OBTAINED IN SELF ASSESSMENT OF TECHNICAL EVALUATION

Sl No	Name of Consultancy firm	Steps of Evaluation	Max Marks	Marks obtained in self assessment	Remark
1		Evaluation of Work Experience	40		
2		Evaluation of Financial strength	30		
3		Evaluation of Technical Persons	25		
4		Evaluation of Technical Software Users	05		
TOTAL			100		

SIGNATURE OF APPLICANT(S)

FORMAT OF BANK GUARANTEE FOR EARNEST MONEY

1. * In consideration of the President of India represented by **Chief Engineer Shillong Zone, Spread Eagle Falls, Shillong – 793 011** (hereinafter called “the OWNER”) having agreed to exempt _____ (hereinafter called “the said contractor(s)”) from the demand, under the terms and conditions of tender for provision of _____ (hereinafter called “the said tender”), of Earnest Money Deposit for the due fulfillment by the said Contractor(s) of the terms and conditions contained in the said tender on production of a Bank Guarantee for Rs _____ (Rupees only). We, _____ Bank, (herein after referred to as “the Bank”) do hereby undertake to pay to the Government an amount not exceeding Rs _____ (Rupees Only) against any loss or damage caused to or suffered or would be caused to or suffered by the OWNER by reason of any breach by the said Contractor(s) of any of the terms or conditions contained in the said tender.

OR

* In consideration of the President of India represented by **Chief Engineer Shillong Zone, Spread Eagle Falls, Shillong – 793 011** (hereinafter called “the OWNER”) having agreed to exempt _____ (hereinafter called “the said contractor(s)”) from the demand, under the terms and conditions of tender for “**Detailed Engineering & Project Management Consultancy Services for Construction of 454 DUs (24 Offrs, 28 JCOs & 402 ORs) including allied services at Leimakhong & Rangapahar under MAP Ph-III.**”, of Earnest Money Deposit for the due fulfillment by the said Contractor(s) of the terms and conditions contained in the said tender on production of a Bank Guarantee for Rs _____ (Rupees only). We, _____ Bank, (herein after referred to as “the Bank”) do hereby undertake to pay to the Government an amount not exceeding Rs _____ (Rupees Only) against any loss or damage caused to or suffered or would be caused to or suffered by the Owner by reason of any breach by the said Contractor(s) of any of the terms or conditions contained in the said tender.

2. We, _____ Bank, do hereby undertake to pay the amounts due and payable under this guarantee without any demur, merely on a demand from the “OWNER” stating that the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the “OWNER” by reason of any breach by the said Contractor(s) of any of the terms or conditions contained in the said agreement. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs.....

3. We, _____ Bank, further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of the Owner under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or till **Chief Engineer Shillong Zone, Spread Eagle Falls, Shillong – 793 011**, Ministry of Defence certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the said Contractor(s) and accordingly discharges the guarantee. Unless a demand or claim under this guarantee is made to us in writing on or before the we shall be discharged from all liability under this guarantee thereafter.

4. We, _____ Bank, further agree with the Owner that the Owner shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Agreement or to extend time of performance by the said Contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Owner against the said Contractor(s) and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said Contractor(s) or for any forbearance, act or omission on the part of the Owner or any indulgence by the Owner to the said Contractor(s) or any such matter or thing whatsoever which under the law relating to sureties would but for this provision have effect of so relieving us.

5. Our main/branch office located at _____ undertakes to confirm genuineness of the guarantee and that invoked amount, if any, under this guarantee will be paid within 24 hrs of receipt of demand letter from **Chief Engineer Shillong Zone, Spread Eagle Falls, Shillong – 793 011** without referring the matter to the original issuing Bank.
6. We, _____ Bank, lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Owner in writing.

Date the _____ day of _____ 20_____ for _____ Bank.

* Delete which ever not applicable.

Signature of Contractor
Dated _____

DEPMC

For Accepting Officer

SECTION VIII

**DETAILED ENGINEERING & PROJECT
MANAGEMENT CONSULTANCY SERVICES
FOR CONSTRUCTION OF 454 DUS (24
OFFERS, 28 JCOS & 402 ORS), INCLUDING
ALLIED SERVICES AT LEIMAKHONG &
RANGAPAHAR UNDER MAP PH-III**

INSTRUCTIONS TO BIDDERS (ITB)**1. INTRODUCTION**

President of India acting through **Chief Engineer Shillong Zone, Spread Eagle Falls, Shillong – 793 011** (hereinafter referred to as **Accepting Officer**) has decided to execute Married Accommodation Project at **Leimakhong & Rangapahar**.

2. BIDDING DOCUMENT, CLARIFICATION AND ADDENDUM

(a) The tender shall be accompanied by a certified true copy of power of attorney in favour of the signatory to the tender documents. If the tender is submitted on behalf of a partnership firm, it must be signed either by all partners or some partners holding a valid power of attorney from all partners constituting the firm and in case of company, it shall be signed by Managing Director / Director / Representative of the company who has been empowered to do so through resolution passed by board of directors of the company. The person signing the tender on behalf of another partner or on behalf of a firm or company shall attach with the tender a proper power of attorney duly executed in his favour by each other person or by the partners or in accordance with the constitution of the company in case of company, stating that he has authority to bind such other person of the firm or the company as the case may be in all matters pertaining to the contract including arbitration clause.

(b) Even in case of firm or company which have already granted power of attorney to an individual authorizing him to sign tender and in pursuance of which tenders are being signed by such persons as a routine, fresh power of attorney duly executed in his favour stating specifically that the person has authority to bind such partners of the firm, or the company as the case may be to the conditions relating to arbitration clause, shall be submitted with the tender unless such authority has already been given to the concerned by the firm or the company.

(c) Clarification/ Requests by Bidder. Although the details presented in the Bidding Document consisting of Conditions of Contract, Scope of Work have been Compiled with all reasonable care, it is the Bidder's responsibility to ensure that information provided are adequate, clearly understood and it includes all documents as per Index. Bidder shall examine the Bidding document thoroughly in all respect and if, any conflict, discrepancy, error or omission is observed, bidder may request clarification as per date mentioned on Portal. Such clarification requests shall be directed to **Email ID: ceshiz-ec-army@nic.in**.

Note: -

(1) Guidelines for preparation of detailed project Report (DPR) are enclosed at Appendix 'D' for guidance and the same shall form part of tender documents.

(d) Confidentiality of Document. Bidder shall treat the Bidding Document and contents thereof as confidential.

3. PREPARATION OF BID

(a) Bid Validity. Bid shall remain valid for acceptance for a period of 90 days commencing from the next date subsequent to bid submission end date. The Bidder shall not be entitled during the said period to vary the bid except and to the extent required by Accepting Officer in writing.

(b) Applicable Language. The bid and all correspondences incidental to and concerning the bid shall be in the English language. For supporting documents and printed literature submitted in any other language, an equivalent English translation shall also be submitted. Responsibility for correctness in translation shall lie with the Bidder. In case of any conflict for the purpose of interpretation of the bid, the English translation shall govern.

(c) Compliance to Bidding Document Requirement. Accepting Officer expects Bidder's compliance to the requirement of Bidding Document without any deviation. In case bidder stipulate any deviation (s), **Accepting Officer** shall have the right to reject such bid at his absolute discretion and without giving any opportunity for such Bidders to make good such deficiencies.

(d) Financial Proposal. The bidder shall quote his rate in the financial proposal. The rate shall include all expenditure incurred towards mobilization and demobilization. All rates set forth in bidder's quotation shall be in Indian Rupees only.

4. **BID OPENING AND EVALUATION.**

(a) Opening of Price Part of Bid. The board of officers will open the bid (tender) appointed by Accepting Officer.

(b) Right to Accept or Reject a Bid. Accepting Officer reserves his right to accept a bid other than the lowest and to accept or reject any bid in whole or part, to annul the bidding process or to reject all bids with or without any notice or reasons. Such decisions by Accepting Officer shall bear no liability whatsoever consequent upon such decisions.

5. **PROJECT COMPLETION SCHEDULE AND SEQUENCES THEREOF.**

The project shall be completed within the period as indicated below:-

- | | | |
|-----|--|-------------------|
| (a) | Go ahead for Prep of DPR (Date of acceptance of Tender) | - G(Datum) |
| (b) | Submission of draft press advt of wks with apprx estimate of project- | G+4 Weeks |
| (c) | Submission of draft DPR | - G+8 Weeks |
| (d) | Submission of final DPR after taking following action by | - G+20 weeks |
| | (i) Presentation on DPR including walk through of area and DUs giving out salient features of the project to owner & Station Commander as owner, Station Commander & at Accepting Officer's office | |
| | (ii) Incorporating changes/deficiencies in DPR | |
| | (iii) Countersignature of DPR by Station Commander | |
| (e) | Go-Ahead for IIT Vetting | - G+20 Weeks |
| (f) | Submission of IIT Vetting | - G+24 Weeks |
| (g) | DPR approval by MoD (ASC) | - G+24 Weeks |
| (h) | Go-Ahead for prep of contractual documents (After approval of DPR by MoD & submission of IIT vetted drawings) | - G+24 Weeks |
| (j) | Power point presentation and submission of tender documents incl BOQs yard sticks and monthly cash flow (Three hard copies and a soft copy to be submitted at this stage) | - G+26 Weeks |
| (k) | Checking of documents by department, correction by consultant and submission of corrected tender documents | - G+30 Weeks |
| (l) | Uploading of tender on website | - G+30 Weeks |
| (m) | Tender presentation by CWE to Accepting Officer (In attendance Consultant and Station Commander/Rep) | - G+32 Weeks |
| (n) | Issue of amendment (s) (if any) after tender presentation | - G+34 Weeks |
| (o) | Receipt of Tender PQ bid | - G+34 Weeks |
| (p) | Receipt of Tender Financial Bid | - G+37 Weeks |
| (q) | Analysis of quoted tender documents and recommendation & Acceptance of tender (10 days + 04 days) | - G+37 Weeks |
| (r) | Placing of Work Order on the contractor | - G+41 Weeks |
| (s) | Execution of the project (Depending on the size of the project) | - 25 to 48 months |

- (t) Provision of team for monitoring 02 years of comprehensive maintenance & preparation of final bill
- Notes:** (i) **The broad scope of consultancy is given in tender documents, however the guide lines for preparation of detailed project report DPR are as per the Appendix 'D'.**
- (ii) **The list of Approximate number of Dwelling Units to be constructed is as per Appendix 'C'.**

Note 1 : The exact period for execution of the project will be as per contract(s) concluded with contractor(s) i.e., builder and it shall be noted by the consultant that in case of any delay in completion of the project for whatsoever reasons, the consultant shall continue to provide his services as per terms of DEPMC contract till the physical completion of the work including Defects Liability Period. No claim what so ever on account of any such delay shall be admissible and consultant shall not be entitled for any compensation other than what has been given in the payment conditions (Please refer notes on Payment Conditions).

Note 2: The action for advertising the works in public sector shall be taken by Accepting Officer sufficiently in advance during DPR stage so that tenders could be issued at the earliest after approval of DPR. Therefore, draft advertisements for various works shall be submitted by the consultant well in advance of submission of DPR.

6. BLANK

7. The tender shall be single stage two cover system. The bid shall be on single stage in two cover system (Cover-1 contains technical Bid & cover -2 contains price Bid) & shall be submitted on website portal <https://defproc.gov.in>.

8. **CONTRACT DOCUMENT.** The successful bidder shall be required to execute a formal Agreement as per Form of Contract with the Accepting Officer within 15 days from the date of intimation with regard to acceptance of bid. In case the bidder fails to do so, his Earnest Money Deposit shall be forfeited.

9. **OWNER'S SCOPE OF SERVICES.** The project comprises of Dwelling units brought out in Appendix C. It is clearly understood that the consultant shall be responsible for obtaining information/ details from the Accepting Officer/ Concerned Station Commanders/ MES Reps for ensuring completion of the work in all respects within the time schedule agreed for the Project. Consultant may obtain the following info from the owner for completing the work:-

- (a) Land availability – its size, location.
- (b) Type of Accommodation Offrs', JCOs, ORs to be constructed.
- (c) Scope of Accommodation and amendments thereto.
- (d) Scale of Accommodation and amendments thereto.
- (e) Plinth Area to be considered for planning.
- (f) Approved specification and finishes to be incorporated.
- (g) Military Engineer Services Standard Schedule of Specifications (Part-I) 2009 and Rates (Part-II) 2010.
- (h) Type and quantity of furniture to be provided in each DUs.
- (j) Existing layout of external services, external electric supply, external water supply, sewage disposal, storm water drainage etc.
- (k) Security requirements.
- (l) Community development requirements, including IVRs for maintenance complaints.
- (m) Preference for multi-storey/high rise buildings.
- (n) Coordination for Presentation to Station Commander and countersignature of Station Commander on DPR (including Presentation by consultant).
- (o) Approval of Detailed Project Report.
- (p) Issue of administrative approval.
- (q) General Conditions of Contract.
- (r) Visit/Inspection by owner's representative.
- (s) Approval of sample flat(s)
- (t) Releasing of payments to the Consultants based on certification by Project Manager and station Commander through any of the PCDA/CDA. However, Owner's decision to allot a particular Regional CDA shall be final based on location of the respective CDA. List of Regional PCDA /CDA is given in Appendix 'B'.
- (u) Approval to all procedures/formats required for due performance of the services by the Consultant mentioned in this agreement and any other requirement necessitated based on discussions.
- (v) Conventional RCC framed structure technique is to be followed.
- (w) Associated ancillary items and any other item as directed by accepting Officer.

Note: - The detailed layout plan for each type of dwelling units is available as guideline in **HQ Chief Engineer Shillong Zone, Spread Eagle Falls, Shillong – 793 011** for inspection.. The bidder can familiarize himself with the same, any time during working days at the office of **HQ Chief Engineer Shillong Zone, Spread Eagle Falls, Shillong – 793 011**. The bidder will be required to develop the DPR accordingly. The responsibility of correctness of BOQ, design and drawings will however rest on the consultant only. Any changes/improvements in the drawing will be intimated and incorporated only after approval of Accepting Officer. Local architecture and building by laws of the area shall be incorporated to the extent feasible

DETAILED ENGINEERING & PROJECT MANAGEMENT CONSULTANCY' SCOPE OF SERVICE

10. **Preamble.** Accepting Officer intends undertaking the project through a consultant responsible for detailed engineering and project management. Even though, certain guidelines for running the project have been laid down in these documents, these are not exhaustive and the consultant would be overall responsible for thorough planning, tendering, supervision of execution by contractor using sound engineering practices, accounting of stores, documentation, handing over of assets to users and monitoring of two years comprehensive maintenance (if approved and included in the building contract) and defect liability. The missing requirements those are not included in this contract but are essential to complete the consultancy service are considered to be included in the DEPMC contract.

11. **Scope.** To facilitate construction of quality accommodation including all infrastructure facilities for the Armed Forces within the stipulated time, cost and conditions. Scope of services of the consultant shall be spread over in three phases as under:-

- (a) Pre-Construction phase
- (b) Construction phase
- (c) Post construction phase

12. **Liaison Cell at Shillong Zone, S.E. falls:** In order to undertake the task mentioned at para 10 above, the consultant would be required to maintain a close liaison with **HQ Chief Engineer Shillong Zone**. It shall establish a liaison cell with one JE (Civil/Electrical/QS&C) with diploma and minimum 20 years' experience and two Data Entry Operators (DEOs), along with a new computer as per specification given below, printer, scanner, Fax and telephone with connection etc, at the office of **HQ Chief Engineer Shillong Zone** on permanent basis till completion of the project including defect liability period and clearing of final bill of consultant. Consumables (up to max of two printer cartridges per month), spares of all types and payment of telephone bills (up to Rs 1000/- per month) will also be provided by the consultant. The DEOs shall be placed under the respective teams. Nothing extra shall be payable to the consultant on this account. Office space will be provided by **HQ Chief Engineer Shillong Zone** on rental @ Rs.1/- per annum.

13. The computers and peripherals with on site AMC for complete duration to have the following minimum specifications/configuration:-

- | | | |
|--------|-----------------------|--|
| (i) | Processor | : I 7 Gen II/ III |
| (ii) | RAM | : 32 GB Dual/Quad Core |
| (iii) | Mother board | : Compatible Mother Board Intel |
| (iv) | Graphic Card | : Nvidia GTX 770 or equivalent with 8 GB on board RAM. |
| (v) | Cabinet | : Compatible Cabinet with 2/3 cooling fans. |
| (vi) | Monitor | : 27 inch |
| (vii) | Hard Disk | : 1 TB |
| (viii) | Make | : DELL/HP/LENOVO |
| (ix) | Printer with Scanner: | 4 in 1 Laser Printer HP/Samsung/Panasonic |
| (x) | UPS | : Min 1 KVA |
| (xi) | Software | : Windows 8.1/10, Anti Virus and Lotus (All licensed). |

14. In case of non-functioning of any equipment, the same shall be replaced/rectified within a period of one week. If not replaced/rectified, a penal deduction @ Rs 500/- day shall be made from the running bills of the consultant. Similarly if no DEO/JE(Civil/Electrical/QS&C) is provided, recovery at the rate specified in payment conditions in note 5 (b) per month from the running bills of the consultant.

Note: Tech staff and resources to be provided at project sites (over and above the liaison cell at **HQ Chief Engineer Shillong Zone**) are given in Appendix 'G'.

15. **Preparation of Detailed Project Report (DPR):** - As far as possible, the Dwelling Units (DUs) are to be constructed in high rise/Multi-Storied Tower concept. Conventional RCC Framed structure technique is to be followed". DPRs will be prepared with arboriculture, furniture, IVRS, external services, fire fighting and lift. Services to be included in DPR are given in succeeding paras highlighting the following: -

- (a) Urban Layout abiding by local byelaws, covering complete Land use /Zonal Plans/Green Areas/Arboriculture –to be shown on drawings.
- (b) Report of Topographical Survey at a grid of 3m X 3m and Record of levels /level chart. (Penalty of 1% of settled fee will be imposed, if the topographical survey is found to be not matching with actual ground conditions).
- (c) Detailed report on soil investigations, its findings and recommendations. (Penalty of 5% of the settled fees will be imposed, if soil investigation report differs from actual soil conditions). Number of soil testing (bore holes/pits) to be carried out to be finalized in accordance with latest IS and in consultation with **PM** and a record of approval by **PM** to be kept.
- (d) Layout of Buildings & Roads with Ground Coordinates properly recorded. Bearing & distance from surrounding permanent features will also be recorded to avoid any future dispute between planning and actual construction. Approval of Station Commander would be obtained in writing after finalization of layout.
- (e) Green Building norms (GRIHA-III) with three star rating shall be incorporated in the project and consultant shall submit certificate from competent authority and cost of same shall be deemed to be included in quoted rates.
- (f) Technical Parameters covering the following, keeping in view the environmental safeguards including permissions/clearances from local authorities to ensure the approval of proposed structures at each site. (The owner on production of official receipt by the consultant in this regard shall reimburse any payment to local authorities).
- (i) Detailed Architectural, structural, Electric and Water supply, Sanitary, Sewage and Construction Drawings. All these drawing shall be detailed drawings, so that no detail is missing. Any extra expenditure to be paid to the contractor because of missing details 10% of DO amount shall be recovered from the consultant. Separate layout drawing to workshop drawings (akin to workshop drawings) for electrical, water supply, sewage pipelines shall be provided, so that no columns/ beams are chiseled later. Where directed by Accepting Officer, design using shear wall/pre-cost technology (Cast-in-situ/pre cast using steel/ aluminum shuttering) will be incorporated.
- (ii) **Design details duly certified by the consultant.** These design details shall be got proof checked through any of the IITs, or Institution nominated by the Accepting Office in writing, cost of which will be reimbursed to Consultant on receipt of drawings back from IITs and on production of proper bills and receipt of IIT. Any change in design necessitated during currency of the work due to fault of consultant shall also be got proof checked (based on the direction of accepting officer, which shall be final and binding), from the same agency through which original design was got proof checked. Entire expenditure towards proof checking on this account shall be borne by the consultant and the owner shall make no reimbursement. In the event of non compliance in a reasonable time frame (Accepting officer's decision will be final and binding), the design would be got vetted directly by Accepting Officer and the amount would be deducted from the consultant's running bills along with 10 percent penalty on vetting amount. However, if the change in design is necessitated due to user or any other reason beyond the control of the consultant, the expenditure will be reimbursed. Outsourced proof checking by the Engineering Colleges shall not be accepted. In exceptional cases, Accepting Officer at his discretion may also get the design details proof checked directly from IIT/Institution nominated by the accepting officer in writing.
- (iii) Detailed specifications of structures service and finishes.
- (iv) Type of materials to be used in construction.
- (v) The architectural features of a multi storyed buildings shall be planned in such a manner that it facilitates cleaning/maint of glazed portion or any external surface of building using cradle system as part of maintenance contract to be undertaken by MES.
- (vi) Type of scaffolding (only steel / Aluminum).
- (vii) Quality Assurance Setup giving details of equipments and tests to be carried out with their frequency keeping IS Code in view. Setting up of site laboratory will be by the contractor.

- (viii) Quality Assurance check lists (Job formats) for major activities.
- (ix) Technique to be used for monitoring progress – MS PROJECT/Primavera CPM shall be updated regularly on monthly basis with resource allocation, based on computer system of work and resource flow chart.
- (x) Format for monitoring progress during construction stage. The format/ report shall cover bottlenecks including remedial measures, current position and six-month advance programme.
- (xi) Liquidity damages will be levied on the consultant, if the variation in Bills of Quantities in contract, in any trade section, except site clearance is beyond 5% unless the variation is necessitated due to either user requirement or circumstances beyond the control of the consultant. If the variation is attributable to consultant, the DO amt would also NOT be considered towards remuneration of consultancy fees. The liquidity damages levied shall be as under: -

S/No	Variation in BOQ in a trade section	Liquidity damages
1.	More than 5% & up to 10%	5% of payable fee for the trade section
2.	More than 10% & up to 20%	10% of payable fee for the trade section
3.	More than 20%	20% of payable fee for the trade section

(xii) For Variation in BOQ upto 10% in the trade section of site clearance only, no liquidity damage will be charged. However, if the variation in BOQ of site clearance is more than 10% liquidity damage at the rate specified in clause 15 (xi) SI No. 2 and SI No.3 will be charged to the consultant. However, if the variation is due to change of site/location on which consultant had no control no liquidity damages will be charged. The Architectural features of multi-storied buildings shall be planned in such a manner that it facilitates cleaning/maintenance of glazed portion or any external surface of building using cradle system as part of maintenance contract to be undertaken by MES.

(xiii) Yard stick for payment shall be supported by Bill of Quantities.

(xiv) Estimates of all works catered in DPR shall be as per SSR -2010 of MES if certain items are not available in SSR-2010 of MES then the market rates shall be taken for working out the rates. Proof of market rates thus arrived will be submitted by the consultant.

(xv) Fixing of Criteria for Pre-Qualification of Contractors as per CVC guidelines.

(xvi) Calculation of Plinth Area rates per square meter of building work including internal electrification, internal water supply, sanitary and plumbing work & built-in furniture.

(xvii) Plan of contract packages including scope and cost of each package. Preparation of time schedule bar chart showing the planned periods of completion for various contract packages to arrive at an overall completion of the project of each station. Simultaneous construction shall be planned at all sites in a Station to obviate building contractor not addressing a particular site for long necessitating consultant to de-hire its supervisory staff from that site. Tender documents to be accordingly prepared to guard against the same.

(xviii) Draft Lump Sum and / or Item Rate Tender documents as decided by the Owner to be issued to contractors.

(xix) Any other details as deemed necessary and highlight the specific issues in DPR (station wise) for information and attention of Owner.

(g) Financial Control covering the following:-

(i) Cash flow Chart as per the yardsticks shall be included in the DPR. Yardstick will be got approved from accepting officer (in writing) before incorporating in the tender.

(ii) Proposal for earnest money and security deposits.

- (iii) Proposal for penalty on contractors for delay/non performance.
- (iv) Administrative Control Reports / Returns – their format for fortnightly and monthly reports.
- (h) Any other details as spelt out by the Accepting Officer during currency of contract.
- (j) Consultant shall provide a perspective view of the proposed building at each site including site development in Auto CAD/ 3D Max format for the approval of the owner. In addition, an axiomatic view of DUs showing the layout of furniture built in furniture, cupboards etc shall be prepared. The actual size of furniture to be issued in DUs shall be shown. Details of furniture and sizes to be obtained from Accepting Officer. Kitchen shall show the layout of sink, water purifier (aqua guard etc), plate rack and so on as per actual size Similarly toilet shall show layout of WC, Wash basin, Mirror, different fixtures like towel rack etc. Only those fixtures which are authorized and have been catered for in the tender are to be shown. No misleading fixture/ items or Representative Models of furniture should be shown.
- (k) The external services, comprising of external water supply, electric supply, storm water drainage, sewage disposal and treatment plant (including STP) portion of the DPR will be approved by **Accepting Officer** after scheme has been vetted by IIT / Director Utility (E-in-C's Branch) & CE Zone. However the local MES authorities will confirm the availability of water/ electric supply & indicate the take off point for the same.
- (l) The DPR shall cater for the complete utilization of treated water of Sewage Treatment plant (STP) for the following: -
 - (i) Maintenance of lawns/arboriculture of MAP accommodation. Pipeline network to be shown in DPR Part II.
 - (ii) Disposal in drains (MES or local municipal bodies) during rainy season or any surplus water after use in para (i) above. Details to be shown in DPR and got approved from CE Shillong Zone (MES)

16. Submission of DPR

- (a) Submit three hard copies and three soft copies (including one to PM) initially for the purpose of evaluation and checking of DPRs. These DPRs will be clearly marked as “Initial DPR” for Evaluation purpose only.
- (b) Submit five hard copies and three soft copies after corrections (if any) duly signed by the consultant. These DPRs would be marked “Final DPR” and shall have all statutory enclosures including countersignature of Station Commander.

17. In the event of difficulty in preliminary Survey at site because of thick bushes /jungle, the same shall be cleared by the consultant on written order of Station Commander/Project Manager. The payment towards site clearance may be claimed by the consultant while submitting the payments for Stage-I duly supported by Digital photographs taken before commencement as well as after completion of site clearance and a certificate from the station commander/PM to the extent of site clearance carried out. The payment for the same will be made as per item 03012 of SSR 2010 enhanced by 25% to cover for market variation. The rate shall be deemed to included for disposal of useless material outside the periphery of the area under site clearance

18. Tender

- (a) Prepare Draft Advertisement for publication in leading daily News Paper for inviting tenders.
- (b) Prepare and submit hard copies and soft copies of complete tender documents as under: -
 - (i) Submit three hard copies and one soft copy (**Including one to PM**) initially for evaluation and checking, clearly marked “Initial tender documents for Evaluation Purpose Only”.
 - (ii) Submit requisite hardcopies and soft copies after incorporating all changes/corrections and ensuring correction with respect to technical and financial aspect, duly marked “Final Tender

Documents-Ready for Release". Seven hard copies of Final tender document are required. Hard copies and soft copies to be distributed as under:-

(aa) Hard Copies

(i)	Director (Contracts)	-	01
(ii)	Nodal Offr/Director Plg	-	01
(iii)	PM	-	02 (incl one for Station Commander/PMG)
(iv)	P&S Section	-	01
(v)	E&M Section	-	01
(vi)	CDA	-	01

(ab) Soft Copies

(i)	Dir(c)	-	01
(ii)	Nodal Offr/Director Plg	-	01
(iii)	SO1 (P&S)	-	01
(iv)	Sr Arch	-	01
(v)	PM	-	01

(c) The tender shall be based on General Conditions of Contract. Lumpsum tender shall include yardstick for payment based on detailed bill of quantities. Insertion of yardstick percentages in the tender for all item of buildings/structure shall be done after getting the same cleared from Accepting Officer by deputing the billing engineer with relevant detailed stage wise cost estimates.

(d) Obtain necessary approval from local agencies required if any for commencement of construction work. (Departmental assistance wherever required would be extended).

(e) The Consultant shall evaluate the tender documents in all aspects including technical and financial evaluation and submit recommendation to **Accepting Officer** for their approval.

(f) Obtain necessary approval from local agencies required if any for commencement of construction work. (Department assistance where required would be extended).

(g) Any other details / works spelt out by **Accepting Officer** during tender process till acceptance of contract.

(h) Submission of 8 copies of hard bound CA drawings in A1 size of the concluded tender, to be distributed as under: -

Dir (c)	-	01
Consultant at site	-	01
Nodal Offr/Dir Plg	-	01
Contractor	-	01
CWE 137 WE	-	01
CDA -	-	01
STE	-	01
SO1 (P&S)	-	01

(j) 02 soft copies as under :-

- (i) 01 copy in AutoCAD
- (ii) 01 copy in PDF format

Note 1: Draft advertisement will be submitted by the consultant and owner shall finalise it in consultation with the consultant. However, these advertisements shall be published by the owner directly in the Newspaper etc and owner shall bear the cost thereof. The documents from the applicants shall be received by the owner and then handed over to consultant for processing.

Note 2: In case re-tendering is to be done, Consultant shall repeat the process of Para 18 without any extra payment.

Note 3: Accepting Officer may exclude any detail/ document from DPR while getting approval of the DPR. However consultant will not be absolved of his responsibilities for submission of that document/details before payment of the stage is released.

CONSTRUCTION PHASE

19. PM is the representative of Accepting Officer at site of work and is responsible for all the actions at site necessary for smooth functioning of project at the site. Consultant team deployed at site will render necessary advice to the PM. The consultant shall be responsible for the overall control of the site (s) and works, project management, complete supervision on site (s) of all the contract packages, quality control of works, proper accounting of all materials especially including cement and steel for which advance has been paid and thus is a govt property. Preparation, custody and regular updating, maintenance of documents & registers, certification of contractors running account and final bills, contract closure and final certification of costs. Consultant will not undertake correspondence with the contractor directly. All the correspondence will be undertaken through PM only. In the event of any difference in opinion between RE (Resident Engineer) and **PM** on any particular issue, the RE has all the right to refer the matter to his main office and Accepting Officer.

20. The consultant shall execute services defined below from the start of construction up to commissioning and handing over of the project for operation. These will be provided by way of using the consultant's expertise and experience in project to implement the entire projects as per drawing and specifications. The consultant shall depute required personnel as per enclosed Appendix 'G' for full time day to day supervision (Day and night as the work progresses), checking of quality and quantity of work, finalization of running Account and final Bill and complete Project management headed by a qualified and experienced Resident Engineer along with his team, to look after the interest of owner and provide monthly reports & special reports (when required). This team of consultant including DEO shall also assist PM to perform his normal routine work of his office.

Note: -

1. The consultant would employ only competent and experienced staff. The requirement of the staff has been elaborated in various contract provisions, Appendix 'G'. Approval of accepting officer would be obtained in writing by submitting their CVs, duly recommended by **PM**. The approved persons so employed shall be put on probation for three months to check their suitability at site by the **PM**. At the end of three months, a suitability report will be sent by PM to accepting officer in writing. An attendance register of the team deployed by consultant will be maintained by RE and will be put up to **PM** and visiting officer as & when asked. The report of attendance will be reflected in MPR.

2. The RE and site engineers who are fit and healthy to supervise works (especially on roof tops and high rise buildings) will only be employed. Endeavour will be made not to change persons in between the work. Minimum overlap of 15 days will be ensured for proper handing/taking over of duties between various technical staff and minimum overlap of 30 days will be ensured for proper handing /taking over of duties of RE. Duties of the staff will be distributed in consultation with **PM** in writing, to fix accountability of each and every employee. The overall accountability will remain with the consultant till the final closure of the project. In case of any arbitration with the contractor or a department court of inquiry, the consultant or its representative would be required to depose if asked by the arbitrator/presiding officer of the inquiry. The consultant cannot shirk off its responsibility stating that the concerned RE/Engineer/Supervisory staff has left the job.

3. Accepting officer reserves the right to terminate services of staff found wanting on the above mentioned counts, or indulging in any practices not in the interest of the project on recommendation of **PM**.

4. No subletting of consultancy services is permitted.

5. Only land for site office will be provided by the Station Commander. The erection of office of suitable size will be under arrangement of building contractor. However furniture, telephone, Computer with internet connection & its peripherals, printer, Plotter, Consumables, Fax Machine, photocopying machine and stationery required by consultant staff for supervision of the project shall be arranged by the consultant himself.

21. Responsibility of the consultant team will be as below: -

(a) Project Management schedule with resource allocation and requirement of stores. Preparation of overall construction schedules and networks using MS project primavera Software with

resources allocated, directing contractors to prepare individual schedules, and their co-ordination and monitoring. Project Management team of consultant under supervision of RE will prepare a project schedule with resource allocation for the project, in consultation with contractor and PM in order to ensure the project completes in time. Monthly requirement of stores and resources will be calculated. The time lines for submission of samples will be prepared and handed over to the contractor. This will be monitored on regular basis, to ensure procurement of stores does not get delayed. The project management schedule will be updated monthly depending upon the progress, resources employed by the contractor and revised project management schedule provided to project manager. Methodology for sampling immediately on arrival of stores and checking the randomly picked up samples from authorized test houses will be evolved in consultation with PM to obviate any delays in the project. The project management schedule and store Requirement for next six months will be reviewed with the contractor and PM monthly before the submission of monthly progress report and accordingly amended and commented upon in the monthly progress report being submitted to accepting officer

(b) Accounting of Stores. Any stores /materials brought to the site by the contractor during the currency of the project, though remains in the custody of the contractor, however proper accounting of stores including cement and steel will be carried out by DEPMC at all times since the material become Govt. property as soon as advance is claimed by contractor and paid through RAR some of the actions which shall mandatory be undertaken by DEPMC to ensure proper accounting of stores are enumerated below:-

- (i) Check before arrival of any construction materials to site, whether proper dunnage (especially for cement and steel) has been prepared by contractor.
- (ii) RE or his store acctg rep to ensure that steel before unloading at site is weighed at weigh bridge preferably in the presence of PM / member of station (if available) to ascertain the quantity mentioned in the purchase voucher/ consignment note tallies with the stores brought at site and then taken on charge (nothing extra would be paid to consultant on this account). The Resident Engineer (RE) shall also give a monthly confirmation in the monthly Progress report regarding correctness of all materials especially steel lying at site for which advance has been paid, even though the material remains in the custody of building contractor.. It is therefore incumbent on the part of RE to ensure that the materials brought at site are checked and stacked properly with proper dunnage, facilitating its periodic check and measurement. The consultant while preparing contract document shall build in sufficient clauses to ensure proper safety and stacking of materials by building contractor. Materials once brought on the site can not be taken out without written permission of the PM.
- (iii) Stores are unloaded and stacked properly on the dunnage facilitating "first-in-first-out" for construction.
- (iv) Random sampling is undertaken as per IS specifications and fwd to authorized labs, maintain record of sampling and results received and keep PM updated.
- (v) Check if stores have been purchased from authorised manufacturers/vendors only.
- (vi) Check the authenticity of the purchase vouchers online or by sending it to the company.
- (vii) Maintain record of stores/materials coming out of store yard/dump for construction to check its utilization with the records of the work done.
- (viii) Render "all correct" stores certificate duly signed by RE/nominated rep of consultant every month alongwith the monthly progress report of work done.

(c) Supervision of work. Supervision of works by the appointed team to ensure execution as per drawings, specifications and contract documents. Preparation of omission/ addition deviation orders against the measurable section/ item of Sch 'A' and taking measurement, recording in MBs. The consultant shall recommend the deviation orders (DOs) / Add Back DOs to be ordered on the contractor within a reasonable time. Add back DOs shall be submitted within six months of commencement of work. If any deviation Order(s) is accepted by Accepting Officer the same shall be submitted within a reasonable period of two months. Any delay beyond this period, would require the Head office of the consultant, to forward in writing, every fortnightly the reasons for delay. Even after Six months of delay, if the add back deviation orders are not submitted, liquidated damages @ 10 % of monthly fees of

DEPMC would be charged till the time add back DOs are completed. In case the add back DOs cannot be submitted for some reason beyond the control of consultant, EOT(Extension of time) would be sought from accepting officer through **PM** without which liquidated damages would be effected. RE of DEPMC will sign all draft DO's and Add back DOs. Measurement in MB (duly filled in by Tech team), original purchase vouchers of material of the contractor duly verified and all test reports including such documents which PM directs.

Note : Consultant rep shall not permit any poor workmanship and take immediate corrective actions to rectify the same. Photographic record shall be maintained of all events. In case contractor fails to take immediate corrective measures, the same shall be brought to the notice of PM and accepting officer in writing. Adequate contract provisions shall therefore be built in the tender documents of building contractor to ensure immediate rectification of the poor workmanship and failing which penalty for poor workmanship / devaluation of the work shall be catered for. In the event of poor workmanship and defective work noticed later, by accepting officer or any rep of accepting officer, the consultant shall be charged liquidity damage for inadequate supervision which would be 10% of MP in the next RAR bill of DEPMC. This penalty would be charged by **PM** after obtaining clearance from **Accepting Officer**. Similarly in case of deviation order, because of incorrect specifications, wrong drafting of specification, the consultant shall be charged 10% of value of deviation as liquidated damages. No extra charges for increase in cost of the project because of change of specifications due to contractor omission/commissions will be given.

(d) Issuing constructional explanatory sketches wherever required and checking bar bending schedules etc submitted by contractor and keep the **PM** updated.

(e) Maintenance of drawing folder with date wise amendments to drawing issued by DEPMC duly approved by Accepting Officer, signed by **PM** and rep of contractor. Register for amendments to drawing to be maintained with complete details e.g., Old drawing No, new drawing No, issued on, change in brief and likely financial effect. Signatures of RE, Rep of Contractor and **PM** etc. Monthly photocopy of the register shall be forwarded to Teams and contract section for records. One copy will also be attached with the monthly progress report and forwarded to the Accepting Officer.

(f) To prepare and furnish drawing and sketches for any missing details required to complete the work for which recovery at the rate of 10% of DO will be effected from the consultant's RAR.

(g) Co-ordinate Testing and Inspections.

(i) Develop and monitor a quality control system to ensure that the required standards of construction are met in consultation with the **PM**.

(ii) Develop a checking and testing procedure so that all systems are adequately tested and balanced prior to their acceptance in consultation with **PM**.

(iii) Co-ordinate all testing provided by other agencies as required.

(iv) Maintain proper records including their safe custody and produce the same to **PM** on daily basis and produce for inspection during visit of Accepting Offrs/ Offrs detailed by accepting officer.

(v) Monitor quality and quantity of items procured by the contractor for incorporation in the project. Ensure such items are as per CA' specifications & have been tested before incorporation.

(h) Monitoring progress and sequence of works of various agencies and trades for coordinated and harmonious construction.

(j) Co-ordination between various agencies such as civil, electrical, water supply, sewerage, water treatment plant, and rain water harvesting etc. including obtaining permission required on various counts from Civil/Municipal authorities.

(k) A half yearly Quality Audit of work done at site covering all aspects of construction will be carried out by independent qualified reps of the consultant to be detailed from their HQ and not by RE or any other engineer deployed at site (s) and the audit report will be fwd to accepting officer. Report shall include a special chapter on leakage/seepage status on RCC (before and after any water proofing is done) and test carried out to check the same. This includes roofs, toilets, sunken floors, RCC cupboards, internal water supply pipes and joints, rain water pipes, efflorescence in bricks etc. Action taken report

will be included in the monthly progress report till the issues are cleared. A special sample audit shall also be carried out during anti termite treatment application.

- (l) Administration of all contracts including preparation of deviation orders and their valuation as approved by owner.
- (m) Administration of all contracts and assistance in resolving the differences and disputes, if any.
- (n) Final inspection, checking/execution of testing, commissioning and handing over of various parts of works and various systems to local MES agencies based on agreed handing over plan.
- (o) Checking and certifying the amount payable in Running and Final bills of Contractors for their correctness. All the Bills /certification shall be strictly in line with MES formats.
- (p) Issue of review and discussion summary in a monthly report that will focus on: -
 - (i) Major issues and pending decisions.
 - (ii) Project Cost, Time schedules and resources.
- (q) Maintain and manage the computerized schedule on MS project/primavera with resources allocation and provide monthly updates, noting areas of concern time penalties etc.
- (r) Reviewing the safety programme developed by each of the contractors and monitoring enforcement.
- (s) To stipulate the conditions with regard to labour laws in the draft tender documents and to ensure that the contractor (Builder) is following labour laws and other local byelaws provisions.
- (t) Whenever, the owner exercises his authority to cancel any of the building contract inventory of the following shall be made jointly by the consultant, Project Manager and the concerned contractor or their accredited representative through the Station Board of Officers and in case of failure of the concerned contractor or their accredited representative to join within the period notified to him, by the consultant and the Project Manager same shall be carried out in his absence:-
 - (i) Completed and in-completed items of works, including their likely effectiveness/strength, on commencement of new contract for the balance work.
 - (ii) Materials brought by contractors and lying at site for incorporation in the work and their likely effectiveness/strength/utility on commencement of new contract for balance work contract. Any resources including labour required by consultant for measuring the material lying at site will be hired by consultant after obtaining approval of **Accepting Officer** through PM in writing. The same will be reimbursed to the consultant.
 - (iii) Tools, plants, other equipments including materials such as shuttering and scaffolding etc brought by contractor and lying at site and their effectiveness on commencement of new contract for balance work control.
 - (iv) Temporary Office/ storage shed/ any other structure constructed at site. The removal of these temporary sheds/ office after the completion of the project shall be included in the balance work tender also, failing which it will be construed as deficiencies in service and would be got done from consultants fees. The consultant shall prepare balance work tender documents based on the details prepared above and shall submit requisite copies of complete tender documents after tender (s) presentation for issue of balance work tender (s). The requisite copies shall be calculated as explained in para 18 (b) (ii). On receipt of bids, consultant shall carry out the tender evaluation and submit recommendation. The consultant shall be compensated for preparing detailed balance work contract documents, draft advertisement for balance work, identify and recommending suitable contractor and evaluation of tender documents in all respect including technical and financial evaluation and submission of recommendation to accepting officer for approval as per payment conditions. Monthly & progress related payments will cease from the first day of next month on termination of the main contract. The same to resume on commencement of balance work contract. The consultant shall finalize the final bill of the contractor (s) whose contract (s) has /have been terminated.

(v) In the event of termination of main contract, the DEPMC will be allowed to shed all manpower less RE & DEOs and any other Engineer / staff as required undertaking above mentioned balance work tasks. Full manpower will be resumed on commencement within 15 days of balance work contract.

(vi) In the event of any dispute arising between the Contractor & department, the consultant shall prepare detailed and exhaustive reply in a time bound manner for filing Pleading-in-defence (PID)/ Statement of case for Arbitration Proceedings.

(vii) DEPMC or its nominated rep to attend any legal proceedings wherein the judge, arbitrator or a presiding officer of a court of Inquiry directs so, In writing to attend depose before it. No cost will be reimbursed by the Department on this account.

(u) In the event of part sites being active and other sites inactive or likely to remain so for long, the DEPMC on written instructions from **PM** will de-hire its manpower (Engineers & Supervisors) from those sites. Full manpower for those sites /part sites will be resumed within 15 days from the commencement of wk or as instructed by **PM** in writing.

(v) Quarterly review meeting on progress of the project will be held at Accepting Officer office which will mandatorily be attended by RE (Resident Engineer) and owner/senior manager/project coordinator of the firm responsible for the overall planning/control of MAP project.

(w) Prepare and submit to Accepting Officer any RTI query within stipulated time period.

(x) DEPMC will provide transport to RE & other staff deployed on the project for effective monitoring of the project. Number of vehicles will be decided by DEPMC in consultation with **PM** in writing, depending on the strength of staff and dispersal pattern of the project. Under no circumstances the DEPMC reps at site will depend on contractor's goodwill or on their own pay for their mobility even if an allowance is fixed in their pay package for transport or fuel for transport. In case of failure to provide transport, the same shall be hired by PM and amt deducted as per prevailing applicable rates approved by local station authorities or as applicable from DEPMC's monthly bill.

(y) The consultant shall ensure that contractor complies with labour laws and that skilled/semiskilled /unskilled labour including supervisory staff employed by the contractor are paid their due wages. Accordingly muster roll of labour shall be signed by RE/Civil Engineer of DEPMC on behalf of the PM with a certificate endorsed that "Paid in my Presence"

22. Site Documents to be prepared, maintained and held in the safe custody of RE during the construction period shall mainly be as given below.

(a) Copy of contract documents duly incorporating the errata / amendments issued and drawing between the Accepting Officer and deployed contractor (s).

(b) Drawing Folder. Two Drawing folders will be maintained as mentioned in Para here in before.

(c) Computerised bill formats.

(d) Site Order Book for contractor:- Similarly a separate site order book for consultant shall also be maintained by PM and orders to be taken and complied with.

(e) Works Diary.

(f) Material Testing Register.

(g) Stage Passing Register.

(h) Measurement Books on computerized formats.

(j) Deviation / variation orders register.

(k) Cement consumption register.

- (l) Reinforcement register.
- (m) Progress bar chart.
- (n) Updated Bank guarantee Bonds Register.
- (o) Work Hindrance Register.
- (p) Leakage / Seepage testing register :- complete record under the signature of RE & **PM** shall be maintained for :-
 - (i) Pressure test for all internal WS pipe
 - (ii) Ponding test for roof slabs, sunken floor etc.
 - (iii) Smoke test for pipes.
 - (iv) Any other test for seepage / leakage as desired by **PM**.
- (q) Slope test Register
- (r) Register for mobilization advance.
- (s) Log Book for Road Roller

Note 1. All documents shall be signed by concerned staff of DEPMC and RE and countersigned by **PM** on daily basis or as per periodicity laid down by **PM**.

Note 2. Above documents will be produced for inspection to rep of Accepting Officer/Technical Examiners nominated by Accepting Officer/E-in-C's Branch/Station Commander. DEPMC will carry out the following tasks in consultation with **PM**.

POST CONSTRUCTION PHASE

23. DEPMC will carryout the following tasks in consultation with **PM**: -
- (a) Settlement of all accounts of the contractors.
 - (b) Reconciliation of materials supplied to the contractors, if any.
 - (c) Preparation and Submission of following documents on the pattern/formats of MES organization to facilitate handing taking over of DUs: -
 - (i) Copy of CA.
 - (ii) One set of completion drawings along with hard and soft copy.
 - (iii) Details of deviation/amendments as per actual work executed on ground.
 - (iv) Building Inventory
 - (v) Register of Fans, Geysers and Meters duly completed and numbered.
 - (vi) Draft RPMB featuring anticipated completion cost.
 - (vii) As built drawings.
 - (viii) Periodical Services Measurement Books (PSMBs) duly audited by RAO/LAO.
 - (ix) Road register.
 - (x) Road roller Register.
 - (xi) Plant Record Books.
 - (xii) History sheets of all machines.

- (xiii) Manual/Catalogue/Warranty Cards/Machine history sheet (less E/M No)/Test Reports of E/M equipments alongwith recommended list of spare parts.
- (xiv) Drawing for layout of underground cables and pipelines showing locations of sluice valves etc.
- (xv) Register of permanent military buildings.
- (xvi) Any other documents required for handing over asset to station/MES.
- (xvii) Submission of all operation and maintenance manuals of plants, machines, equipments etc.

(d) Consultant will prepare all documents as per Standard Operating procedure (SOP) on Handing /Taking over of assets, amended from time to time. The (SOP) is available in the office of PM and can be seen by the Consultant.

(e) Handing over of assets created to MES and users.

(f) To ensure that any defects arising during defect liability period, are rectified promptly and to evolve a defect rectification plan which is feasible and economical.

(g) Issuance of No Defects Certificate by Station authorities after the defects liability period is over.

24 Monthly Progress Report (MPR). Following shall be included in the report:-

- (a) Brief on activities of two month in one page
- (b) Pocket wise progress report showing the following:-
 - (i) Layout plan with prog of each block with Photographs (last month and this month).
 - (ii) Detailed work done in current month for each block with Photographs.
 - (iii) Item wise prog in each block.
 - (iv) Project Management schedule with resources allocated and changes during the month.
 - (v) Engineers, Supervisors, eqpt and other resources provided by the contractor
 - (vi) Engineers & other resources provided by DEPMC.
 - (vii) Photocopy of the register showing issue of amended drawings etc.
- (c) Monthly Expenditure Report (MER)
- (d) Financial Progress report.
- (e) Certificate from RE or store acctg in charge of DEPMC that all stores for which material advance has been paid are correctly accounted for.
- (f) A CD containing the soft copy of the above MPR.
- (g) State of Engineers & other supervisory staff employed in the month by contractor.
- (h) State of eqpt employed in the month by contractor.
- (j) State of skilled/semiskilled /unskilled manpower provided in the month by the contractor.
- (k) State of material at site available, ordered for supply including criticalities of materials required for progress of work.
- (l) State of engineers/ supervisions employed by DEPMC.

25. Helping the OWNER with advice on technical matters in respect of the project in setting disputes, if any with the contractor (s) and assisting the OWNER by preparing exhaustive replies for defence of arbitration proceedings to settle the disputes with contractor (s). the consultant or its nominated rep would be required to attend/ depose, if called for by competent legal authority i.e., presiding officer of a court of inquiry or an arbitrator. A consultant cannot absolve himself from the above responsibility on the ground that concerned engineer/RE has left the firm.
26. Preparation of "FINAL REPORT" which will contain all technical and financial information of the project for record of **Accepting Officer**.
27. The consultant shall assist in preparation of replies and settle all observations raised by various agencies with respect to the project.
28. The consultant shall not use or reveal the details of the project to any third party without permission of the owner and shall return all the records of project whether hard copy or soft copy to the owner on completion of the contract.
29. The consultant shall depute required minimum personnel at project site as per Appendix G.
30. Closure report of the project by the consultant (CR Part "A" and CR Part "B").

Signature of DEPMC

signature of Director (C)/Jt/Dy Director(C)

FINANCIAL PROPOSAL**FINANCIAL BID (AS DEFINED IN PREQUALIFICATION CRITERIA)**

The financial bid of only eligible bidders of cover-I shall be opened on the date notified in tender. The marks obtained in cover-I (Technical evaluation) shall be considered while acceptance of bidders successfully qualified for financial bid.

The consultant shall quote consultancy charges in column 6 of BOQ for the quantum of services defined herein these documents

After opening the financial bid of all bidders, the marks shall be awarded to each bidders considering maximum 100 marks to lowest quoted bidder. The financial score in respect to other than lowest bidders will be calculated proportionately as per formula given in qualification criteria here in before.

FINAL SELECTION (AS DEFINED IN PREQUALIFICATION CRITERIA)

Final selection of bidder shall be based on QCBS (quality cost based selection). Final score will be arrived by adding technical score and financial score with weightage of 70% and 30% respectively. The total of financial and technical score shall determine the relative ranking of bidders the bidder achieving highest marks in the evaluation shall be ranked first and will be considered for acceptance of consultancy service for this project.

The amount quoted by first ranking (the tenderer to achieve highest marks after technical & financial evaluation) bidder in BOQ shall be considered for purpose of deriving consultancy charges. Consultancy charge shall be in % of project cost as defined in **para 1.9 of Article 1** of form of contract of tender.

Consultancy charges = (Amount quoted by the first ranking bidder/ Approximate amount of project cost inserted in BOQ) x 100

The % so derived as explained above shall be treated as settled fees irrespective of any subsequently changes in project cost and will be reflected in acceptance letter.

Signature of DEPMC

Dy. Director (Contracts)

PAYMENT CONDITIONS

Stage -1(a) 7% (Seven percent) of the settled fee will be released on submission of final DPR, that is, DPR as defined on page here-in-after. The project cost considered at this stage will be the estimated cost in the DPR subject to stipulation given at Note 1 here-in-after. This amount will only be released against non-revocable Bank Guarantee to be submitted by the consultant on approved form from a Scheduled Bank. The Bank Guarantee will be released on approval of DPR.

(b) 6% (Six percent) of the Settled fee will be released after approval of DPR by MoD subject to stipulations given in Note 1 here-in-after. The project cost considered at this stage will be approved DPR cost. Minus cost of contingencies & Agency/consultancy charges. The DEPMC fee shall exclude the amount required to be deposited for bulk sources (i.e. Electricity charges/water supply charges or any other charges) as applicable with local authorities/state Govt.

Note The initial payment made on submission of DPR is subject to adjustment based on approved DPR amount.

Stage -2 7% (Seven percent) of the settled fee after conclusion of contract with contractor(s).

Stage -3 65% (sixty five percent) of settled fee will be released during execution of work in two separate parts viz, monthly payment and progress related payment as under: -

(a) Monthly Payment (MP). 40%(Forty percent) of the settled fee will be divided into equal monthly installment equal to period of completion mentioned in the building tender plus 12 months, which will be fixed payment every month to the DEPMC on satisfactory deployment of specified engineers & staff. This payment will commence after 2 months (60 days) from date of commencement mentioned in work order issued to main contractor (to cater for the mobilization period of the contractor).

(b) Progress Related Payment (PRP). 25% (twenty five percent) of the settled fee will be released on pro-rata basis as per the progress of the work till the project is completed. The material lying at site for incorporation in the work or otherwise shall not be considered as part of the progress of the work for payment purpose to the consultant. The consultant may at intervals of not less than 15 days submit claims for payment.

Stage -4 5% (Five percent) of the settled fee after payment of final bills to the contractor(s).

Stage -5 10% (ten percent) of the settled fee after completion of defect liability period of two years or submission of final report or settlement of all disputes with contractors in arbitration, whichever is later. The consultant can claim the payment after stage 4 on production of non-revocable Bank Guarantee of the amount so claimed on approved form from a scheduled Bank.

Note1 Settled Fees (Consultancy charges)

(a) This will be calculated by multiplying the percentage derived by the department with the project cost.

(b) The project cost shall be lower of two i.e., DPR cost and contract Agreement amount. Project contingencies, Consultancy charges, Agency/Govt charges etc will not be considered for calculation of settled fees.

(c) The consultant's task would comprises of preparation of DPR, vetting of design by IIT, tender documents, project supervision during execution, original contract and in case of cancellation balance work contract, final bill, arbitration and monitor upto defects liability period.

Note 2

The MP will cease with the last payment of PRP or on certification by the project manager that the project is complete, whichever is earlier. However If the contractor completes the work

before /within original contract period or within the 12 months from original contract period, the consultant will get entire payment as quoted.

Note 3 In case the project gets delayed beyond the date of completion, the consultant MP will be regulated as under: -

(a) The consultant would continue to get the MP at the same rate, for a period upto one year from the original date of completion (DOC). Provided the delay is not attributable to the consultant.

(b) If the delay is beyond one year from the original date of completion the consultant would get an escalation of 7 % (seven percent) in the MP every year thereafter on original MP (not compounded). Provided the delay is not attributable to the consultant.

(c) The remuneration shall be reduced as per CA provisions if less number of personnel are deployed on site by the DEPMC or as directed by PM and Department.

Note 4 : **Remuneration for new contract for balance work**

(a) This would be @ 0.1% of accepted amount of balance work contract. this will be paid to the consultant for carrying out all tasks as listed below between termination of original contract and commencement of balance work contract:-

(i) Measure exact work done by the contractor.

(ii) Measure quantity of steel and other material lying at site and serviceable and unserviceable T & P, which is Govt property.

(iii) Market cost calculation of material and valuation of T & P from approved Government valuer.

(iii) Handover the measured stores/materials to the new contractor on conclusion of balance work contract.

(iv) The consultant would be required to prepare exhaustive replies of the issues raised by the contractor in court and submit to Director (Contract), Accepting Officer for processing with Govt counsel defending the case.

(v) Preparation of E-NIT for balance work contract and handing over to accepting officer for advertising in newspaper as per original contract with revised figure of cost for balance work.

(vi) Prepare balance work tender documents including drawings as required for uploading on the same on website.

(vii) Technical evolutionary and submission of recommendation for selection of contractor.

(b) Market analysis and financial evaluation of tender and submission of recommendations for acceptance of tender or otherwise

(viii) Preparation of certified true copies of accepted e-tender including drawings (7 copies).

(b) For the purpose of settled fees, the amount of contract originally accepted shall be taken into account and the amount of balance work contract (s) shall not be considered for settled fee. The consultant can shed all manpower less those Commencement of balance work contract also.

(c) Monthly & progress related payment will cease from the first day of next month on termination of the main contract. The same to resume from the first day of next month on commencement of balance work contract and re-deployment of the said manpower. However the remuneration of MP for the staff employed at the CA provisions shall be provided.

Note 5:

(a) In the event of some sites being inactive or likely to remain so for long, the DEPMC on written instructions from **PM** will de-hire its manpower (Engineer & Supervisor) from those sites. Full manpower in these sites/part sites will be resumed within 15 days from the date of re-commencement of work.

(b) The payment for the manpower de-hired will be deducted from the monthly payment due to the consultant. This amount to be calculated as under: -

(i)	RE	-	Rs 1.0 lac
(ii)	Civil Engineer/Elect Eng	-	Rs 0.5 lac
(iii)	Billing Engineer	-	Rs 0.5 lac
(iv)	Asst Civil/Elect Engineer	-	Rs 0.3 lac
(v)	Computer Operator	-	Rs 0.15 lac
(vi)	Store keeper	-	Rs 0.1 lac
(vii)	Vehicles for consultancy staff	-	Rs 0.4 Lac
(viii)	JE(Civil)/ JE(Electrical) /JE(QS&C)	-	Rs 0.25 lac

Note 6:

(a) If DEPMC fails to provide requisite supervisory staff due to any reason at any time, **PM** can hire the deficient staff through a BOO and the amount of their salary fixed by BOO will be paid from consultant's fees due to DEPMC (both MP and PRP) and if recovered from performance security deposit of DEPMC held with the Dept. **PM** will forward separate contingent bill to PCDA/CDA for payment each month. The performance security utilized for the above purpose will be made good at the earliest but within 90 days failing which a 10% penalty will be charged on the shortfall amount. Even after 180 days if the performance security has not been made good, the contract would be terminated. If the consultant fails to provide requisite staff during DLP, the **PM** will hire the same as per above procedure. The payment would be made by CDA out of performance guaranteed as per above procedure. The payment would be made by CDA out of performance guarantee to be encashed.

(b) In case of non deployment of required staff by DEPMC (without the explicit directions of **PM**/Accepting Officer) the recovery will be twice as calculated under Note 5 (b) for the period of non deployment and till hiring by BOO on prevailing rates. The bill for hiring amount is to be prepared by **PM**, countersigned by Station Commander, paid by CDA and debited to the running bill of the consultant.

Note 7:In the event of continued deficiencies of staff or poor performance of the consultant, the DEPMC contract would be terminated after issuing a final warning letter and BGB kept as performance security will be encashed and forfeited in full and shall be at the disposal of president of India. During the intervening period (till balance work contract is concluded) the supervisory staff would be hired by BOO as mentioned here-in-before in note 6 (a) and paid out of performance security and any other BGBs held with the department.

Note 8:

(a) The consultant's total remuneration shall be inclusive of costs towards all staff costs, sub-consultant's costs (if any) printing, communications, travels, accommodation and the like, and all other costs including cost for carrying out topographical survey incurred by the consultant in carrying out the services described in the contract, statutory levies imposed by Government of India such as GST and labour cess etc. as applicable on the consultant.

(b) However, if after the last date of receipt submission of e- tenders, there occurs a change in the rate of GST (Goods & Services Tax), the same will be subject to adjustment, i.e., say if the GST (goods & services tax) is reduced then the consultant will give refund to accepting officer. Similarly if the rate of GST (goods & services tax) is increased from the rate prevalent on date of

receipt of e-tender then the additional liability of GST (goods & services tax) shall be reimbursed to the consultant by accepting officer on production of proof of payments.

Note 9: The cost of the project worked out based on the awarded cost shall be firm except any increase in scope of work ordered by accepting officer during execution of the project which has not been attributed to consultant due to his fault/oversight.

Note 10:

(a) In case of failure of the consultant, to prepare and submit the Final DPR within a specified period from the date of go ahead for preparation of DPR, liquidated damage @ Rs 5000/- per day of delay shall be recovered from the consultant subject to maximum of 1.5% of settled fees.

(b) In case of failure of the consultant, to prepare and submit corrected tender documents within a specified period from the date of go ahead for preparation of contractual documents, liquidated damage @ Rs 5000/- per day of delay shall be recovered from the consultant subject to maximum 50000/-.

(c) In case of delay in evaluation and recommendations on quoted tender documents and recommendation within a period of ten days from the date of opening of price bid (Cover-II), liquidated damage @ Rs 5000/- per day of delay shall be recovered from the consultant.

(d) If certain portion of the delay is not attributable to the consultant, no penalty will be charged for that period.

(e) Note 10 (b) & (c) holds good for balance work contracts also (Risk & cost tender).

Note 11:

The add back DOs to be submitted immediately on commencement of work. Liquidated damages @ 10% of monthly fees shall be recovered for every month of delay if the same is not been submitted within six months of date of commencement unless EOT is obtained for reasons beyond the control of DEPMC.

Note 12: The following expenditure will be reimbursed to the consultant on production of proof and payment receipts: -

(a) On account of clearance of thick bushes/jungles for the purpose of topographical survey/finalization of layout of buildings on the recommendations of **PM** (station board of officers will decide on the requirement).

(b) Any statutory fees to state Govt/local bodies for obtaining sanction for construction of the project.

(c) Vetting of drawings from IIT (or reputed Govt Engineering College after obtaining approval of accepting officer).

(d) Expenditure incurred (on termination of a building contract) on account of hiring of labour, plants & equipments, for stacking and counting of heavy materials like steel etc for the purpose of completion of Board of Offrs ordered for ascertaining the materials lying at site for conclusion of balance work contract. Quantum of labour, plants and machineries required to be hired to be got approved by **PM** from accepting officer.

Signature of DEPMC

Dy. Director (Contracts)

FORM OF CONTRACT

This Contract is made on this _____ day of _____ of the year two thousand _____.

Between

The President of India, represented by **Chief Engineer Shillong Zone**, Ministry of Defence, **GOVERNMENT** of India, with its office at **Spread Eagle Falls, Shillong, Meghalaya – 793 011** (herein after referred to as **“OWNER”**) of the one part,

AND

Name, Status and Address

.....(hereinafter referred to as **Consultant**), which expression shall unless repugnant to the context or meaning thereof be deemed to include its administrators, successors and permitted assigns of the other part; and

Whereas the OWNER intends to engage Consultant to render consultancy services as per detailed engineering and project management consultant’s (DEPMC) scope of service, at stations listed in notice of tender; and

Whereas in this connection **Consultant**, being in the business of providing such services and having experience, expertise and knowledge in this regard, have agreed to engage themselves for getting the Services completed at the consultancy charges quoted in financial proposal and considering the willingness, readiness and ability projected by consultant; and

Whereas _____ alterations have been made in these documents and an evidence that these alterations made before the execution of this agreement these have been initialed by the consultant and, _____ Dir (Contracts). The said officer is here by authorized to sign and initial on my behalf the documents forming part of this contract.

The above tender accepted by me on behalf on the President of India, for financial proposal _____ @ _____% (_____ percent) of project cost on _____ day of _____ 2018.

Signature _____ dated _____ of 2018.

Appointment : Chief Engineer Shillong Zone
(For And on Behalf of the President of India)

Whereas OWNER agrees to engage consultant for performing such Services. Now this contract witnessed and it is hereby mutually agreed by and between the parties as follows:-

ARTICLE 1:- DEFINITIONS

For the purpose of this CONTRACT, unless otherwise specified or repugnant to or inconsistent with subject, context or meaning thereof, the following terms shall be deemed to have the following meanings:

1.1 "CONTRACT" shall mean this CONTRACT including all sections, annexure, and appendices hereto and all documents herein attached and amendments to be made to this CONTRACT, if any, which the PARTIES may hereafter mutually agree in writing.

1.2 "OWNER" shall mean President of India represented by Chief Engineer Shillong Zone, i.e. Accepting Officer.

1.3 "Consultant" shall mean M/s having its registered office at(Address) and shall include all other known offices of M/s

1.4 "PARTIES" shall mean OWNER and consultant, one individually referred to as party.

1.5 "SERVICES" shall mean all the responsibilities to be discharged by consultant for fulfilling its obligations under this contract.

1.6 "AUTHORISED REPRESENTATIVE" shall mean the representatives of "OWNER" and/or "consultant" as the case may be, who are duly empowered and authorized by their respective organization to act for and on their behalf.

1.7 "DATE OF ACCEPTANCE" shall mean the date on which OWNER confirms written acceptance of consultants SERVICES.

1.8 "PROJECT" shall mean the Housing Complex/ Urban Development at location (s) for which consultant is to provide SERVICES under this CONTRACT.

1.9 "PROJECT COST" shall mean summation of cost of contracts concluded with lowest tender adjusted with cost of variations/deviations during execution or DPR cost of work contracted which ever is less.

Note: - It is expressly mentioned that project Cost shall not include cost of land and escalation, if any and percentage derived by the department of project cost shall not be paid on cost of land, escalation, if any.

1.10 "CONSULTANCY CHARGES (SETTLED FEE)" shall mean the amount calculated by multiplying the percentage derived by the department for acceptance with project cost.

1.11 "CPR" shall mean Concept Project Report.

1.12 "DPR" shall mean Detailed Project Report.

1.13 "JCO" shall mean Junior Commissioned Officer.

1.14 "OR" shall mean other Rank

1.15 "CDA" shall mean Controller of Defence Accounts.

1.16 "PCDA" shall mean Principal Controller of Defence Accounts.

ARTICLE 2 LANGUAGES

This Contract has been executed in English, which shall be the binding and controlling language for all matters relating to the meaning or interpretation of this Contract.

ARTICLE 3 HEADINGS

The headings shall not limit, alter or effect the meaning of this Contract.

ARTICLE 4 OFFICIAL SECRETS ACT AND SECURITY OF CLASSIFIED INFORMATION AND DOCUMENTS

The Consultant shall not disclose to any third person or party any information, data, tender documents and contents thereof, design, drawings, plans, specifications etc. received from the OWNER or collected during their site visits to various military stations at any time either in whole or in part and shall ensure to preserve the secrecy of the above information and shall not use the same for any purpose other than construction, maintenance and operation of the resultant Project/Plant. Officers, staff, employees of the Consultant handling all such information shall be subject to the OFFICIAL SECRETS ACT and violations, if any, shall be dealt with accordingly.

ARTICLE 5 OWNERSHIP OF INFORMATION / DATA/DESIGNS / DRAWINGS/ DEVELOPED BY THE CONSULTANT UNDER THE CONTRACT.

Ownership of all data, documents, drawing, designs developed by the Consultant at OWNER's cost under this contract shall rest with the OWNER. The consultant shall hand over all such materials (in print as well as in electronic media) to DG MAP before the payment of that material/document is claimed. Authority for future use of these materials shall solely rest with the OWNER. Accordingly a certificate to this effect that these documents will not be utilized by them for any other project without the permission of DGMAP shall be rendered at the time of submission of tender.

ARTICLE 6 INDEMNITY

6.1 The consultant shall hold harmless and indemnify the OWNER, against any claims or liability because of personal injury including death of any employees of consultant arising out of or in consequence of the performance of this CONTRACT.

6.2 OWNER shall not be responsible for any loss or damage to property of any kind belonging to consultant or his employees, servants or agents during execution of the contract.

ARTICLE 7 ASSIGNABILITY

The contract and benefits and obligations thereof shall be strictly personal to the parties.

ARTICLE 8 GOVERNMENT LEVIES

The Consultant remuneration shall be inclusive of all statutory levies imposed by Government of India, such as GST (goods & services tax) and labour cess etc as applicable on the Consultant from time –to-time. Any change in such levies after the date of opening of Priced bid shall be adjustable.

ARTICLE 9 PERFORMANCE SECURITY

The consultant shall furnish within 30 days of issue of the letter of acceptance by OWNER, a Bank Guarantee from any nationalized bank on the prescribed format (given at Appendix 'A') for an amount equivalent to 10% (Ten percent) of the total consultancy fee to be received by him towards performance Security valid for a period till payment of final bill or completion of defect liability period of the project whichever is later. Any amount as and when due against consultant on account of liquidated damages, unsatisfactory performance and failure of buildings /schemes or any part of non-provision of requisite supervisory staff buildings/schemes be recovered from his dues and by encashing the bank guarantee. The total consultancy fee (settled fee) for this purpose shall be calculated by multiplying the percentage derived by the department for acceptance with the Estimated Project Cost given in the Notice of tender and amended subsequently

ARTICLE 10 NOTICES

Any notice, request or consent required or permitted to be given or made pursuant to this Contract shall be in writing. Any such notice, request or consent shall be deemed to have been given or made when delivered in person to an authorized representative of the Party to whom the communication is addressed, or when sent by registered mail, telex, telegram or facsimile to such Party at the address specified below:-

Client :- **Chief Engineer Shillong Zone, Spread Eagle Falls, Shillong – 793 011**

Consultant :-

.....
.....

ARTICLE 11 EFFECTIVENESS OF CONTRACT

This Contract shall come into force and effect on the date (the “Effective Date”) of Acceptance.

ARTICLE 12 COMMENCEMENT OF SERVICES

The Consultants shall begin carrying out the Services at the end of Maximum 15 days’s period after the date of acceptance.

ARTICLE 13 SUSPENSION

The OWNER may, by written notice of suspension to the Consultant, suspend all payments to the Consultant hereunder if the Consultant fails to perform any of their obligations under this Contract, including carrying out of the Services provided that such notice of suspension.

- (a) Shall specify the nature of the failure.
- (b) Shall request the Consultants to remedy such failure within the period not exceeding thirty (30) days after receipt by the Consultants of such notice of suspension.

ARTICLE 14 TERMINATION

If at any time in spite of reasonable notices, the OWNER considers that the consultant is making default or is not progressing diligently or that the quality of services rendered by the consultant is not satisfactory, or that the consultant is not effectively cooperative in achieving the targets of the scheme in one way or other or that the consultant is lacking in professional ethics or misconducts himself, then may at his own discretion terminate this contract in whole or in part as he deems fit without assigning any reason, In the event of such termination, the consultant shall be entitled to be paid only for those stages of work/services which have been fully completed by the consultant. No compensation whatsoever for payment shall be due to the consultant for any incomplete stage or on any other account. Any drawings, design etc received by the OWNER for incomplete stage however becomes the property of the OWNER.

Whenever the OWNER exercises his authority to terminate the contract as a whole or in part due to above said reason (s), he may complete the consultancy services by any means independently without new contract for balance work of the original consultant and shall forfeit his performance security in full to the department. The original consultant shall be debarred from participating in the tender for the balance consultancy service and may be blacklisted for an unspecified period from all MAP and MES works consultancy.

ARTICLE 15 FORECLOSURE

At any time before his services and obligations under the contract is completed by the consultant, the OWNER, shall have right to foreclose this agreement without assigning any reason to the consultant. In case of such foreclosure the consultant shall be entitled to be paid for the stages of work already completed by him at applicable rates and a reasonable compensation as decided by Employer (which shall be final and binding) for any part or any stage of services of the consultant already completed by the consultant before he was served with a notice of foreclosure.

ARTICLE 16 FAIRNESS AND GOOD FAITH

Good Faith

The Parties undertake to act in good faith with respect to each other's rights under this Contract and to adopt all reasonable measures to ensure the realization of the objectives of this Contract.

Operation of the Contract

The Parties recognize that it is impractical in this Contract to provide for every contingency which may arise during the life of the Contract, and the Parties hereby agree that it is their intention that this Contract shall operate fairly as between them, and without detriment to the interest of either of them, and that, if during the term of this Contract either Party believes that this Contract is in operation unfairly, the Parties will use their best efforts to agree on such action as may be necessary to remove the cause or causes of such unfairness, but on failure to agree on any action pursuant to this clause shall give rise to a dispute subject to arbitration in accordance with Clause thereof.

ARTICLE 17 SETTLEMENTS OF DISPUTES

Dispute Resolution Mechanism as being promulgated by the E-in-C's Branch Kashmir House , Raja ji Marg, New Delhi will be used for resolution of disputes through mutual consent. Pending finalization of this mechanism, SOP issued by Indian Council of Arbitration for Dispute Boards will be used for dispute resolution. In the vent of no resolution through dispute resolution mechanism ,following process of Arbitration will be followed

All disputes, between the parties to the contract (other than those for which the decision of the **Accepting Officer** or any other person is by the contract expressed to be final and binding) shall, after written notice by either party to the Contract to the other party, be referred to the sole arbitration of serving officer having degree in Engineering or equivalent or having passed Final / Direct Final Examination of Sub Division II of Institution of Surveyors (India) recognized by the Govt of India to be appointed by the Engineer-in-Chief, E-in-C's Branch, Kashmir House, New Delhi-11 or Director General of Works if specifically delegated in writing by Engineer-in-Chief, Army Headquarters, New Delhi whose decision shall be final, conclusive and binding. The Arbitration shall be governed by Arbitration and Conciliation Act, 1996 (Amended 2015).

Unless both parties agree in writing, such reference shall not take place until after the completion or alleged completion of the Works or termination or determination of the Contract under conditions of this contract.

Provided that in the event of abandonment of the works or cancellation of the Contract under conditions of this contract, such reference shall not take place until alternative arrangements have been finalized by the OWNER to get the works completed by or through any other consultant or consultants or agency or agencies.

Provided always that commencement or continuance of any arbitration proceeding hereunder or otherwise shall not in any manner militate against the Owner's right of recovery from the consultant as provided in conditions of this contract.

If the Arbitrator so appointed resigns his appointment or vacates his office or is unable or unwilling to act due to any reason whatsoever, the authority appointing him may appoint a new Arbitrator to act in his place.

The Arbitrator may proceed with the arbitration, ex-parte, if either party, inspite of notice from the Arbitrator, fails to take part in the proceedings.

The Arbitrator shall give his reasoned award in writing on all matters referred to him and shall indicate his findings, along with sums awarded, separately on each individual item of dispute.

The venue of arbitration shall be such place or places as may be fixed by the Arbitrator in his discretion.

The language of the arbitration proceedings and that of all documents any communications between the parties shall be "English".

The award of the Arbitrator shall be final and binding on both the parties to the contract.

Notwithstanding the fact that the stations of work are anywhere in India, only the courts at **Shillong** shall have the jurisdiction to adjudicate and settle any disputes between OWNER and the consultant. No other court outside **Shillong** shall have any jurisdiction on any matter requiring reference to Civil Court.

ARTICLE 18 CONSULTANTS NOT TO BENEFIT FROM COMMISSIONS, DISCOUNTS ETC.

The remuneration of the Consultant pursuant to 'Consultant Price' hereof shall constitute the Consultant's sole remuneration in connection with this Contract or the Services and, the Consultant shall not accept for own benefit any trade commission, discount or similar payment in connection with activities pursuant to this Contract or to the Service or in the discharge of their obligations hereunder, and the Consultant shall use their best efforts to ensure that any sub-consultants, as well as the Personnel and agents of either of them, similarly shall not receive any such additional remuneration.

ARTICLE 19 CONSULTANTS AND AFFILIATES NOT TO ENGAGE IN CERTAIN ACTIVITIES

The Consultant agree that, during the term of this Contract and after its termination, the Consultant and any entity affiliated with the Consultant, as well as any sub-consultant and any entity affiliated with such sub-consultant shall be disqualified from providing goods, works or services (other than the Services and any continuation thereof for any project resulting from or closely related to the Services).

ARTICLE 20 PROHIBITIONS OF CONFLICTING ACTIVITIES

Neither the Consultant nor their sub-consultants or the Personnel of either of them shall engage, either directly or indirectly, in any of the following activities:-

- (a) During the terms of this Contract, any business or professional activities in the Government's country which would conflict with the activities assigned to them under this Contractor.
- (b) After the termination of this Contract, such other activities as may be specified in the contract.

ARTICLE 21 LIABILITY OF THE CONSULTANT

Subject to additional provisions, if any, set forth in the contract, the Consultant's liability under this Contract shall be as provided by the Applicable Law.

ARTICLE 22 FORCE MAJEURE

22.1 Definition

For the purpose of this contract, "Force Majeure" means an event which is beyond the reasonable control of a party, and which makes a Party's performance of its obligations under this contract impossible or so impractical as reasonably to be considered impossible in the circumstances, and includes but not limited to, war, riots, civil disorder, earthquake, fire explosion, storm, flood, strikes, lockouts, or other industrial action (except where such strikes, lockouts or other industrial action are within the power of the Party invoking Force Majeure to prevent), confiscation or any other action by government agencies.

Force Majeure shall not include:-

- (a) Any event which is caused by the negligence or intentional action of a Party nor;
- (b) Any event, which a diligent Party could reasonably have been expected to both;
 - (i) Take into account at the time of conclusion of this contract and;
 - (ii) Avoid or overcome in the carrying out of its obligations under this contract.

The failure of a Party to fulfill any of its obligations under this contract shall not be considered to be a breach of, or default under, this contract insofar as such inability arises from an event of Force Majeure, provide that the party affected by such an event has taken all reasonable precautions, due care and reasonable alternative measures, all with the objective of carrying out the terms and conditions of this contract.

22.2 Measures to be taken

- (a) A Party affected by an event of Force Majeure shall take all reasonable measures to remove such Party's inability to fulfill its obligations under this contract with minimum of delay.
- (b) A Party affected by an event of Force Majeure shall notify the other Party of such events as soon as possible, and in any event not later than fourteen (14) days following the occurrence of such an event, providing evidence of the nature and cause of such event, and shall similarly give notice of the restoration of normal conditions as soon as possible.
- (c) The Parties shall take all reasonable measures to minimize the consequences of any event of Force Majeure.

22.3 Extension of Time

The Consultant shall keep a record of the circumstances referred to above information, which are responsible for causing delays in the execution of the project and shall intimate to **Accepting Officer** within seven days of the happening causing delay requesting for extension of time for entire completion of his services. Such extension of time shall be granted by **Accepting Officer** after due consideration of circumstances intimated by the consultant. In case of any difference of opinion, the decision of **Accepting Officer** shall be final and binding.

ARTICLE 23 PATENTS

The consultant shall indemnify and hold OWNER harmless from all costs, damages, and expenses arising out of any claim, action or suit brought against OWNER by third parties in respect of any infringement of any patent or registered design or similar rights resulting from the use of any technical information, data or process or design belonging to the Consultant and furnished to OWNER.

ARTICLE 24 PROJECT COMPLETION SCHEDULE

- (a) The exact time for execution of the project will be as per contract (s) concluded with contractor (s) i.e., Builder and it shall be noted by the consultant that in case of any delay in completion of the project for whatsoever reasons, the consultant shall not be relieved of his responsibilities after the period given against execution of project and shall not be entitled for any compensation/extra charges other than what is given in payment condition and notes thereof. The rates quoted in financial proposal and derived percentage shall be final and nothing extra on this account shall be payable to the consultant.
- (b) The action for advertising the works in public shall be taken by **Accepting Officer** sufficiently in advance during DPR stage so that tenders could be issued at the earliest after Approval of DPR. Therefore, draft advertisements for various works shall be submitted by the consultant well in advance of submission of DPR.
- (c) The remuneration for the consultancy services shall also include Rebidding, Reevaluation of contract documents, preparation of tender with revised / changed drawings and specifications during re-tendering stage. No additional payment on account of the same shall be admissible.
- (d) The payment for the manpower de-hired will be deducted from the monthly payment due to the consultant. This amount to be calculated as under:-

(i)	RE	-	Rs 1.0 lac
(ii)	Civil Engineer/Elect Eng	-	Rs 0.5 lac
(iii)	Billing Engineer	-	Rs 0.5 lac
(iv)	Asst Civil/Elect Engineer	-	Rs 0.3 lac
(v)	Computer Operator	-	Rs 0.15 lac
(vi)	Store keeper	-	Rs 0.1 lac
(vii)	Vehicles for consultancy staff	-	Rs 0.4 Lac
(viii)	JE(Civil)/ JE(Electrical) /JE(QS&C)	-	Rs 0.25 lac

(e) DEPMC or its nominated rep to attend any legal proceedings wherein the judge, arbitrator or a presiding officer of a court of Inquiry directs so, In writing to attend depose before it. No cost will be reimbursed by the department. on this account.

(f) In the event of part sites being active and other sites inactive or likely to remain so for long, the DEPMC on written instructions from PM will de-hire its manpower (Engineers & Supervisors) from those sites. Full manpower for those sites /part sites will be resumed within 15 days from the recommencement of wk or as instructed by PM in writing.

(g) In case of failure of the consultant, to prepare and submit the Final DPR within specified period from the date of go ahead for preparation of DPR, liquidated damage @ Rs 5000/- per day of delay shall be recovered from the consultant subject to maximum of 1.5% of settled fee.

(h) In case of failure of the consultant, to prepare and submit corrected tender documents within specified period from the date of go ahead for preparation of contractual documents, liquidated damage @ Rs 5000/- per day of delay shall be recovered from the consultant subject to maximum 50000/-.

(i) In case of delay in evaluation and recommendations on quoted tender documents and recommendation within specified period from the date of opening of price bid (Cover-2), liquidated damage @ Rs 5000/- per day of delay shall be recovered from the consultant.

(j) Liquidity damages will be levied on the consultant, if the variation in Bills of Quantity in contract, in any trade section, except site clearance is beyond 5% unless the variation is necessitated due to either user requirement or circumstances beyond the control of the consultant. If the variation is attributable to consultant, the DO amt would also not be considered towards remuneration of consultancy fees. The liquidity damages levied shall be as under:-

S/No	Variation in BOQ in a trade section	Liquidity damage
1.	More than 5% & up to 10%	5% of payable fee for the trade section
2.	More than 10% & up to 20%	10% of payable fee for the trade section
3.	More than 20%	20% of payable fee for the trade section

For Variation in BOQ upto 10% in the trade section of site clearance only, no liquidity damage will be charged. However, if the variation in BOQ of site clearance is more than 10% liquidity damage at the rate specified in article 24(j) and SI No. 2 and SI No.3 will be charged to the consultant. However, if the variation is due to change of site/location on which consultant had no control no liquidity damages will be charged. The architectural features of a multi storied buildings shall be planned in such a manner that it facilitates cleaning/maint of glazed portion or any external surface of building using cradle system as part of maintenance contract to be undertaken by MES.

ARTICLE 25 REMOVALS AND REPLACEMENT OF PERSONNEL

If the owner;

(a) finds that any of the Personnel of the consultant has committed serious misconduct or has been charged with having committed a criminal action or

(b) has reasonable cause to be dissatisfied with the performance of any of the personnel , then the Consultant shall at the Owner's written request specifying the grounds there for, forthwith provide as a replacement a Person with qualifications and experience acceptable to the Owner.

ARTICLE 26 PROFESSIONAL LIABILITY INSURANCE

(a) Professional Liability Insurance, more commonly referred to as Professional Indemnity Insurance, is a mechanism to transfer all or part of the risk to an insurance company for payment to those who are entitled to be compensated for their losses to the negligent performance of a duty of care by the professional.

(b) The consultant shall provide to the HQ CE SHILLONG ZONE, SHILLONG a Professional Liability Insurance (PLI) for a period of five (5) years or as per applicable law, whichever is higher, after completion of services. The liability to the ACCEPTING OFFICER, CE SHILLONG ZONE shall be limited to not less than the total payments expected to be made under the consultant’s contract, or the proceeds the consultant is entitled to receive under its insurance, whichever is higher.

(c) Guidelines on Professional Liability Insurance (PLI)

Following guidelines are prescribed.

- (i) PLI shall be uniformly taken for period of five years for all projects.
- (ii) Following clauses shall be incorporated in the agreement.

(aa) Consultant will maintain at its expense, Professional Liability Insurance including coverage for errors and omissions caused by Consultant’s negligence in the performance of its duties under this agreement, (A) For the amount not exceeding total payments for Professional Fees and Reimbursable Expenditures made or expected to be made to the Consultants hereunder OR (B) the proceeds, the Consultants may be entitled to receive from any insurance maintained by the Consultants to cover such a liability, whichever of (A) or (B) is higher.

(ab) The policy shall be issued only from an Insurance Company operating in India.

(ac) The policy must clearly indicate the limit of indemnity in terms of “Any One Accident” (AOA) and “Aggregate limit on the policy” (AOP) and in no case shall be for an amount less than stated in the contract.

.....
Signature of consultant

.....
Signature of Owner
(For & on behalf of President of India)

WITNESS: -

1.	2.
.....
(Signature)	(Signature)
.....

.....
.....
(Name & Address)	(Name & Address)

Signature of Consultant

**Dy. Dir. (Contracts)
For Accepting Officer**

FORMAT FOR BANK GUARANTEE FOR PERFORMANCE SECURITY

Ref:..... Bank
Guarantee:.....

Date:.....

To
.....
.....
.....
.....

Dear Sir,

In consideration of President of India represented by **Chief Engineer Shillong Zone, Spread Eagle Falls, Shillong - 793 011** (hereinafter referred as the "OWNER") having awarded to (Name of Consultant (hereinafter referred to as the "Consultant" which expression shall unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns), an agreement for

.....(name of the work)
(hereinafter called the scope of work) and in terms of clause of Form of Contract, the Consultant is required to submit a Bank Guarantee amounting to Rs.....(Rupees.....only) as a Performance Security for performance for the agreement to be furnished by the Consultant.

We, the(Name of the Bank & address) (hereinafter referred to as the Bank,) which expression shall, unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns) do hereby guarantee to the Owner, performance of the terms and conditions of said contract and undertake upon default absolutely and unconditionally to pay the Owner immediately on demand any or all money payable by the consultant to the extent of Rs.(Rupees.....only) as aforesaid at any time uptomonths from the date of agreement without any demur, reservation, contest, recourse or protest and / or without any reference to the consultant. Any such demand made by the owner on the Bank shall be conclusive and binding notwithstanding any difference between the Owner and the Consultant or any dispute pending before any Court, Tribunal, Arbitrator or any other authority. We agree that the Guarantee herein contained shall be irrevocable and shall continue to be enforceable till the owner discharges this guarantee.

The Owner shall have the fullest liberty without affecting in any way, the liability of the Bank under this Guarantee, from time to time to extend the time for performance of the Contract by the Consultant. The Owner shall have the fullest liberty without affecting this guarantee, to postpone from time to time the exercise of any powers vested in them or of any right which they might have against the Consultant to exercise the same at any time in any manner and either to enforce or to enforce any covenants, contained or implied, in the Contract between the Owner and the Consultant any other course or remedy or security available to the Owner. The bank shall not be relieved of its obligations under these presents by any exercise by the Owner of its liberty with reference to the matters aforesaid or any of reason or any other act or forbearance or other acts of omission or commission on the part or the Owner or any other indulgences shown by the Owner or by any other matter or thing whatsoever which under law would but for this provision have the effect of relieving the Bank.

The Bank also agrees that the Owner at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor, in the first instance without proceeding against the Consultant and notwithstanding any security or other guarantee that the Owner may have in relation to the Consultant's liabilities.

Notwithstanding anything contained here in above our liability under this guarantee is limited to Rs...../- (Rupees.....only) and it shall remain in force up to and including.....and shall be extended from time to time for such period as may be desired by the Owner acting through Director General married Accommodation Project on whose behalf this guarantee has been given.

Dated this.....

Signature of Authorised signatory of Bank

WITNESS:-

1.
(Signature)

2.
(Signature)

.....

.....

.....
(Name & Address)

.....
(Name & Address)

Signature of Consultant

Dy. Director (Contracts)
For Accepting Officer

Appendix 'B'LIST OF PCDA/CDA

Ser No	Postal Address of PCDA/ CDA	Telephone No of JCDA	Fax No
1.	Office of the CDA Udyan Vihar, Narangi Guahati- 781 171	0361-641842	0361-640204

Signature of Consultant

**Dy. Director (Contracts)
For Accepting Officer**

APPROXIMATE NOS AND COST OF DWELLING UNITS (DUs)

Sl No	Name of Stations	Officers	JCO	OR	Total DUs	Rough Cost of the Project	Amount of DEPMC Consultancy
1	Leimakhong	12	04	300	316	10,419.01 Lakh	294.88 Lakh
2	Rangapahar	12	24	102	138	3,883.54 Lakh	109.91 Lakh
	Total	24	28	402	454	14,302.55 Lakh	404.79 Lakh

Signature of Consultant

Dy. Director (Contracts)
For Accepting Officer

GUIDELINES ON DPR

CONTENTS OF DPR**DPR Part I (Building)**

1. Introduction
2. Met Data
3. Topographical details & Soil investigation
4. Land and site plan details
5. Site clearance and area development
6. Architectural drawings and details
7. Structural and execution drawings.
8. Details of fittings and fixtures.
9. Details of resources:-
 - (a) Tools & Plants.
 - (b) Equipment for testing of all materials incorporated in work i.e., site lab/out sourcing.
 - (c) Formwork and Shuttering
 - (d) Human Resources
10. Quality control measures including check lists (Job formats) for major activities.
11. Detailed specification and finishes
12. Technique for Monitoring of work
13. Financial checks
14. Pre-qualification criteria for selection of contractors.
15. Site documents.
16. Services
 - (a) Road, path, culverts and area drainage.
 - (b) Drainage- In buildings
 - (c) Sewage- Internal
 - (d) Fencing & Security wall, Gate & pillars.
 - (e) Electrification- Internal and street lighting
 - (f) Water Supply- Internal
 - (g) Others
 - (i) Rain water harvesting
 - (ii) Environmental clearance
 - (iii) Fire Fighting
 - (iv) Lift
 - (v) Solar water heating system
17. Estimate and bill of quantities
18. Defect liability period

19. Miscellaneous information

20. List of appendices.

DPR Part II (External Services)

- 1 External Electrification including development of sources.
- 2 External water supply including development of sources
3. External sewage disposal
4. Sewage treatment plant including recycling of treated water for :-
 - (a) Pipeline design and layout for Arboriculture
 - (b) Disposal of surplus water in MES /Local municipality drainage during rainy season or any other season after the utilization for the above mentioned purpose
- 5 IVRS
- 6 Site clearance and area development for external services (DPR part II)
- 7 Vetting of above mentioned details of external services by CE Zone (MES)
- 8 Approval of external services schemes by Dte of Utilities, E-in-C's Branch.
- 9 Statutory sanction/clearances from local/ state bodies with the assistance of Station Commander & local MES authorities

Note :- Details of existing systems /sources available in the Station will be provided by Garrison Engineer (MES) of the Station

DPR Part III – Furniture :- To be provided as per list to be given by Accepting Officer.

DPR Part IV – Arboriculture/landscaping :- To be planned for a maximum of one percent of the cost of DPR part 1 (building). The plan to be approved by Station Commander.

Complete detailed layout of toilets, kitchen, cup boards, water filter, chimney etc.
Separate set of drawings of all the buildings.

DETAILED INSTRUCTIONS FOR PREPARATION OF DPR

1. **Introduction:** It shall contain the following:-
 - (a) Name of Station
 - (b) No of DUs in different phases for each category approved by ASC.
 - (c) Special item etc to be included in DPR.
2. **Met Data:** The met data shall include the following information:-
 - (a) Wind direction and speed.
 - (b) Rainfall data for last 20 years including annual rainfall, period of rainfall, average hourly rainfall, maximum daily rainfall etc. Based on the rainfall data, deductions to be drawn and mentioned: -
 - (i) Most appropriate time for construction.
 - (ii) Type of roof and magnitude of slope of roof.
 - (iii) Type of roof treatment to be adopted.

- (c) Seismic zone and precaution to be adopted.
 - (d) Temperature and humidity both maximum and minimum.
 - (e) Highest flood level (HFL) of the area under consideration for deciding plinth level of buildings, road level and area drainage.
3. Topographical details & Soil investigation: A detailed topographical survey and sub soil investigation of the land marked / allotted for construction shall be carried out by the consultant. It shall contain details of contour map and soil profile, soil investigation report consisting of plate load test, standard penetration test, pile load test etc as per site requirement along with calculation details, recommended foundation type and details based on soil investigation report and special requirement for foundation if any due to ground condition e.g. black cotton soil, coastal area, low lying or filled up area etc.
4. Land and site plan details: It shall contain layout details covering complete land use giving plan/green areas/ arboriculture /community development requirement, layout of blocks (No of storey/type of construction) and B/R and E/M external services, sub stations, service centre details of plinth levels of various blocks, road levels invert levels of sewage lines and manholes, details of site office, testing facilities at site, labour camp, tapping points for water and electricity for construction of building.
5. Site Clearance and area development: The executing agency shall give details of site clearance involved in the work with supporting documents for each and every item such as:-
- (a) Area development details, cutting /filling of earth supported with calculation details considering use of surplus earth available.
 - (b) Tree cuttings, if any.
 - (c) Telephone pole/ wire shifting if any with estimate from telephone department.
 - (d) Shifting of electric lines/poles (HT/LT) and water pipe lines with estimate from state electricity / water boards.
 - (e) Wherever demolition of buildings are involved, complete information about each and every building in separate format containing building no, book value, year of construction, plinth area, no of storeyes, type of construction with brief specification, cost of demolition, cost of credit of retrieved material duly authenticated by local PM or Station Commander. A separate certificate from the station Commander that “the buildings proposed for demolition have outlived their life and original purpose of construction and are no longer required” shall be enclosed with the DPR.
 - (f) Any other specific requirement at site.
6. Architectural drawing and details: Complete set of arch drawing based on authorized plinth area, zonal specifications, scale of Accn-2009 and subsequent amendment and instruction issued by Min of Defence and including all details & specifications consisting of the following:-
- (a) Plan at different floor levels including foundation & roof.
 - (b) Elevations from different sides, front, rear, right and left including plinth level and perspective view.
 - (c) Section at all critical point such as at toilet and kitchen, staircase, sunken floor, changing slope points etc.
 - (d) Details of staircase, wall thickness, sunken floor, changing slope points etc.
 - (e) Complete detailed layout of toilets, kitchen, cupboards, water filter, chimney etc.
 - (f) Details of door, windows & cupboard shutters with wooden and / or steel frame, built in dressing table both for gents and ladies, fireplace, concealed rain water pipes, CI grating.
 - (g) Separate set of drawings of all the buildings.

7. Structural and execution drawings:- It shall consist of the following details and information:-

- (a) Detailed structural drawings of the foundation i.e. plan, elevation, section with dimensions of footing, pedestal and column junctions including details of sub base for foundation and reinforcement details for pedestals, footing and column including details at junction, foundation details of load bearing walls, details of specialized foundation such as pile foundation, raft foundation etc.
- (b) Details of construction i.e., framed construction, load bearing wall, fillings and drawings for connections between columns and filler walls etc.
- (c) Structural details (plan, section, reinforcement) of plinth beams, columns, lintel beams roof beams, floor slabs, roof slabs, sunken slabs, chajjas, projections, balcony, staircase, railings, RCC shelves and parapets, RCC/Brick Jalis, cooking platforms, cantilever beams & porches, mummy slab, brick steps, loft slabs and cupboard etc.
- (d) Typical reinforcement details of all structural members mentioned in para (c) above with bar bending schedules, lap joints and other reinforcement details as per IS-456-2000.
- (e) Design details (calculations) of each structural members to be checked by IITs, Government engineering colleges.
- (f) Details of seismic and wind load provisions incorporated in the design of the structures as per relevant BIS codes.
- (g) Structural details of water sumps, static water tanks, soak well, septic tanks, filter beds, manholes, cover, water chambers with covers etc.
- (h) Structural details of security fencing posts, boundary/security wall, gate pillars and steel gate, garbage bins, RCC Jalis, parapets, drains, hume pipe/RCC culverts etc.
- (j) Detailed technical notes for RCC work as per IS-456-2000 and other relevant BIS codes.
- (k) Structural details of kitchen slabs (cooking platforms), shelves, RCC sinks, cupboard shelves/slabs, drainage covers, niches etc.
- (l) Details of roof treatment with specification compatible with local environment and climatic conditions, justification for deviations from zonal specification if any, warranty for leakage/seepage of roof and sunken floor.
- (m) Structural details (plan, elevation and reinforcement) of RCC overhead tanks and service tanks, extra provisions for roof slab at the location of services tanks, details of tanks, other than RCC i.e., brand name of manufactures, capacity, specifications etc.
- (n) Detailed drawings for expansion/ crumple joint, steel door for garages, rolling shutter, built in steel lockers, writing table, chain link fencing, fan hook, water meter and switch box etc.
- (o) Working drawings for electrical conduit layout, location of switch boards, No and type of switches on each board, location of MCBs and location of main electric meter board. This will also include layout of conduit pipes for inverter connection in officers DUs
- (p) Working drawings for plumbing, water supply pipelines (ensuring no beams/columns are cut/damaged during layout of GI pipes), location of Over Head Water Tanks, location of sanitary fittings i.e. WHB, EWC/IWC etc.
- (q) Working drawings for sewage disposal from Kitchen/toilets etc upto first manhole.
- (r) Working drawings for Rain Water pipes.

8. Details of fittings and fixtures: It shall contain following information:-

- (a) Details specification of doors and windows including fixing details clearly shown on drawing with dimensions.

- (b) Details of fly proofing, railing and grills including details of fixing (design pattern of railing and grills guard bars to be shown with dimension of each member).
- (c) Details of toilets and bath fittings i.e. layout of WC, WHB, towel rails with dimensions, soap niche, looking mirror, peg set, shower roses, taps and specification of these fittings, location of geysers and fixing details.
- (d) Details of iron mongery for doors and windows, ventilator cupboards, built in furniture and other such requirement.
- (e) Details of built in furniture and cupboard i.e. layout type of materials, design and fixing details, details of pelmet including curtains rods, fixing details.
- (f) Detailed layout of kitchen and its fitting including fixing details (cooking platform, sink, plate racks, shelves taps, RO/aqua guard unit, exhaust fan, plugs & switches with respect to placing of kitchen electrical items etc.
- (g) Details of fitments in kitchen for better space utilization and concealed storage of kitchen utensils and containers.
- (h) Details of floor (living, bath, toilet, and kitchen) dado, skirting and their finishes.
- (j) Details of service water tanks (capacity, make, type i.e. Ferro cement, RCC, PVC), fixing details, layout of water pipe lines and their connections.
- (k) Details of staircase railing, balustrade, pillars and fixing arrangement of these items, floor and its specifications, traps doors & rungs, parapets, Jalis etc.
- (l) Details of gate and gate pillars fixing details of barbed wire with posts etc, including fixing details of gate (plan elevation and section).
- (m) Detailed specifications of SWG, GI, CI, RCC & Hume pipes, their fittings and fixing details wherever applicable.
- (n) Details of layout and fixing of electrical and water supply items such as FTL fittings, plugs, switches, taps & looking mirrors etc.
- (o) In all multi storeyed buildings polished granite stone flooring in & around lift be considered.

9. Details of resources: - It shall contain information in details regarding:-

- (a) Tools and plants: Details of machinery proposed to be used during execution of work i.e. transportation of materials, earth works, mixing and transportation of concrete, curing of works, cutting and bending of reinforcement and other structural steel, welding works and any other machinery required for execution of the works. Vibrators to be used for compaction of concrete, lifting and placing of concrete.
- (b) Equipment for testing of materials and concrete: - Details of equipments proposed to be mobilized for testing of aggregate (coarse and fine) properties, physical and chemical properties and strength of cement, quality of concrete mix i.e. cube test, slump test, arrangement for water absorption and strength test of brick and HP tiles, moisture content measurement equipment, physical & chemical properties of water and any other equipment required for tests to ensure quality of work.
- (c) Formwork and shuttering: - Details of type of formwork and scaffolding i.e., steel, aluminium etc. proposed for use during construction, their frequency of use i.e. no of repetition of use in case of wooden formwork, lift/jacks for connection of scaffolding etc.
- (d) Human Resources: - Number of site engineers and their qualifications and experience, details of manpower to be employed on daily basis during construction of work, skilled workers trade wise i.e. bar benders, carpenters, masons, semiskilled workers, labour, arrangement for the boarding/lodging of employed manpower, details of permanent staff etc.

10. Quality control measures: - In order to ensure quality of work executed, following measures shall be made as part of the tender: -

- (a) Aggregate (coarse): Being basic ingredient for RCC and PCC work, its quality shall be checked and controlled continuously by concluding regular sieve test, crushing value test, impact value, corrosion tests, flakiness test, moisture content and all other tests as per BIS.
- (b) Sand: The quality of sand is very important for civil work and therefore sieves analysis, bulkage, silt content and moisture content tests shall be regularly performed.
- (c) Cement: Cement from reputed manufacturers shall be procured and physical and chemical properties, initial and final setting time, soundness test, strength test etc shall be conducted for each lot of cement etc.
- (d) Concrete: The quality of concrete will decide the quality of work and therefore it required utmost care during preparation, placing and compaction. Concrete shall be manufactured using weigh-batching plant with digital display system and having auto controlled water mixing arrangement. The EA shall ensure slump and compaction factor test and maintain w/c ratio at site during mixing of concrete. Sufficient Transit mixers /millers shall be available for transporting the concrete and suitable vibrators shall be used for compaction in position. Concrete cubes shall be casted as per IS-456-2000 for testing to ensure its strength.
- (e) Bricks and Hydraulically pressed tiles: Water absorption, compressive strength, efflorescence test shall be conducted for proper quality of these items.
- (f) Structural Steel: Structural steel shall be procured only from manufacturers of repute. No steel from re-rolling mills shall be used in the work. Chemical and physical properties including weight, elongation, ultimate tensile strength etc shall be conform to respective BIS standards.
- (g) Water: Quality check of water for its suitability for construction and during construction shall be checked before use in the work.
- (h) Joinery and woodwork: Proper quality monitoring for joinery and wood work would be ensured through proper chemical treatment, moisture control use of seasoned and mature timber and conducting regular tests e.g. bend test boiling test, moisture absorption test etc.
- (j) Sunken Floor and Roof Treatment : To avoid leakage and seepage, before and after treatment, quality shall be checked carefully by flooding and proper records to be maintained for future inspection.
- (k) Check of leakage seepage from Gutter pipes: All these shall be treated with water proofing material.
- (l) Smoke test for sewage and manhole system, hydraulic pressure test or water pipe line system, slope test for drain & sewage and other relevant test applicable at different stages shall be ensured and clearly specified in CPR executing agency.
- (m) The Executing Agency shall submit testing schedule of various test conducts during execution at site or in the lab in tabular form along with its results.

11. Detailed specifications and finishes: The specification and finishes shall be as per authorization of SOA-2009 Zonal specifications and instruction from Min of Def it shall cover the following aspects:-

- (a) Works: Detailed specification of foundation, brickwork, RCC work PCC work floor and sub floor, beam and slab, column external and internal Plaster, roof treatment staircase and steps, bath and toilet, kitchens, cooking platform, door window and ventilator and frames, cupboard and shelves, fly proofing and glazing, roads, drains, path, culverts, fencing and boundary wall, gate and pillars, sewage system and manholes, external and internal electrification, external and internal water supply, furniture i.e. steel locker, roller shutter, steel door for garages, expansion and crumple joint etc.
- (b) Materials: - Aggregate (coarse and fine), cement, steel, bricks, electric wiring and fittings, water supply pipes and fittings, SWG, RCC, CI and hume pipes and fittings, barbed wire, GI wire net, glass panes iron mongery, glazed tiles, marble chips, HP tiles, bituminous felts, doors and windows, door

frames (steel and wooden) and other joinery, external electrical fittings and water fittings, water storage tanks, sanitary fittings and fixtures and other materials.

(c) Make of items: The consultant shall obtain from **Accepting Officer**, specification and manufactures/brands of all items. These shall be analysed for any anomalies and deficiencies and brought to the notice of **Accepting Officer**. Only approved specifications/brands/makes would be incorporated in the tender documents. Machine made bricks and roof tile shall be preferred over conventional bricks and tile wherever available and cost is comparable. Possibility shall be explored for use Ready Mix Concrete (RMC)

(d) Schedule of finishes: It shall contain the type of finishes for each and every item right from sub base of foundation to roof treatment in tabular form e.g., floor/dado/skirting in living, drawing, dining, kitchen, bath and toilet, staircase, inside/outside wall finish, inside of cupboard etc.

12. Technique for Monitoring of work:

(a) Technique to be used for monitoring progress of the works on MS PROJECT with resource allocation, based on electronic media.

(b) Resources flow chart.

(c) Bottleneck details of the project if any, and time frame for action.

13. Financial checks:

(a) Monthly cash flow chart & planned execution schedule of works.

(b) Earnest money/security deposit proposals.

(c) Penalty proposals.

(d) Conditions for defect liability period including proposed detailment of tradesman/manpower.

(e) Realistic Yardstick for payment supported by bill of quantities.

(f) Certifying payments to be made in RARs and final bill.

(g) Report and returns, their format and periodicity for administrative control of the project.

14. Pre-qualification criteria for selection of contractors: It shall include the detailed information on following aspects: -

(a) Financial competence.

(b) Technical competence.

(c) Experience of execution of works.

(d) Capacity to mobilize resources-human, material and tools & plants.

(e) Bid capacity.

(f) Performance regarding timely completion of works undertaken, arbitration, litigation and quality of works executed.

(g) Any other relevant information if any.

15. Site documents: The following documents/registers shall be Kept in safe custody of RE and maintained at site: -

(a) Site order book.

(b) Works diary

- (a) Material testing register
- (b) Material passing register
- (c) Stage passing register
- (d) Level register
- (e) Sample approval register
- (f) store requirement register.
- (j) Concrete cube test register
- (k) Slump test register
- (l) Cement and steel test register
- (m) Deviation register.
- (n) Proprietary items register.
- (o) Concrete mix design register
- (p) Water cements ratio register
- (q) Silt content register.
- (r) Sand bulkage register
- (s) Visitors register.
- (t) Job formats for Quality Assurance check lists for major activities.
- (u) Work Hindrance register.
- (v) Leakage / seepage test register.
- (w) Honey-combing repair register.
- (x) Mobilization advance
- (y) Road roller log book

Any other details and specific requirement (station wise) as deemed necessary.

16. External services

- (a) Road, path & Culverts
 - (i) Layout plan with levels, sectional drawing with details of specifications, Structural and functional soundness of existing roads, paths, culverts and bridges where traffic pattern is likely be affected by MAP. Details of strengthening measures to be given if required.
 - (ii) Detailed drawings, specifications, and design details with levels of proposed roads, paths, culverts and bridges considering all design parameters such as design traffic volume considering all phases in MAP sub soil features upto significant depth, its CBR value/ modulus of sub grade reaction, H.L.F., Highest ground water table, suitability of earth for fillings, design discharge based on hydrological parameter/features for designing of culverts/bridges.
 - (iii) Site lab for testing relevant materials as per relevant BIS codes.

(b) Drainage:

- (i) Layout plan with levels and sectional drawing with details specification of exiting storm water drain and existing discharge point.
- (ii) Layout plan with levels and sectional drawings with detail specification of proposed storm water drain with design details based on hydrological and structural design parameters such as topography of land Geological feature of soil, design discharge details at various points based on catchments area, rainfall dates, run off co-efficient and time of concentration etc.
- (iii) Details of proposed discharge point and outfall structure.

(c) Sewage System:

- (i) Layout plan with sectional drawings, levels and specifications of existing sewage disposal system indicating their discharge capacity, details of existing central sewage plant and feasibility of connecting new sewage lines.
- (ii) Layout plan, details drawings and specifications of proposed sewage scheme with levels upto disposal point.
- (iii) Details of functional soundness of entire sewage disposal system considering existing and proposed one based on utilization of treated water for flushing system for toilets, arboriculture and feasibility of joining it to existing trunk sewerage line /municipal sewers during rainy season with confirmation from them if any passing by from nearby areas.
- (iv) Details of design of sewage disposal system based on topography of land, minimum/maximum velocity of sewage and its BOD at discharge point etc.

(d) Fencing, Security/Boundary wall, Gate & Gate pillars:

- (i) Detailed drawings and specification for security wall with fencing and gate.
- (ii) The security/boundary wall shall be designed to sustain the lateral pressure due to max boundary wall wind velocity based on met datas in the past for at least 20 years and stability against seismic condition besides other design parameters.

(e) Electrification

- (i) Layout plan of existing external electric supply network of station bringing out KLP electrical load, availability and present electrical load, system voltages, location of take over point, transmission/distribution lines with size and capacity, transformer with capacity and connected load, substations, protection & switchgears, feeder pillar, street lights etc.
- (ii) Determination of electrical load phase wise and pocket wise for proposed married accommodation after taking into consideration of critical electrical load for lifts, pumps for water supply, pumps for fire fighting, pumps for sewage disposal, street lights etc.
- (iii) Details revision/ amendment of agreement for supply of electricity with supplying agency with reference to KLP electrical load of station after taking into consideration of electrical load of MAP works for all four phases, if any. Restriction/regulation from supplying agency regarding mode of supply for electricity, tariff structure, penal condition etc must be elaborated/highlighted in details.
- (iv) The proposed electrical scheme must economically consider the augmentation of existing electrical network and ensure optimal utilization of existing electrical network to avoid clustering of conductors duplicacy / redundancy of assets.
- (v) Schematic diagram, layout plan, specification and details of proposed electric supply scheme including source, tapping point, transmission/distribution lines with size and capacity along with supporting fault/voltage drop calculations, transformer with size and capacity, substation, protection & switchgear, HT /LT panels, earthing arrangement for earth resistance as

per IS, feeder pillar box, street lights etc along with supporting details and selection criteria for all electrical items, equipments and accessories.

(vi) Schematic diagram, layout plan of sub stations duly marked with location, size, specification & capacity of all equipments/electrical item such as protection & switchgears, transformers, HT/LT panels, shunt capacitor bank, switches, ducting & criteria for all electrical items, equipments and accessories. Necessary clearance, safety & adequate working space as per Indian Electricity rule 1956 be ensured.

(vii) Working drawing, layout plan, supporting details, specifications and selection criteria for all electrical items, equipments and accessories of HT/LT panels, as well as power and control equipments and accessories such as bus bar, switches, protection & switchgears, relays, CT/PT, change over switches, voltmeter / ammeter, energy meter,. Power factor meter, frequency meter, earthing etc and wiring diagram of protection of transformer to relay to be provided.

(viii) Certificate from station commander / MES confirming that electricity for works can be made available without augmentation of existing external electric supply network of station else certificate from State Electricity Board confirming that electricity for works can be made available without augmentation of existing external electric supply network of station.

(ix) In case requirement of electricity for works cannot be met and external electric supply network of station is required to be augmented by the MES/ Station Electricity Board, details, estimates and time frame of execution for proposed augmentation work from MES / State Electricity Board to be obtained and enclosed. Financial effect be included in DPR.

(x) Requirement of standby DG set as per authorization along with supporting calculation of details to arrive at the required capacity.

(xi) Schematic diagram, specifications and layout plan of DG set room duly marked with location, size & capacity of all equipments such as DG set, LT panels, POL tank, switches, change over switch, control wiring, ducting & cabling, piping, earthing etc along with supporting details, foundation details of DG set as per manufacturer's instruction and selection criteria for all electrical / mechanical items, equipments and accessories Necessary clearance, safety & adequate working space as per Indian Electricity rule 1956 be ensured.

(xii) Installation details, drawings, specifications and layout plan of measures adopted for correction / improvement of power factor within prescribed limit along with supporting details, calculations and selection criteria for all electrical items, equipments and accessories.

(xiii) Installation details, drawings, specification and layout plan of aviation lights.

(xiv) Installation details, drawings, specification, selection criteria and economic and technical justification of proposed cost effective energy saving measures for reduction in consumption of electricity.

(xv) Installation details, drawings, specifications, layout plan and selection criteria for all electrical items, equipments and accessories of lighting protection scheme.

(xvi) Installation details, drawings, specifications, selection criteria for all electrical items, equipments and accessories, of solar power based electrical items.

(xvii) Schedule of quantities and particular specifications of scope of works.

(f) Water Supply

(i) Layout plan of existing external water supply network of station out KLP requirement, availability and present requirement, source / bore wells, storage reservoirs, pumping.

(ii) Installations, water pipe lines with size, method of disinfection/ purification etc.

(iii) Determination of water requirement phase wise and pocket wise for proposed married accommodation after taking into Consideration of critical requirement for fire fighting etc.

- (iv) Details of revision / amendment of agreement for supply of water with supplying agency with reference to KLP water requirement of station, after taking into consideration of water requirements for works for all four phases, if any. Restriction /regulation from supplying agency regarding mode of supply for water tariff structure, penal condition etc must be elaborated / highlighted in details.
- (v) The proposed water supply scheme must ensure optimal utilization of existing water supply network to avoid duplicacy / redundancy of assets.
- (vi) Schematic diagram, layout plan with levels, specifications and details of proposed water supply scheme including source /bore wells, tapping point, storage reservoirs, pumping installation, water pipe lines with supporting friction / hydraulic head loss calculations, pump & prime mover with supporting details and selection criteria for all electrical / mechanical items, equipments and accessories.
- (vii) Chemical analysis of water samples from recognized / approved institute / Agency duly stated that water is potable. Institutes Agency must also suggest the method of disinfection / purification if any in order to bring impurities within tolerance limit as approved by WHO.
- (viii) Schematic diagram, specifications and layout plan of pump house duly marked with location, size & capacity of all equipments such as pumps, prime mover, starters, water lines, valves, LT panels, ducting & cabling, earthing etc along with supporting details and selection criteria for all electrical mechanical items, equipments and accessories. Necessary clearance, safety & adequate working space as per rule be ensured.
- (ix) Working drawing, layout plan, supporting details, specifications and selection criteria of LT panels showing all power and control equipments and accessories such as bus bar, switches, relays, CTS, Change over switches, voltmeter / ammeter, energy meter, shunt capacitors, earthings.
- (x) Certificate form station commander/ MES, confirming that water for works can be made available without augmentation of existing external water supply network of station else Certificate from State / Municipal Board confirming that water for works can be made available without augmentation of existing external water supply network of station.
- (xi) In case requirement of water for works cannot be met and external water supply network of station is required to be augmented by the MES or state / Municipal Board details, estimates and time frame of execution for proposed augmentation work MES or State / Municipal Board to be obtained and enclosed. Financial effect be included in DPR.
- (xii) CGWB report, if water supply scheme is based on bore wells, stating the following items:-
- (a) Digging of bore well is permitted for meeting the potable water requirement for proposed works at station.
 - (b) Yield of proposed bore well specifically in lean period.
 - (c) Specify the depth at which potable water is available at the suggested location.
- (xiii) Installation details, drawing, specifications, layout plan and selection criteria for all electrical / mechanical items' equipments and accessories of proposed rain water harvesting ground water recharging scheme and location of recharging pit along with report from CGWB. Economic and technical justification / viability of proposed rain water harvesting / ground water recharging scheme and location of recharging pit.
- (xiv) Installation details, drawings, specifications, layout plan and selection criteria for all electrical / mechanical items, equipments and accessories of proposed fire fighting scheme along with report from fire Advisor Ministry of Defence, if any for building height more than 18 meter.
- (xv) Schedule of quantities and particular specification of scope of work.

(g) **Others**(i) **Rain water Harvesting**

- (aa) Layout plan and details of proposed scheme for roof rainwater harvesting and ground water recharging as per CGWB recommendation.
- (ab) Location of recharging pit, trench/any other method recommended considering ground conditions, subsoil strata, rainfall datas and runoff co-efficient etc.
- (ac) If no rain water harvesting is planned for a station, the DEPMC must enclose certificate in the DPR stating the reasons for not planning the rain water harvesting.

(ii) **Environmental Clearance** : Environmental clearance wherever required shall be obtained from local/Govt agency.

(iii) **Fire Fighting**

- (aa) Approval of CFEES to be obtained for multi storied buildings. Following main items to be included in fire fighting system.
- (ab) Wet riser pipes 150/100 mm dia.
- (ac) Landing valve/outlet (Hydrant point) at each floors near each stair case with necessary accessories.
- (ad) Yard Hydrant.
- (ae) Centralised fire water tank and fire pump room.
- (af) Two fire pumps, one electric driven and second (standby) diesel engine driven.
- (ag) Jocky pump.
- (ah) Down corner system on upper most floor with tank and terrace pump.
- (aj) Fire Brigade Inlets.
- (ak) Manual call points (alarm system).
- (al) Fire extinguisher.
- (am) Central control panel for all pumps has been envisaged and located pump room.
- (an) **Details of the following points**

(i) **Wet Riser System.** The system must be comprise of riser pipes of 150/100 mm dia to be raised vertically from ground floor up to the terrace preferably along the space near the stairs landing (or at any appropriate place remain conspicuous accessible and able to provide coverage to all wings and corners of the building). Each Building shall have two numbers of risers. The riser pipes shall be kept charged with water pressure of 3.00kg/cm² upto terrace level and each floor Hydrant comprising of the following:-

- (aa) Single headed Hydrant Valve.
- (ab) 2 x 15 Meters of fire hoses and 63mm dia, the hose pipe shall be non percolating type conforming to IS-636.
- (ac) Gunmetal branch pipe with nozzle of 12.5 mm dia.
- (ad) Hose reel with 40 Meters length and diameter hose reel shall not be less than 19mm and conform to IS-884.

All wet risers shall be interconnected with terrace level water tank with terrace pump to increase the pressure in case of emergency.

(ao) Yard Hydrant. The residential building at each site to be provided with Yard Hydrant coverage facility. Yard hydrants shall be provided around the buildings in ring main shape and connected with water storage tank and pump house. The hydrant out let spaced above 45 meter apart and located 5 to 15 from nearest edge of the building in a manner that each wing of the protected from at least two sides hydrant coverage. The yard hydrant are provide with hose cabinet in which 2 x 15 meters fire hoses branch pipe and nozzle are stored. Wet risers and yard hydrant network are connected an underground static water storage tank (sump).

(ap) Underground static water tank (sump). The location of the tank shall be such that it remains accessible to the fire engine/appliance of local fire brigade/services. Provisions of manholes shall be made for inspection, repair cleaning, insertion of suction hose etc. To prevent stagnation of water in the tank (fire) the arrangement may be made to first receive the water in the tank (fire) and then overflow to the bifurcated portion of the same tank before finally overflowing/diverting the same for domestic use. The design of the tank shall be as per the drawing indicated in NBC Part-4 (Fire and lift safety). The underground sump shall have the facility of a pump house.

(aq) Pumps. Pumps are basically used to increase the velocity and the quantity of water reqd to fight fires. The following are the pumps provided:-

(aaa) 1 No of electrical driven main pump for hydrant system, capable to discharge 2850 LPM with minimum pressure of 3.5Kg/cm^2 at the terrace level and also at each of the Hydrant point.

(aab) 1 No of diesel engine driven common stand by pump for both system, capable to same discharge as main pump.

(aac) 1 No of electrical motor driven Jockey Pump of 180 LPM capacity to take care of the minor leakage in pipe lines.

(aad) Terrace pumps electrical motor driven capable to discharge 450 LPM connected to terrace tank with down comer system.

(ar) Fire Brigade Inlets. Shall be provided at the ground level into the risers in case of failure of the installed system.

(as) Manual call points/Hooters and central panel. To be checked the arrangement of the manual call points. The system of manual call point be interlinked with the central panel. These shall be provided enclosed in the sturdy box installed one meter above the floor level and spaced at a distance of approx 22.5 meters apart. A call point and hooters are installed at strategic location (preferably near Entry/Exist) to enable easy access and audibility. To check the arrangement of manual operation of these call points, signals would be transmitted to the central control panel to effect the movement of fire station or concerned persons to tackle the situation.

(at) Electric Wiring. The following points to be checked of electric wiring to avoid electrical short circuit:-

(aaa) Electrical Wiring / fitting and fixtures are of appropriate rating.

(aab) RCCB's (Residual Current Circuit Breaker with over current protection) in place of MCB's.

(aac) Wiring shall be of copper conductor and laid through PVC conduit concealed pipes.

(aad) All electrical fittings (fixtures) are as per National Electrical code/Relevant Indian Standard.

(au) Portable Fire Extinguishers. To check the following points:-

(aaa) The number and location of portable fire extinguishers depends on the size and use of the buildings.

(aaa) Fire extinguishers are provide as per IS- 2190.

(aac) Different type of extinguishers have been provided different characters/ appropriate type.

(aad) Dry chemical powder type fire extinguishers of capacity 2/5 Kg fitted with gun metal cap, high pressure carbon dioxide cartridge with suitable mounting brackets conforming to IS-2171 to be provided in main switch board room, transformer, DG set room, pump room and lift machine room.

(aae) Carbon dioxide type fire extinguishers of capacity 4.5 Kgs fitted with valve discharge horn, conforming to IS-2878 located in electrical panel room, pump room and lift machine room.

(aaf) Fire extinguisher mechanical foam type 9 Liters capacity (IS-10204) located in parking area. Keeping in view that a fire point is available within a running distance 15 to 20 Meters from the hazard to be protected.

(av) General points to be checked.

(aaa) Every building at both sites essentially shall have not less than two exits for every floor.

(aab) Provn of fire lift, minimum capacity 8 persons shall be made.

(aac) Service ducts and shaft shall be properly sealed and fire stopped at all floor levels.

(aad) A minimum (open) space of 6 meter shall be ensured around the building/block.

(aae) Open space shall not be used as parking space.

(v) **Lift.**

Ser No.	Description	Yes	No	Remarks
(aa)	No of lifts are as per scale of lifts (Scale of Accn 2009)			
(ab)	Speed (a) Ground & 10 floor 0.6 to 1 m/sec. (b) Ground & 11 and above 1 to 1.5 m/sec.			
(ac)	Landing doors of the lift collapsible type.			
(ad)	<u>Control system</u> Automatic push button operation both from car & pending			
(ae)	Machine Room provided with air circulation equipment like exhaust or inlet fan.			
(af)	Stand by generator provided with lifts.			
(ag)	Cost of lift whether rate analysis/ quotation attached.			
(ah)	Minimum height of lift cage 2.13 m (7 feet)			
(aj)	Light provided at lift door.			
(ak)	The drawing prepared for building include the following:-			
(al)	Design adequacy certificate attached.			
(am)	Combined / luminous hall butters with seven segment digital hall position indicator on all floors.			
(an)	Warranty period of one year/operation for two year.			
(ao)	The lift is of metal construction with stainless steel finish inside.			
(ap)	<u>Dimension of car doors</u>			

The minimum clear doors opening of lift car doors.					
Description	Hoist way entrance / door width	Hoist way entrance / door height	Size of car inside.		
13 passengers / 884 kg passenger lift	900mm	2100mm	2000mm	1100mm	
8 passenger / 544 kg passenger lift	800mm	2100mm	1300mm	1100mm	
(aq)	Door locking device provided on all doors				
(ar)	<u>Emergency safety device.</u> Every lift suspended by wire ropes shall be provided with one more safety device attached to the lift car frame placed beneath.				
(as)	Commissioning of the lift shall be got approval by the Electrical Inspector.				
(at)	Testing of the installation on completion.				

(vi) **PNG:-** Working drawing, layout plan, supporting details and specification of providing of PNG infrastructure for insuring piped natural gas supply in all DUs.

17. **Estimates and bill of quantities:**

- Details estimates of all items and other accessories are to be prepared as per MES SSR 2010 and wherever rates are not available it shall be prepared on market rate (rate analysis to be enclosed).
- Calculation of plinth area per SM of building work including internal electrification, internal water supply, sanitary and plumbing work.

18. **Defects liability period:** Modalities for ensuring smooth and timely rectification of all type of defects shall be spelt out by the executing agency giving details of each category of tradesmen and inventory of stores and time period of rectification of defects reported.

19. **Miscellaneous information: -**

- Grade of cement (43/53).
- Grade and type of structural steel.
- Source and availability of local material- bricks, coarse and fine aggregate.
- Aesthetic details of the project keeping in view of existing structures, local environment and surrounding construction patterns.
- Type of shuttering / scaffolding proposed for construction.
- Any other relevant information if any.

20. **List of appendices:** The following appendices are part of the guidelines.

- Appendix 'E' : Cost estimate part I
- Appendix 'F' : Cost estimate part II
- Latest updated zonal specifications of the station duly Authenticated by CE ZONE.

COST ESTIMATE PART IAppendix E

Station:

Name of Project:

Brief particulars of work to be done:

Name of Executing Agency

Sl No.	Item of work	Basis of Calculation	Cost	Remarks
1.	(a) Cost of land (b) Site clearance and area development (Including demolition)			
2.	Building (Including internal water supply and electrical works)			
3.	Special items of work.			
4.	External Services: -			
	(a) Development of source			
	(i) Electric supply System			
	(ii) Water supply system			
	(iii) Sewage Disposal System			
	(b) Roads, path and culverts	-	DPR Part 1	
	(c) Sewage disposal			
	(d) Area drainage	-	DPR Part 1	
	(e) Wall, fencing and Gates	-	DPR Part 1	
	(f) External electric supply			
	(g) External water supply			
5.	Rain water Harvesting			
6.	Arboriculture and land Scaping	-	1% of Building Cost	
	(a) IVRS			
	(b) Solar water heating	-	DPR Part 1	
	(c) Payments to state Agency			
7.	Furnitures			
8.	Contingencies (2%)			
9.	Agency / Consultancy Changes (if applicable)			
10.	Total			
11.	Time required for physical completion of works under normal circumstances from date of order to commence works.			

Date:-

Place:-

Signature
(Competent Authority)
Of Executing Agency

Countersigned
(Station Commander)

Signature of DEPMC

Dy. Director (Contracts)

Station

Name of Project

Brief particular of work to be done

Name of Executive Agency

Appendix 'F'

COST ESTIMATE PART II

<u>SL No</u>	<u>Description of work</u>	<u>Authorized / section</u>	<u>Brief specification</u>	<u>Quantity</u>	<u>Unit</u>	<u>Rate</u>	<u>Amount</u>	<u>SSR/MR</u>	<u>REMA RKS</u>
<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>

Signature of DEPMC

Dy. Director (Contracts)

PROJECT MANAGER TEAM OF CONSULTANT FOR PROJECT MANAGEMENT AT WORK SITE

1. The Consultant fee shall include the following minimum personnel to be provided by the consultant at the station for project management:-

Srl No	Station	REQUIREMENT OF SUPERVISORY STAFF AT PROJECT SITE							
		Resident Engineers (RE)	Billing Engineers (BE)	Civil Engineers (CE)	Elect Engineers (EE)	Asst Civ Engineer (ACE)	Asst Elec Engineer (AEE)	Data Entry Oprs with Cmpr and Printer each (DEO)	Store acctg incharge
1	Leimakhong & Rangapahar	1	1	3	1	2	2	2	1

i **Employment of RE, BE and DEOs.** To be employed from the date of acceptance of the building contract to the date of finalization of the last final bill of the contract

ii **Employment of Asst Civil Engineers.** To be employed within two months from the date of placing of work order on the contractor till final completion certificate is issued.

iii **All other staff.** To be employed within two months from the date of placing work order till the completion of the project ie, occupation of the dwelling units (DUs) or signing of handing taking over of DUs with the users/MES whichever is earlier. If part site (s) is completed, then staff of those sites can be de hired with the approval of PM. Staff provided at the project site shall be self sufficient in terms of resources like computers and peripherals, software like auto-CAD to read soft copies of drawings, tele and Fax machine, plotter, photocopier, consumables, stationery and mobility for site Engineers with transport. staff provided at project site is separate from the liaison cell to be maintained at **HQ of Accepting Officer.**

2. The qualification and experience of the above engineers / Personal shall be as under:-

Ser No.	Designation	Minimum Qualification	Minimum Experience	Remarks
(a)	Resident Engineer	Degree in Civil Engineering from government recognized Institute	20 Year in the field of building construction age below 65 years	1. All site Engineers (from RE to Asst Engineer) shall be Physically fit to work for 8-10 hour daily at site & supervise work at roof tops and other difficult to access areas during construction and thereafter wk in the office for planning of next days work. 2. In case anyone fails to meet the above criteria, the services of the same shall be terminated and a new staff to be hired.
(b)	Civil Engineer	Degree/Diploma in Civil Engineering from government recognized Institute	10 Year in the field of building construction and for Diploma 15 years experience	
(c)	Electrical Engineer	Degree/Diploma in Electrical Engineering from government recognized Institute.	10 Year experience in the field of external and internal electrification and for Diploma 15 years experience	
(d)	Billing Engineer	Degree/Diploma in Civil Engineering from government recognized Institute	10 Year in the field of quantity surveying and contract management of building work and for Diploma 15 years experience	
(e)	Computer Operator	Diploma in computer from an AICTE recognized institute	2 Year Experience as computer Operator.	
(f)	Assistant Civil Engineer	Diploma in Civil Engineering from government recognized Institute	10 Year in the field of building construction	

(g)	Assistant Electrical Engineer	Diploma in Electrical Engineering from government recognized institute	10 Year in the field of external and internal electrification	<p>3. Continuity of manpower to be maintained with overlap as explained earlier.</p> <p>4. Minimum 2 Engineers shall be proficient in MS Project Software for project management with resource allocation.</p> <p>5. Billing engineer shall be proficient in Auto CAD, quantity calculations and MS Excel</p>
-----	-------------------------------	--	---	---

3. The Consultant's representatives having expertise in following disciplines shall visit site (s) as required and shall be made available at office of **Accepting Officer** during scrutiny of the Detailed Project Report and as required during Construction Phase including carrying out independent quality audit every six months: -

- (a) Architecture
- (b) Structural Engineering
- (c) Soil Engineering
- (d) Electrical Engineering
- (e) Public Health Engineering
- (f) Quantity Surveying
- (g) Arboriculture and Landscaping
- (h) Project Management.

3.1 Periodic visit:-Chief Architect, Chief structural Designer and specialist Agencies like STP, Lifts, Fire Fighting equipments, Arboriculture etc must visit construction site once in two months during execution period and all important test required for specialized service will be carried out in presence of concern specialist.

4. (a) The Consultant shall submit curriculum vitae of the engineers / personal to be deployed at site as brought out in Appendix 'H' during construction phase on the format attached as Annexure 'H' along with the Detailed Project Report of each station for the approval of **Accepting Officer** duly recommended by PM. The persons so hired will be on probation for 3 months and will be confirmed only on the certificate of suitability issued by PM.

(b) If the services of personnel are not made available at proper time and in specified numbers, the supervision and quality control will suffer and in such case, the **Accepting Officer** / **PM** will hire experienced persons from open market at the cost available. The remuneration to the hired people will be made from the consultant's fees (FMP & PRP) due to him every month. The shortfall will be made good from the performance security.

(c) The composition of team will be as per table given here-in-before (minimum) however, the consultant may engage more personnel, if required, for effective timely management of contract. Nothing extra on this account shall be paid to the consultant.

(d) The Consultant shall not reduce the staff employed by him at site without prior approval of owner in writing. In case any member of consultant's supervisory staff leaves the work site or becomes ineffective due to any reason what so ever or informs consultant that a member of staff wants to leave the service, it shall be ensured by the consultant that a replacement is arranged and proper handing/taking over of duties is arranged between the outgoing and incoming staff and overlap maintained as mentioned earlier.

(e) The consultant shall immediately remove any person(s) on being notified to do so by the **Accepting Officer** and provide immediate replacement.

(f) The PM (owner's representative) at site has authority to alter any recommendation / decision taken by and on behalf of the consultant so far as execution of work by contractor is concerned. However DEPMC can represent to **Accepting Officer** citing reasons thereof.

5. **Defects liability Period.** Assistant Civil Engineer(s) /Electrical Engineer (s) as shown in appendix 'J' out of those employed by consultant during construction shall continue to be at each station for supervision of rectification of defects till the expiry of defect liability period or rectification of defects , whichever is later.

6. The Tentative / Approximate cost of project at each station is as under for your guidance only. These costs may vary as per the actual requirements.

SI No	Name Station	Approximate cost of Project including Development Charges (Rs in Lakh)
1	Leimakhong	10,419.01
2	Rangapahar	3,883.54

Signature of Consultant

**Dy Director (Contracts)
For Accepting Officer**

APPENDIX 'H'**FORMAT FOR CURRICULAUM VITAE**

Format for Curriculum Vitae (CV) for proposed Personnel

Name of Consultant / Firm
 Name of Staff Member
 Profession
 Date of Birth
 Nationality
 Year with Consultant / Firm

Details of Tasks Assigned

(The information may be furnished as per the format given below)

Sl No.	Relevant Previous Experience				
	Project Details (Title, Location, Year)	Client	Tasks Actually performed	Duration of Tasks	Remarks

Education & Experience

The certified true copy of experience Certificate (s) and Degree in Engineering / Diploma in Engineering is attached.

Certification

I, the undersigned, Certify that to the of my knowledge and belief, this CV correctly describes the person being employed, his experience. I undertake full responsibility of the person being employed for the MAP Phase III project.

Date _____ Signature of
Staff Members

Signature and seal of
Authorized Representative
Of the firms

(Note : This shall be signed by both the staff Members and the Authorized Officer of the firm)

Signature of DEPMC

Dy. Director (Contracts)

Appendix 'J'

CONSULTANT TEAM DURING DEFECTS LIABILITY PERIOD

1. The Consultant fee shall include the following minimum personnel to be provided by the consultant at the station for project management:-

Sl No	Station	Number of Assistant Civil Engineer	Number of Assistant Electrical Engineer	DEO	Remarks
1	Leimakhong	01	01	01	
2	Rangapahar	01	01	01	

Signature of DEPMC

Dy. Director (Contracts)