



भारत संचार निगम लिमिटेड  
(भारत सरकार का उपक्रम)  
BHARAT SANCHAR NIGAM LIMITED  
(A Govt. of India Enterprise)

## TENDER DOCUMENT

FOR

THE WORK OF

**"Shifting of Shelter and Providing E/A foundation at CHILAKALADONA in Kurnool District.  
(3rd Call)"**

**NIT No. 20/CDT/2024-25**

This Tender document contains **71** printed pages including this cover.

Name of Contractor: \_\_\_\_\_

Date of Application and Receipt: \_\_\_\_\_

Tender issued on: \_\_\_\_\_

Cost of tender: **₹.590/-**-(Rupees Five Hundred and Ninety) only including GST (Non-Refundable)

Date of submission: **27.08.2024 (up to 15.00 hrs)**

Date of opening: **27.08.2024 at 15.30 hrs**

EXECUTIVE ENGINEER (CIVIL)  
BSNL CIVIL DIVISION,  
TIRUPATI.

Name of Contractor : \_\_\_\_\_  
Date of Application and Receipt : \_\_\_\_\_  
Tender issued on : \_\_\_\_\_  
Cost of tender : ₹.590/- including GS tax  
Date of opening : \_\_\_\_\_

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The N.I.T. contains **71 (Seventy One)** pages only.

Executive Engineer (Civil),  
BSNL Civil Division,  
Tirupati.

**IMPORTANT INSTRUCTIONS TO ALL TENDERERS**

01. Please go through the directives carefully. Any lapse / departure may lead to:
- i) Rejection of your tender and / or
  - ii) Forfeiture of your earnest money / and or
  - iii) Cancellation of your registration and / or
  - iv) Debarring you from future tenders.
02. The tenderers should read carefully & understand **all the Conditions for the contract, Schedule of quantity etc** attached with the tender document before actually quoting for the work.
03. Submission of Tender :- The Earnest money, Tender cost, Eligibility Credentials and Tender may be submitted as per Para No. 9.0 to 9.2.4 of BSNL W-6.
04. Any tender in which any of the prescribed conditions is not fulfilled or any conditions including that of conditional rebate is put forth by the tenderer shall be summarily rejected. However any unconditional rebate offered before the opening of the tenders shall be considered.
05. Near relatives of the BSNL employees shall not be permitted to tender and all the intending tenderers will have to give a certificate (that none of his / her near relatives as defined in para **14** of BSNL W-6) in the format enclosed.
06. The rates quoted shall include all taxes i.e. 50% of service tax payable, insurance, transportation, royalty, seigniorage charges that are applicable from time to time as per statutory rules of State / Central Government.
07. The rates shall invariably be written in figures and words and amount for each item worked out and filled in the schedule. All corrections made while filling shall be signed and seal affixed.
08. Please fill up the entire tender with one pen only. If the ink pen blots on the paper, please use dot pen for the entire tender.

CONTRACTOR

EXECUTIVE ENGINEER

**INSTRUCTIONS TO TENDERERS WHO HAVE DOWNLOADED THE  
TENDER DOCUMENT FROM WEB SITE**

1. Tender is to be down loaded from the web site and print is to be taken on A4 size paper and details are to be entered by the tenderer at the various locations in the document. It is advisable that the down loaded tender document to be printed through a good printer like laser etc., Submission of Xerox or Photocopy of tender document is prohibited.
2. The tenderer should see carefully & ensure that the complete tender document including schedule of quantities as per the Index has been downloaded. While taking printout it shall be ensured that the document is printed as appearing in the web & there is no change in formatting, number of pages etc. and all the pages are legible and clear.
3. The cost of the tender document (Non refundable, amount mentioned in BSNL W-6 of tender document) will have to be deposited by the tenderer in the form of bank draft payable in favour of **Accounts Officer (Cash), % GMTD, BSNL, Kurnool, Payable at Kurnool**, along with the tender. This should be enclosed as a separate demand draft. A single demand draft for the cost of tender form and Earnest Money Deposit will not be accepted. Tender not accompanied with the demand draft towards the cost of tender document will be summarily rejected.
4. The Earnest Money Deposit required for this work as stipulated in BSNL W-6 of tender document also to be submitted separately.
5. Tenderers are advised to download tender documents well in advance and submit the tender before the stipulated time. It is the responsibility of the Tenderer to check any correction or any modifications published subsequently in website and the same shall be taken into account while submitting the tender. Tenderer shall download corrigendum (if any), print it out, sign and attach it with the main tender document. Tender document not accompanied by published corrigendum/s is liable to be rejected. BSNL will not be responsible for delay in downloading of tender document from website.
6. Each page of tender document should be signed by the tenderer with seal.
7. Tenderer/s are free to download tender document at their own risk and cost, for the purpose of perusal as well as for using the same as tender document for submitting the offer. Master copy of the tender document is available in the Office of **Executive Engineer, BSNL Civil Division, Tirupati**. After award of work agreement will be prepared based on the master copy of tender document available in the above mentioned office. **In case any discrepancy between the tender document downloaded from the website and the master copy, later shall prevail and will be binding on the tenderer/s, no claim on this account will be entertained.**
8. If any change/addition/deletion is made by the Tenderer/Contractor and the same is detected at any stage even after the award of the tender, full earnest money deposit will be forfeited and the contract will be terminated at his /their risk and cost. The tenderer is also liable to be banned from doing business with BSNL Civil Wing.

9. The down loaded "Tender Document" in which rates are quoted should be properly bound and sealed. Loose / Spiral bound tenders shall be rejected out-rightly. In case of any corrections/additions/alterations/deletions in the tender document vis-à-vis tender document available on website the tender will not be considered and Earnest Money Deposit shall be forfeited.
10. In case of any doubt in the downloaded tender, the same should be got clarified from the **O/o Executive Engineer, BSNL Civil Division, Tirupati** (telephone No: 0877-2220800) before submitting the tender.
11. (i) Attested copies of the credentials; (ii) Cost of Tender document; (iii) Earnest Money Deposit shall be kept in one envelope.
- NOTE :**  
Attested copies of credentials to be submitted are :
1. Enlistment / Registration document for all contractors.
  2. PAN Card for Non-BSNL contractors.
  3. Certificate of GST registration
  4. Form 'A' and Partnership deed in case of Partnership Firms. Memorandum of Articles of Association and Power of Attorney to sign the tender documents in case of Private Limited Companies.
12. Tender documents shall be kept in another envelope.
13. Above two covers shall be kept in a third cover and dropped in the tender box. All the three envelopes should be properly closed and sealed.
14. The tenders of tenderers will not be opened and will be returned to them in case cost of tender document is not submitted and or EMD is not submitted and or they are not eligible based on the credentials submitted by them. In any case cost of tender document will not be refunded.
15. Originals of all the credentials shall be produced by the tenderer as and when asked by the **Executive Engineer, BSNL Civil Division, Tirupati**. In case of failure to produce the originals the tender will not be considered and Earnest Money Deposit will be forfeited.
16. The tenderer should ensure that every page of the downloaded tender document is signed by him with stamp (seal).

CONTRACTOR

**DECLARATIONS TO BE GIVEN BY THE TENDERERS****It is to certify that**

- a) I / we have downloaded the tender form from the website [www.ap.bsnl.co.in](http://www.ap.bsnl.co.in) and I/We have not tampered / modified the tender forms in any manner. In case, if the same is found to be tampered / modified I/We understand that my/our tender will be summarily rejected and full amount of Earnest Money Deposit will be forfeited and I/We am/are liable to be banned from doing business with BSNL Civil Wing.

I/We have checked that no page is missing and all pages as per the index are available and that all pages of tender document submitted by us are clear & legible.

I/We have signed all the pages of the tender with seal.

**Date: -**

**Signature of Tenderer**

- b) I /We have gone through BSNL W-8 amended upto correction slip No. 6; available on website [www.ap.bsnl.co.in](http://www.ap.bsnl.co.in) and I/We agree with the terms and conditions of it and understood that it will form part of the agreement.

**Date: -**

**Signature of Tenderer**

- c) I, \_\_\_\_\_ S/O Sri. \_\_\_\_\_  
Resident of \_\_\_\_\_ hereby certify that none of my relative (s) as defined in para 14 of BSNL W-6 is/are employed in A.P. BSNL Civil Zone. In case at any stage, it is found that the information given by me is false/incorrect, BSNL shall have the absolute right to take any action as deemed fit without any prior intimation to me.

NOTE:- (To be certified by all the partners in case of partnership firms, by all the directors in case of companies).

**Date: -**

**Signature of Tenderer**

- 1.
- 2.
- 3.
- 4.

**d) The following are the works which are being executed by me / us.**

| Name of work | Name and particulars of division where work is being executed | Value of work | Position of work in progress | Remarks |
|--------------|---|---------------|------------------------------|---------|
| 1            | 2   | 3             | 4                            | 5       |
|              |   |               |                              |         |
|              |   |               |                              |         |
|              |   |               |                              |         |
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|              |   |               |                              |         |
|              |   |               |                              |         |
|              |   |               |                              |         |

**Date: -**

**Signature of Tenderer**



BHARAT SANCHAR NIGAM LIMITED  
(A GOVERNMENT OF INDIA ENTERPRISE)

## GENERAL RULES AND DIRECTIONS

1. All work proposed for execution by contracts will be notified in a form of invitation to tender duly signed by the officer inviting tender will be displayed on the notice board/ pasted in public places or by publication in News papers as the case may be and shall also be on the BSNL website [www.ap.bsnl.co.in](http://www.ap.bsnl.co.in)

This form will state the work to be carried out, as well as the date for receipt of application, the date of submitting and opening tenders and the time allowed for carrying out the work, also the amount of earnest money to be deposited with the tender, and the amount of the security deposit to be deposited by the successful tenderer and the percentage, if any, to be deducted from the bills. Copies of the specifications, designs and drawings and any other documents, required in connection with the work signed for the purpose of identification by the officer inviting tender, shall also be open for inspection at the office of the officer inviting tender during office hours.

2. In the event of the tender being submitted by a firm, it must be signed separately by each Partner thereof or by the partner(s) as specified in the partnership deed or by the person holding a power of attorney authorizing him to do so, such power of attorney to be produced with the tender, and it must disclose that the firm is duly registered under the Indian Partnership Act, 1932.

3. Receipts for payment made on account of work, when executed by a firm, must also be signed by all the partner(s) or by the partner(s) as specified in the Partnership Deed by the person holding a power of attorney authorizing him to give effectual receipts for the firm.

4. Any person who submits a tender shall fill up the usual printed form, stating at what rate he is willing to undertake each item of the work. Tenders which propose any alteration in the work specified in the said form of invitation to tender, or in the time allowed for carrying out the work, or which contain any other condition of any sort including conditional rebates, will be summarily rejected. No single envelope shall include tender for more than one work, but contractors who wish to tender for two or more works shall submit separate envelope for each. Tender shall have the name and number of the works to which they refer, written on the envelopes.

The rate(s) must be quoted in decimal coinage. Amount(s) must be quoted in full rupees by ignoring fifty paise and less, and, considering more than fifty paise as rupee one.

5. The officer inviting tender or his duly authorized assistant, will open tenders in the presence of any intending contractors who may be present at the time, and will enter the amounts of the several tenders in a comparative statement in a suitable form. A receipt of earnest money, forwarded therewith, shall be given to all contractors. In the event of a tender being rejected, the earnest money forwarded with such unaccepted tender shall thereupon be returned to the contractor, remitting the same, without any interest.

6. The officer inviting tenders shall have the right of rejecting all or any of the tenders and will not be bound to accept the lowest or any other tender.

7. The receipt of an accountant or clerk for any money paid by the contractor will not be considered as any acknowledgment of payment, to the officer inviting tender and the contractors shall be responsible for seeing that he procures a receipt signed by the AO / Sr. AO or a duly authorized Cashier.

8. The memorandum of work tendered for and schedule of the materials to be supplied by the BSNL and their issue-rate shall be filled and completed in the office of the officer inviting tender before the tender form is issued. If a form is issued to an intending tenderer without having been so filled in and incomplete, he shall request the officer to have this done before he completes and delivers his tender.



9. The tenderers shall sign a declaration under the officials Secret Act 1923, for maintaining secrecy of the tender document, drawings or other records connected with the work given to them. The unsuccessful tenderers shall return all the drawings given to them.

10. In case of item rate tenders, only rates quoted shall be considered. Any tender containing percentage below / above the rates quoted is liable to be rejected. Rates quoted by the contractor in item rate tender in figures and words shall be accurately filled in so that there is no discrepancy in the rates written in figures and words. However, if a discrepancy is found, the rates, which correspond with the amount worked out by the contractor shall, unless otherwise proved, be taken as correct. If the amount of an item is not worked out by the contractor or it does not correspond with the rates written either in figures or in words then the rates quoted by the contractor in words shall be taken as correct. Where the rates quoted by the contractor in figures and in words tally but the amount is not worked out correctly, the rates quoted by the contractor will, unless otherwise proved, be taken as correct and not the amount.

In the event of no rate has been quoted for any item(s) then the rate for such item(s) will be considered as zero and work will be required to be executed accordingly. It will be presumed that the contractor has included the cost of this/ these item(s) in other item(s).

11. In case of any tender where unit rate of any item / items appear unrealistic, such tender will be considered as unbalanced and in case the tenderer is unable to provide satisfactory explanation such a tender is liable to be disqualified and rejected.

12. All rates shall be quoted on the tender form. The amount for each item should be worked out and requisite totals given. Special care should be taken to write the rates in figures as well as in words and the amount in figures only, in such a way that interpolation is not possible. The total amount should be written both in figures and in words. In case of figures, the work Rs. Should be written before the figure of Rs. And word 'P' after the decimal figures, e.g. Rs. 2.15 'P' and in case of words, the word, 'Rupees' should precede and the word 'Paise' should be written at the end. Unless the rate is in whole rupees and followed by the word 'only' it should invariably be up to the two decimal places. While quoting the rate in schedule of quantities, the word 'only' should be written closely following the rate in words and it should not be written in the next line.

13. The contractor whose tender is accepted, for amount exceeding Rs. 15.00 Lakhs (Rupees Fifteen Lakhs), will be required to furnish an irrevocable PERFORMANCE GUARANTEE mentioned elsewhere in the Contract for his proper performance of the contract agreement, (not withstanding and/or without prejudice to any other provisions in the contract) within 15 days of issue of letter of Acceptance of Tender. This guarantee shall be in the form of Fixed Deposit receipts or Guarantee Bonds of a Scheduled Bank or State Bank of India.

The contractor shall permit BSNL at the time of making any payment to him for work done under the contract to deduct a sum at the rate of 5% of gross amount of each running bill till the sum along with the sum already deposited as earnest money, will amount to security deposit of 5% of the tendered value of the work. Such deductions will be made and held by BSNL by way of Security Deposit unless he/they has / have deposited the amount of Security at the rate mentioned above in form of Demand draft / Baker's Cheque / Deposit at call receipt of a Scheduled Bank or State Bank of India in accordance with the form annexed hereto.

In case of works with estimated cost put to tender is up-to and including Rs. 15.00 Lakhs (Rupees Fifteen lakhs) the total security deposit deducted shall be 10% (Ten percent) instead of 5% (Five percent) of the tendered value of the work. Security Deposit shall be recovered @ 10% of gross amount of each running bill till the sum along with the sum already deposited as earnest money, will amount to security deposit of 10% of the tendered value of the work.

14. On acceptance of the tender, the name of accredited representative(s) of the contractor, who would be responsible for taking instructions from the Engineer-in-charge, shall be communicated in writing to the Engineer-in-Charge.

15. Sales-tax, purchase tax, turnover tax or any other tax on material in respect of the contact shall be payable by the Contractor and BSNL will not entertain any claim whatsoever in respect of the same.

16. The contractor shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relative to any

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executive employee / Gazetted officer in the BSNL or Department of Telecom or in the Ministry of Communications.

17. The tender for the work shall not be witnessed by a contractor or contractors who himself / themselves has/have tendered or who may and has /have tendered for the same work. Failure to observe this condition would render, the tender of the contractors, tendering, as well as witnessing the tender, liable to summary rejection.

18. The tender for composite work includes in addition to building work all other works such as sanitary and water supply installations, drainage installation, electrical work, horticulture work, roads and paths etc. The tenderer apart from being a registered contractor of appropriate class, must associate himself with agencies of appropriate class, which are eligible to tender for sanitary and water supply drainage, electrical and horticulture works in the composite tender.

19. The contractor shall submit list of works which are in hand (progress) in the following form:-

| Name of work | Name and particulars of division where work is being executed | Value of work | Position of work in progress | Remarks |
|--------------|---|---------------|------------------------------|---------|
| 1            | 2   | 3             | 4                            | 5       |
|              |   |               |                              |         |

20. The contractor shall comply with the provision of the Apprentices Act 1961, and the rules and orders issued there under from time to time. If he fails to do so, his failure will be a breach of the contract and the Superintending Engineer(C), may in his discretion, without prejudice to any other right or remedy, available in law, cancel the contract. The contractor shall also be liable for any pecuniary liability arising on account of any violation by him of the provision of the said Act.



BHARAT SANCHAR NIGAM LIMITED  
(A Govt. of India Enterprise)

**B.S.N.L.W-6**

**NOTICE INVITING TENDER**

**1.** Sealed Item rate tenders are invited on behalf of the BHARAT SANCHAR NIGAM LIMITED (A Government of India Enterprise) from approved and eligible contractors of B.S.N.L, D.O.T, CPWD, State PWD (B&R). DOP, MES & Railways for the work of **"Shifting of Shelter and Providing E/A foundation at CHILAKALADONA in Kurnool District.(3rd Call)"**

The work is estimated to cost **₹.1,67,682/- (Rupees One Lakh Sixty Seven Thousand Six Hundred and Eighty Two) only**

1.0 Tenders will be issued to eligible contractors provided they produce proof of their valid enlistment with the appropriate authority.

1.0.1 Criteria of eligibility for issue of tender documents for non-BSNL registered contractors of public works organizations like CPWD, State PWD(B&R), DOP, MES Railways only.

**1.0.1.1** For works up to ₹. 7.00 Lakhs – **"No prior experience is required for any category of registered contractors."**

2.0 Agreement shall be drawn with the successful Tenderer on prescribed Form No. BSNL W - 8, amended up to correction slip No. 6 which is available as a BSNL publication / BSNL Web site : [www.ap.bsnl.co.in](http://www.ap.bsnl.co.in). Tenderer shall quote his rates as per various terms and conditions of the said form, (in case "Tender Documents" are down loaded from the BSNL web site in which rates are to be quoted should be properly bound and sealed) which will form part of the agreement.

3.0 The time allowed for carrying out the work will be **1(One) Month** from the **Seventh** day after the date of issue of letter of award of work, or, from the first day of handing over of the site, whichever is later, in accordance with phasing, if any, indicated in the tender document.

4.0 The site for the work is available,

5.0 The last date of receipt of applications for issue of tender forms (in prescribed format/can also be down loaded from BSNL web site [www.ap.bsnl.co.in](http://www.ap.bsnl.co.in) ) and date of issue of tender forms will be as follows:

i) Last date of receipt of application \* **23.08.2024** up to 16.00 hours.

ii) Last date of issue of tender forms \* **24.08.2024** up to 16.00 hours.

6.0 Tender documents consisting of plans, specifications, the schedule of quantities of the various classes of work to be done and the set of terms & conditions of the contract to be complied with by the contractor whose tender may be accepted and other necessary documents, can either be down loaded from the BSNL web site [www.ap.bsnl.co.in](http://www.ap.bsnl.co.in) or be seen in the office of the **Executive Engineer (C) BSNL Civil Division, Tirupati** between 11.00 hrs. & 16.00 hrs every day except on Sundays and Public Holidays. Tender documents, excluding standard form, will be

issued from his office, during the hours specified above, on payment of the following:-

- i) ₹. 590/- Including GS Tax (as applicable) as cost of tender (Non-refundable) in cash or Demand Drafts / Pay Orders of a Scheduled Bank Drawn in favour of **Accounts Officer (Cash), % GMTD, BSNL, Kurnool.**
- ii) The tender shall be accomplished by Earnest money of ₹.3,360/- in cash (up to ₹.2500/- only) / Deposit at call receipt of a scheduled bank/fixed deposit receipt of a scheduled bank/demand draft of a scheduled bank issued in favour of "**Accounts officer (Cash), % GMTD, BSNL, Kurnool** payable at Kurnool. When amount of earnest money is more than Rs. 5 lakhs, part of the earnest money is acceptable in the form of Bank Guarantee also. In such case, minimum 50% of earnest money (but not less than Rs. 5 lakh) or Rs. 25 lakh, whichever is less, will have to be deposited in the shape prescribed above. For balance amount of earnest money, bank guarantee will also be acceptable.

**Note:** Money due to contractor in any other work or earnest money of the previous call of the same work shall not be adjusted towards earnest money. The 'cost of tender' and 'Earnest money' should be submitted through separate instruments.

7.0 Tenders, which should always be placed in sealed envelope, in the manner detailed at para 9.0 below, will be received by the **Executive Engineer(C) BSNL Civil Division, Tirupati** upto **15.00 hrs on \* 27.08.2024** and will be opened by him or his authorized representative in his office **on the same day at 15.30 hrs.** After opening the main envelope 3, the envelope 1 containing the earnest money along with the cost of the tender as applicable and eligibility credentials shall be opened first. The envelope 2 containing tender shall be opened only for those tenderers whose earnest money, cost of tender and eligibility is found in order. The unopened tenders shall be returned to the tenderers after the final decision on the tender is reached .

8.0 The description of the work is as follows: -"**Shifting of Shelter and Providing E/A foundation at CHILAKALADONA in Kurnool District.**"

9.0 **Submission of the Tender:-**  
Tender shall be submitted in following manner:

9.1 **In case the tender document is down loaded from BSNL web site .**

9.1.1 "Earnest Money plus cost of tender and eligibility credentials" shall be placed in sealed envelope – 1. marked "Earnest Money plus cost of tender and eligibility credentials".

9.1.2 The "Tender" shall be placed in sealed envelope – 2 and will be super scripted as "Tender".

9.1.3 The sealed envelope no. 1 & 2 as above containing "Earnest money plus cost of tender, eligibility credentials", and the "Tender" shall be placed in another sealed envelope – 3.

9.1.4 All the three envelopes shall be super scripted with following data on it.

- i) Name of work
- ii) Name of Tenderer
- iii) Last date of receipt of Tender

9.2 **In case tender document is purchased from Division Office.**

9.2.1: **Earnest Money Deposit in required format or proof of payment of EMD (If paid in cash)** and copies of documents showing eligibility credentials to be placed in sealed envelope no. 1

9.2.2: Envelope no. 2 will be as per para 9.1.2.

9.2.3: The sealed envelopes 1&2 shall be placed in another sealed envelope no. 3.

9.2.4: Same as 9.1.4

**Note: In case the eligibility credentials are not found in order at any stage i.e before award of work or during execution of work or after completion of the work, the contractor will be debarred from tendering in BSNL for three years including any other action under the contract or existing law.**

9.3 The Tender in which rates/percentage are to be quoted should be properly bound and **sealed (wax sealed/ adhesive tape sealed)**. Loose/spiral bound submission (in case the tender is down loaded from web site) shall be rejected outrightly. In case of any correction/ addition/alteration/omission in Tender document vis-à-vis Tender document available on web site shall be treated as non-responsive and shall be summarily rejected.

10.0 Copies of other drawings and documents pertaining to the work will be open for inspection by the tenderers at the office of the above-mentioned officer.

10.1 Tenderers are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general, shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their tender. A tenderer shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charges consequent on any misunderstanding or otherwise shall be allowed. The tenderer shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity, access, facilities for workers and on all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a tender by a tenderer implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools & plant, etc., will be issued to him by the BSNL and local conditions and other factors having a bearing on the execution of the work.

11.0 The competent authority on behalf of the B.S.N.L. does not bind himself to accept the lowest or any other tender, and reserves to himself the authority to reject any or all of the tenders received without the assignment of any reason. All tenders, in which any of the prescribed conditions is not fulfilled or any condition including that of conditional rebate is put forth by the tenderer, shall be summarily rejected.

12.0 Canvassing whether directly or indirectly, in connection with the tenders is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection.

13.0 The competent authority on behalf of the B.S.N.L. reserves to himself the right of accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at the rate quoted.

14.0 The company or firm or any other person shall not be permitted to tender for works in BSNL Civil Zone in which his near relative (s) (directly recruited or on deputation in BSNL) is /are posted in any capacity either non-executive or executive employee. Near relative (s) for this purpose is /are defined as –

- (i) Member of Hindu Undivided family (HUF).
- (ii) They are Husband and wife.

- (iii) The one is related to other in the manner as father, mother, son(s) & son's wife (daughter –in-law), daughter(s), daughter's husband (Son –in –law), brother (s), brother's wife, sister (s), sister's husband (brother – in –law).
- 14.1 The contractor shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relative to any executive employee/ Gazetted officer in the BSNL or Department of Telecom or in the Ministry of Communications.
- 14.2 All the intending tenderer will have to give a certificate that none of his /her such near relative (s) as defined above is/are working in the concerned BSNL Civil Zone where he is going to apply for tender /work. The format of the certificate is to be given as : -
- "I-----s/o Shri-----  
Resident of ----- hereby certify that none of my relative (s) as defined above is/are employed in concerned BSNL Civil Zone. In case at any stage, it is found that the information given by me is false/incorrect, BSNL shall have the absolute right to take any action as deemed fit without any prior intimation to me".
- 14.3 The certificate in case of Proprietorship Firm shall be given by the proprietor; for Partnership Firm, certificate shall be given by all partners and in case of Limited Company, by all Directors of the company. However, Government of India/Financial Institutions nominees and independent non – official part-time Directors appointed by Govt. of India or the Governor of the State are excluded from the purview of submission of this certificate while submitting tenders by Limited Companies.
- Any breach of these conditions by the Company or Firm or any other person, the tender / work will be cancelled and Earnest Money/Security Deposit will be forfeited at any stage, whenever it is so noticed. B.S.N.L will not pay any damages to the company or Firm or the concerned person. The Company or Firm or the person will also be debarred for further participation in the tender in the concerned BSNL Civil Zone. Further, any breach of this condition by the tenderer would also render him liable to be removed from the approved list of contractors of BSNL. If however the contractor is registered in any other Department he shall also be debarred from tendering in BSNL for any breach of this condition.
- 15.0 No Engineer of Gazetted rank or other Gazetted officer employed in engineering or administrative duties in an Engineering Department of the Government of India/State Government or PSU's is allowed to work as a contractor for a period of one year after the date of his retirement from Government service, without previous permission of the Government of India or BSNL in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found any time to be such a person who has not obtained the permission of the Government of India/State Government or PSU's as aforesaid before submission of the tender or engagement in the contractor's service.
- 16.0 The tender for the work shall remain open for acceptance for a period of **60(Sixty)** days from the date of opening of the tenders. If any tenderer withdraws his tender before the said period or issue of letter of acceptance/ intent, whichever is earlier, or, makes any modifications in the terms and conditions of the tender which are not acceptable to the BSNL, then the BSNL shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% (Fifty percent) of the said earnest money as aforesaid.
- 17.0 In case of works having estimated cost below Rs. 15,00,000/-, the successful tenderer shall be required to execute an agreement with the Engineer-In-Charge in the proforma annexed to tender document, within 15 days of issue of letter of award by the BSNL. In the event of failure on part of the successful tenderer to sign the agreement, the earnest money will be forfeited and the tender cancelled.

- In case of works of estimated to cost Rs. 15,00,000/- and above, the successful tenderer shall, upon issue of letter of acceptance of tender, shall be required to furnish performance guarantee @ 5% of the tendered value in the form of irrevocable Bank Guarantee of requisite amount to the Engineer-in-Charge in the proforma annexed to the Tender document, with in 15 days of the issue of letter of acceptance of Tender by the BSNL. In the event of failure on the part of the successful tenderer to furnish the Bank Guarantee within fifteen days, the Earnest Money will be forfeited and Tender cancelled.
- 18.0 This notice inviting tender (BSNL W-6) shall form a part of the contract document. In accordance with clause-1 of the contract, the letter of acceptance shall be issued first in favour of the successful tenderer/contractor. After submission of the performance guarantee, the letter of award shall be issued. The contract shall be deemed to have come in to effect on issue of letter of acceptance of the tender. On issue of letter of award, the successful tenderer/contractor shall, within 30 days from such date, formally sign the agreement consisting of: -
- a) The notice inviting tender, all the document including additional conditions, specifications and drawings if any, forming part of the tender, and, as issued at the time of invitation of tender and acceptance thereof together with any correspondence leading thereto.
  - b) Standard BSNL W-8 amended upto correction slip No.6 as on website [www.ap.bsnl.co.in](http://www.ap.bsnl.co.in).
  - c) Agreement signed on non - judicial stamp paper as per Proforma annexed to BSNL W-8
- 19.0 Payment to the contractors shall be made through E-Payment system like ECS & EFT as detailed below:-
- a) In cities/ areas where ECS/EFT facility is provided by Banks, the tenderer must have account in such ECS/EFT facility providing Banks and the Bank a/c No. shall be quoted in the tender by the tenderer.
  - b) The cost of ECS/EFT will be borne by BSNL in all cases where the payment to contractor is made in a local branch i.e tenderer is having Bank account in the same place from where the payment is made by BSNL unit.
  - c) In case payment is made to outside branch i.e tenderer is having Bank account not in the same place from where the payment is made by BSNL unit, the crediting cost will have to be borne by the tenderer only.
  - d) The payments to contractors will compulsorily be made through ECS/EFT in respect of all contracts where the value of the contract is more than Rs. 10 Lakhs.
- 20.0 First running account bill shall be paid only after
- a) signing of the agreement/contract by both the parties, and
  - b) progress chart has been prepared as required under Clause-5 and approved by the competent authority.
- 21.0 If a contractor after purchasing the tender does not quote consecutively on three occasions, the contractor may be debarred for further purchase of tenders for a period of six months.
- 22.0 General condition of contract for works amended upto correction slip No. 6 in BHARAT SANCHAR NIGAM LIMITED are available on web site [www.ap.bsnl.co.in](http://www.ap.bsnl.co.in) as well as in the Divisional/Sub-Divisional office.

- 23.0 The tenderer shall furnish a declaration to this effect (in case of down loaded Tender) that no addition/deletion/correction have been made in the Tender document submitted and it is identical to the Tender document appearing on web site. Every page of down loaded Tender shall be signed by the tenderer with stamp (seal) of his firm/organization.
- 24.0 **GST & Other taxes** : Goods and Services Tax (GST) or any other tax applicable in respect of inputs procured by the contractor for this contract shall be payable by the contractor and BSNL will not entertain any claim whatsoever in respect of the same. However, component of GST at time of supply of service (as provided in GST Act 2017) provided by the contractor shall be varied if different from that applicable on the last date of receipt of tender including extension if any.

**Signature and Name of the**  
**Divisional / Sub-Divisional Officer**  
**For and on behalf of BSNL.**





BSNL. W – 7/8

**BHARAT SANCHAR NIGAM LIMITED**  
(A GOVERNMENT OF INDIA ENTERPRISE)STATE- **ANDHRA PRADESH**CIRCLE-**BSNL Civil Circle, VIJAYAWADA.**DIVISION – **BSNL Civil Division, Tirupati.**ZONE- **BSNL Civil A.P Zone**SUB-DIVISION- **BSNL Civil Sub-Division, Kurnool.****Item Rate Tender & Contract for Works**

Tender for the work of “**Shifting of Shelter and Providing E/A foundation at CHILAKALADONA in Kurnool District.(3rd Call)**”

- (i) To be submitted by 15:00 hours on \***27.08.2024**  
to the **Executive Engineer(c), BSNL Civil Division, Tirupati**
- (ii) To be opened in presence of tenderer who may be present at **15:30**  
hours on \***27.08.2024** in the office of **Executive Engineer(c),**  
**BSNL Civil Division, Tirupati**

Issued to: \_\_\_\_\_  
(Contractor)  
Signature of officer issuing the documents \_\_\_\_\_  
Designation \_\_\_\_\_  
Date of Issue \_\_\_\_\_.

**T E N D E R**

I/We have read and examined notice inviting tender, schedule, A, B, C, D, E & F, specifications applicable, Drawings & Design, General Rules and Directions, Conditions of Contract, Clauses of Contract, Special conditions, Schedule of Rate & other documents and Rules referred to in the Conditions of Contract and all other contents in the tender document for the work.

I/We hereby tender for the execution of the work specified for the Bharat Sanchar Nigam Limited within the time specified in schedule 'F', viz., schedule of quantities and in accordance in all respects with the specifications, designs, drawings and instructions in writing referred to in Rule-1 of General Rules and Directions and in Clause 11 of the Conditions of the contract and with such materials as are provided for, by and in respect in accordance with, such conditions so far as applicable.

I/We agree to keep the tender open for **60** days from the due date of submission thereof and not to make any modifications in its terms and conditions. If I/We withdraw my/our tender before the said period or issue of letter of acceptance/intent, whichever is earlier, or, makes any modifications in the terms and conditions of the tender which are not acceptable to the B.S.N.L., then the BSNL shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid.

A sum of **₹.3,360/- (Rupees Three Thousand, Three Hundred and Sixty only )** has been deposited in prescribed manner as Earnest money. If I/We fail to commence the work specified I/We agree that the said Bharat Sanchar Nigam Limited shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely otherwise the said earnest money shall be retained by competent authority on behalf of the Bharat Sanchar Nigam Limited towards Security Deposit to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to therein and carry out such deviations as may be ordered, up to maximum of the percentage mentioned in Schedule 'F' and those in excess of that limit at the rates

**TENDER DOCUMENT**

**NIT NO.20/CDT/2024-25**

**BSNL**

to be determined in accordance with the provision contained in Clause 12.2 and 12.3 of the tender form.

I/We agree that, in case of works of estimated cost exceeding Rs. 15,00,000/- to deposit an amount equal to 5% of tendered value of the work as performance guarantee in the form of bond of any scheduled Bank of India in accordance with the proforma prescribed or in the form of fixed deposit receipt etc., within 15 days of the issue of letter of acceptance of tender by the BSNL. I/We am/are aware that in the event of failure on my/our part to furnish the Bank Guarantee within 15 days, the earnest money will be forfeited and tender cancelled.

I/We hereby intimate that for receiving payments I/We have an account in \_\_\_\_\_ Bank with account No. \_\_\_\_\_ where the ECS / Eft facility of e-payment is available.

I/We hereby declare that I/We shall treat the tender documents drawings and other records connected with the work as secret/confidential documents and shall not communicate information derived there-from to any person other than a person to whom I/We am/are authorised to communicate the same or use the information in any manner prejudicial to the safety of the State.

I/We agree that should I/We fail to commence the work specified in the above memorandum, an amount equal to the amount of the earnest money mentioned in the form of invitation of tender shall be absolutely forfeited to the Bharat Sanchar Nigam Limited and the same may at the option of the competent authority on behalf of the Bharat Sanchar Nigam Limited be recovered without prejudice to any right or remedy available in law out of the deposit in so far as the same may extend in terms of the said bond and in the event of deficiency out of any other money due to me/us under this contract or otherwise.

The information in respect of works in hand is as per proforma enclosed.

"I/We agree that this contract is subject to jurisdiction of Court at **Tirupati** only".  
(Where the NIT/Tender has been issued).

Dated.....

Witness:

Address: ( \_\_\_\_\_ )  
Signature of Contractor

Occupation:

Postal Address:-

**A C C E P T A N C E**

The above tender (as modified by you (Contractor) and as provided in the letters mentioned here under) is accepted by me for and on behalf of the Bharat Sanchar Nigam Limited for a sum of Rs. \_\_\_\_\_ Rupees \_\_\_\_\_ )

The letters referred to below shall form part of this Contract Agreement:-

- (a)
- (b)

For & on behalf of the Bharat Sanchar Nigam Limited.

Dated.....

Signature . . . . .  
Name & Designation . . . . .  
Executive Engineer (Civil)  
BSNL Civil Division,  
TIRUPATI

**PROFORMA OF SCHEDULES**

(Operative Schedules to be supplied separately to each of the intending tenderer)

**SCHEDULE "A"**

Schedule of Quantities ..... (Enclosed)

**SCHEDULE "B"**

Schedule of Materials to be issued to the contractor

| S. No. | Description of Item | Quantity | Rates in figures & words at which the materials will be charged from the contractor | Place of issue |
|--------|---------------------|----------|---|----------------|
| 1      | 2                   | 3        | 4   | 5              |

**NIL**

**SCHEDULE "C"**

Tools and Plants to be hired to the contractor

| S. No. | Description of Item | Hire charges per day | Place of issue |
|--------|---------------------|----------------------|----------------|
| 1      | 2                   | 3                    | 4              |

**DELETED**

**SCHEDULE "D"**

Extra schedule for specific requirements/documents for the work if any - Schedule D1 (Enclosed)

**SCHEDULE "E"**

**Schedule of component of Materials, Labour etc. for escalation.  
NO ESCALATION ON MATERIAL AND LABOUR IS PAYABLE FOR THIS WORK.**

**CLAUSE 10 C**

|  |            |             |
|--|------------|-------------|
| Component of Materials expressed as percent of Total Value of Work | <b>"X"</b> | <b>75 %</b> |
| Component of Labour expressed as percent of Total Value of Work    | <b>"Y"</b> | <b>25 %</b> |
| Component of POL expressed as percent of Total Value of Work       | <b>"Z"</b> | <b>0 %</b>  |
|  |            |             |

|   |   |   |
|---|---|---|
| <b>SCHEDULE "F"</b>   |   |   |
| <b>Reference to General Conditions of Contract</b>  |   |   |
| <b>Name of work:-</b>   | <b>"Shifting of Shelter and Providing E/A foundation at CHILAKALADONA in Kurnool District.(3rd Call)"</b> |   |
| Estimated cost of Work  | ₹.1,67,682/-  |   |
| Earnest Money   | ₹.3,360/- ( Rupees Three Thousand Three Hundred and Sixty only )  |   |
| <b>Performance Guarantee</b> (5% of the tendered value in the form of Bank Guarantee from Scheduled Bank in respect of works with estimate cost put to tender exceeding Rs. 15.00 Lakhs)  | ₹. _____ (Rupees _____ only)  |   |
| <b>Security Deposit</b><br>(10 % of the tendered value for works with estimated cost put to tender up to Rs. 15 Lakhs) (5% of the tendered value in the form of Bank Guarantee from Scheduled Bank in respect of works with estimated cost put to tender exceeding Rs. 15.00 Lakhs) | ₹. _____ (Rupees _____ only)  |   |
| <b><u>GENERAL RULES AND DIRECTIONS</u></b>  |   |   |
| Officers inviting tender  | <b>Executive Engineer©, BSNL Civil Division, TIRUPATI</b>   |   |
| Maximum percentage for quantity of items of work to be executed beyond which rates are to be determined in accordance with Clause 12.2 & 12.3   | <b>50% (Fifty Percent)</b>  |   |
| <b>Definitions</b>  |   | See below   |
| 2(v)  | Engineer-in charge  | <b>Executive Engineer©, BSNL Civil Division, TIRUPATI</b>                         |
| 2(viii)   | Accepting Authority   | <b>Executive Engineer©, BSNL Civil Division, TIRUPATI</b>                         |
| 2(x)  | Percentage on cost of materials and labour to cover all overheads and profit                              | <b>10 %</b>   |
| 2(xi)   | Standard Schedule of Rates  | C.P.W.D. DSR- 2021 with up to date correction slips. Rates multiplied by 110/115. |
| 2(xii)  | Department  | BSNL  |
| 9(ii)   | Standard BSNL Contract Form   | BSNL W - 8 amended up to correction slips No.6.                                   |

|  |   |   |
|--|---|---|
| <b>Clause 2</b>  |   |   |
| Authority for fixing compensation under Clause 2   |   | <b>Executive Engineer© ,BSNL Civil Division, TIRUPATI</b>                                     |
| <b>Clause 2A</b>   |   |   |
| Whether Clause 2A shall be applicable  |   | <b>No, Clause 2A for bonus stands deleted</b>   |
| <b>Clause 3A</b>   |   |   |
| Whether Clause 3A shall be applicable  |   | <b>Yes</b>  |
| <b>Clause 5</b>  |   |   |
| i)   | Time allowed for execution of work.   | <b>1(One) Month.</b>  |
| ii)  | Authority to give fair and reasonable extension of time for completion of work.   | <b>Executive Engineer© ,BSNL Civil Division, TIRUPATI</b>                                     |
| <b>Clause 6A</b>   |   |   |
| Whether Clause 6A shall be applicable  |   | <b>YES</b>  |
| <b>Clause 7</b>  |   |   |
| Gross value of work to be done together with net payment /adjustment of advances for materials collected, if any, since the last such payment for being eligible to interim payment. |   | <b>₹.67,000/-</b>   |
| <b>Clause 10</b>   |   |   |
| Reinforcement steel to be used in the work shall have to be procured as below:<br>(a) CTD bars Manufactured by / producers<br>(b) TMT bars Manufactured by/ producers                |   | <b>.....<br/>Primary producers such as SAIL,TISCO,RINL</b>                                    |
| <b>Clause 11</b>   |   |   |
| Specification to be followed for execution of work.  |   | <b>CPWD specification volume I &amp; II of 2019 with up to date correction slips.</b>         |
| <b>Clause 12</b>   |   |   |
| 12.2 & 12.3  | Limit for value of any item of any individual trade beyond which sub clauses (i) to (v) shall not apply and clauses 12.2.& 12.3 shall apply | <b>100% (Hundred percent) up to plinth level.<br/>50% (Fifty percent) above plinth level.</b> |
| <b>Clause 16</b>   |   |   |
| Competent authority for deciding reduced rates.  |   | <b>Superintending Engineer© , BSNL Civil Circle, Vijayawada</b>                               |

**Clause 36(i)**

General guidelines for fixing requirement of Technical staff and rate of recovery in case of non-compliance, for a work, shall be as per the following table.

| Sl. NO. | Minimum qualification of Technical Representative | Discipline | Designation (Principal Technical / Technical Representative) | Minimum Experience | Number | Rate at which recovery shall be made from the contractor in the event of not fulfilling provision of clause 36(i) |       |
|---------|---|------------|--|--------------------|--------|---|-------|
|         |   |            |  |                    |        | Figures   | Words |
| 1.      |   |            |  |                    |        |   |       |
| 2.      |   |            |  |                    |        |   |       |

- To be filled up by NIT approving authority as per latest provisions of Appendix-18 of CPWD Works manual.

**Clause 37(i) modified**

The GST has been implemented by Government of India with effect from 1st July, 2017. The rates quoted by the tenderer shall be firm and **inclusive of all taxes including GST @ 18%** on work contract service as per GST Act after duly considering the advantage of Input Tax Credit of GST on material/goods or services used in the work. Building and Other Construction workers welfare cess or any other tax or cess in respect of this contract shall be payable by the contractor and BSNL shall not entertain any claim whatsoever in this respect.

**Clause 42**

- i) (a) Schedule / statement for determining theoretical quantities of cement on the basis of Delhi Schedule of Rates **2023** printed by CPWD.
- ii) **Variation permissible on theoretical quantities**
- a) Cement for works with estimated costs put to tender
- i) not more than Rs. 5 lakhs 3 % minus
- ii) more than 5 lakhs 2 % minus
- b) Steel reinforcement and structural steel sections for each diameter, section and category. 2 % minus

**Star prices to be considered for Escalation and Recoveries**

| Sl.No | Material  | Star Price<br>(Rate in Figures and Words) including Taxes |
|-------|---|---|
| 1     | For Cement  | ₹. 7,267- One Metric Tonne                                |
| 2(c)  | For Reinforcement Steel TMT bars Fe - 500 D grade | ₹. 67,289/-One Metric Tonne                               |

**NOTE:- The rate for recovery under Clause 42 shall be same as the Star Price.**

**Certificate of near relatives**

**DECLARATION**

(To be submitted by the contractor regarding near relatives working in BSNL as per clause 14 of BSNL W-6)

"I ..... s/o Shri ..... Resident of-----  
----- -- hereby certify that none of my near relative(s) as defined in clause 14 of BSNL W-6 is/are employed in concerned BSNL Civil Zone. In case at any stage, it is found that the information given by me is false/incorrect, BSNL shall have the absolute right to take any action as deemed fit without any prior intimation to me."

Signature of Contractor

(Note : The certificate in case of Proprietorship Firm shall be given by the proprietor and for Partnership Firm, certificate shall be given by all partners and in case of Limited Company, by all Directors of the company. However, Government of India/ Financial Institutions nominees and independent non-official part-time Directors appointed by Govt. of India or the Governor of the State are excluded from the purview of submission of this certificate while submitting tenders by Limited Companies.)

**S H E D U L E - D****ADDITIONAL CONDITIONS****(i) GOODS AND SERVICES TAX**

|   | Item                   | Description  |
|---|------------------------|--|
| 1 | Indemnity clause       | It is hereby agreed between both the parties that in case any GST and/or cess liability, interest, penalties or any other tax/ duty/ amount/ charge /liability/ professional costs related to litigation becomes payable by BSNL or input tax credit is denied to BSNL due to failure of the Vendor to comply with the relevant laws/regulations applicable in India or overseas. Vendor undertakes to indemnify BSNL for an amount equal to amount payable by BSNL and the same shall be recovered by BSNL from any of the amounts due to the vendor.                               |
| 2 | Tax deducted at source | Nothing contained herein in the agreement shall prevent BSNL from deducting tax at source if required under GST Act and GST regulations, any law or any regulation.  |
| 3 | GST invoice            | It shall be the responsibility of Vendor to raise appropriate tax invoice as per the provisions of GST Act. BSNL reserves the right to be indemnified for the credit loss in case BSNL is unable to claim the input tax credit for any noncompliance/ default in raising appropriate invoice by Vendor. Further all tax invoices should be sent to BSNL promptly, subsequent on uploading in GSTN portal, failing which bill payment will not be made and BSNL shall not be liable for any such delays, if the vendor could not obtain the Input Tax credit (ITC) due to this delay. |
| 4 | Advance payment        | Where in terms of the agreement, BSNL pays advance amount to Vendor for supply of goods/ services; it shall be the responsibility of Vendor to issue GST compliance receipt voucher or such other document as may be prescribed by BSNL. Further Vendor would be required to issue refund voucher as prescribed under GST Act in case no supply is made and no invoice is raised.  |

**(ii) CONSTRUCTION WORKERS WELFARE CESS**

Cess under building and other construction worker's welfare cess "Act 1996" and building and other construction workers Cess rules notwithstanding any thing contained in this contract, cess at the rate stipulated under Clause 3(1) of the Building and other construction worker's welfare Cess Act 1996, shall be recovered from the gross amount of the bill / bills payable under this contract.

**(iii) OTHER CONDITIONS**

a) Other agencies doing works related with this project will also simultaneously execute the works and the contractor shall afford necessary facilities for the same. The contractor shall leave such necessary holes, openings etc., for laying/burying in the work of pipes, cables, conduits, clamps, boxes and hooks for fan clamps etc., as may be required for other agencies, conduits for electrical wiring/cables will be laid in a way that they leave enough space for concreting and do not adversely affect the structural members. Nothing extra over the agreement rates shall be paid for the same.



b) All safety precautions are to be taken by the agency for the working labour and inspecting officers by taking appropriate actions. (Insurance, safety helmets, safety belts, glues etc.)

c) The contractor shall take instructions from Engineer-in-Charge for stacking of materials in any place. No excavated earth or building material shall be stacked on areas where other buildings, roads, services of compound walls are to be constructed.

d) All materials that are tested for use in the work shall be procured well in advance so that enough time is available for testing and approval of these materials by the Engineer-in-Charge.

**(iv) MATERIAL MAKES**

The tenderer has to provide items specified as under for corresponding item of work and no other equivalent item shall generally be accepted. However, the Engineer-in-Charge reserves right to accept any other equivalent item for the work on satisfaction that the stipulated item is not available in the local market or for any other reason.

**Additional Conditions**

1. Unless otherwise provided in the schedule of quantities the rates tendered by the contractor shall be all inclusive and shall apply to all heights, lifts, leads and depths of the building and nothing extra shall be payable to him on this account. Payment for centering, shuttering,, however if required to be done for floor to floor heights greater than 3.5 metre shall be admissible at the rates arrived at in accordance with clause-12 of the agreement if not already specified.

2. The contractor shall made his own arrangements for obtaining electric connections if required and make necessary payments directly to the department concerned.

3. Other agencies doing works related with this project will also simultaneously execute the work and the contractor shall afford necessary facilities for them. The contractor shall leave such necessary holes, openings etc. for laying / burying in the work Pipes, cables, conduits, clamps, boxes and hooks for fan clamps etc. as may be required for other agencies. Conduits for electrical wiring/cables will be laid in a way that they leave enough space for concreting and do not adversely affect the structural members. Nothing extra over the agreement rates shall be paid for the same.

4. Some restrictions may be imposed by the security staff etc. on the working and for movement of labors, materials, etc. the constructor shall be bound to follow all such restrictions/instructions and nothing extra shall be payable on this account.

5. (a) The building work will be carried out in the manner complying in all respects with the requirements of relevant bylaws of the local body under the jurisdiction of which the work is to be executed or as directed by the Engineer-in-charge and nothing extra will be paid on this account.

b) Water tanks, taps, sanitary, water supply and drainage pipes, fittings and accessories should conform to bye-laws and specifications of the Municipal Body/Corporation where C.P.W.D. specifications are not available. The contractor should engage licensed plumbers for the work and get the materials (fixtures/fittings) tested by the Municipal Body/Corporation Authorities wherever required at his own cost.

c) The contractor shall comply with proper and legal orders and directions of the local or public authority or municipality and abide by their rules and regulations and spay all fess and charges which he may be liable.

6. The contractor shall give a performance test of the entire installation(s) as per standing specifications before the work is finally accepted and nothing extra shall be payable to the contractor for the test.

7. Any cement slurry added over base surface (or) for continuation of concreting for better bend is deemed to have been in built in the items and nothing extra shall be payable (or) extra cement considered in consumption on this account.

8. Testing of materials: a) Samples of various materials required for testing shall be provided free of charge by the contractor. Testing charges, if any, unless otherwise provided, shall be borne by the department. However in case samples fail in testing, the testing charges if any shall be borne by the contractor. All other expenditure required to be incurred for taking the samples conveyance, packing etc. shall be borne by the contractor himself.

9. The structural and architectural drawings shall at all times be properly correlated before executing any work. However, in case of any discrepancy in the item given in the schedule of quantities appended with the tender and Architectural drawings relating to the relevant item, the former shall prevail unless and otherwise given in writing by the Engineer-in-charge.

10. The contractor shall bear all incidental charges for cartage, storage and safe custody of materials issued by the Department or procured by the contractor and nothing extra shall be payable to the contractor on their accounts.

11. The full nomenclature of the items shall be adopted in preparing abstract of final bill in the measurement book and also in the bill form for final bill.

12. Water to be used for construction and curing of cement / RCC work shall conform to the requirement of IS: 456- 2000. The agency has to arrange good quality water for construction indicating source.

**ADDITIONAL CONDITIONS FOR CEMENT & STEEL.****CONDITIONS FOR CEMENT.**

1. The contractor shall procure 43 grade (conforming to IS 8112) Ordinary Portland cement, as required in the work, from reputed manufacturer of cement having a production capacity of one million tonnes per annum or more, such as A.C.C., Ultra-Tech, Jaypee Cement, Vikram, Shri Cement, Century cement, Grasim, J.K.Cement, Ambuja, Lafarge and Cement Corporation of India etc as approved by Ministry of Industry, Government of India and holding licence to use ISI certification mark for their product whose name shall be got approved from Engineer-in-Charge. The tenderers may also submit a list of names of cement manufacturers which they propose to use in the work. The tender accepting authority reserves the right to accept or reject name(s) of cement manufacturer(s) which the tenderer proposes to use in the work. No change in the tendered rates will be accepted if the tender accepting authority does not accept the list of cement manufacturers, given by the tenderer, fully or partially. Supply of cement shall be taken in 50 Kg bags bearing manufacturer's name and ISI marking. Samples of cement arranged by the contractor shall be taken by the Engineer-in-Charge and got tested in accordance with provisions of relevant BIS Codes. In case test results indicate that the cement arranged by the contractor does not conform to the relevant BIS codes, the same shall stand rejected and shall be removed from the site by the contractor at his own cost within a week's time of written order from the Engineer-in-Charge to do so.

1.1 In addition to ordinary Portland cement as specified above, use of portland slag cement conforming to IS: 455 (Latest edition) is permitted for foundation work. Portland slag cement will also be permitted for super structure works subjected to enhancement of stripping time of " form work" as per provision of para 11.3.1 of IS:456-2000 vis-à-vis the curing time as per the decision of the Engineer-in-Charge which shall be final and binding on the contractor.

2. The cement shall be brought at site to bulk supply of approximately 50 tonnes or as decided by the Engineer-in-Charge. The cement godown of the capacity to store a minimum of 1000 bags of cement shall be constructed by the contractor at site of work for which no extra payment shall be made. Double lock provision shall be made to the door of the cement go down. The keys of one lock shall remain with the Engineer-in-Charge or his authorised representative and the key of the other lock shall remain with the contractor. The contractor shall be responsible for the watch & ward and safety of the cement godown. The contractor shall facilitate for the inspection of the cement go down by the Engineer-in-Charge at any time at any time.

3. The contractor shall supply free of charge the cement required for testing, the cost of tests shall be borne by the contractor / Department in the manner indicated below : (i ) By the contractor, if the results show that the cement does not conform to relevant BIS codes. (ii ) By the Department, if the results show that the cement conforms to relevant BIS codes.

4. The actual issue and consumption of cement on work shall be required and proper accounts maintained as provided in clause 10 of the contract. The theoretical consumption of cement shall be worked out as per procedure prescribed in clause 42 of the contract or as per other condition/ specification of the tender documents if otherwise applicable. In case the cement consumption is less than theoretical consumption including permissible variation, recovery at the rate so prescribed shall be made. In case of excess consumption no adjustment need to made.

5. Cement brought to site and cement remaining unused after completion of work shall not be removed from site without written permission of the Engineer-in-Charge.

6. The damaged cement shall be removed from the site immediately by the contractor on receipt of a notice in writing from the Engineer-in-Charge. If he does not do so within 3 days of receipt of such notice, the Engineer-in-Charge shall get it removed at the cost of the contractor.

**CONDITIONS FOR STEEL**

1. The contractor shall procure TMT bars of Fe 500/Fe 500D grade from primary producers such as SAIL, Tata Steel Ltd, RINL, Jindal Steel and Power Ltd and JSW Steel Ltd or any other producer as approved by Ministry of Steel who are using iron ore as basic raw material/input and having crude steel capacity of 2.0 Million tons per annum or above. In case of non-availability of steel from primary producers the NIT approving authority may permit use of TMT reinforcement bars procured from ISPs or Secondary producers. In such cases following action is to be taken by NIT approving authority:

(1.1) The grade of the steel such as Fe 500/500D or other grade to be procured is to be specified as per BIS 1786-2008.

(1.2) The secondary producers must have valid BIS license to produce HSD bars conforming to IS 1786 : 2008. In addition to BIS license, the secondary producer must have valid license from either of the firms Tempcore, Thermex, Evcon Turbo & Turbo Quench to produce TMT Bars.

(1.3) The TMT bars procured from primary producers shall conform to manufacture's specifications.

(1.4) The TMT bars procured from secondary producers shall conform to the specifications as laid by Tempcore, Termex, Evcon Turbo & Turbo Quench as the case may be.

(1.5) TMT bars procured either from primary producers or secondary producers, the specifications shall meet the provisions of IS 1786 : 2008 pertaining to Fe415D or Fe 500D or Fe550D grade of steel as specified in the tender (while preparing NIT the grade of the steel to be specified).

2. The contractor shall have to obtain and furnish test certificates to the Engineer-in-Charge in respect of all supplies of steel brought by him to the site of work.

3. Samples shall also be taken and got tested by the Engineer-in-Charge as per the provisions in this regard in relevant BIS Codes. In case the test results indicate that the steel arranged by the contractor does not conform to the specifications as defined under Para (1)(d) & (1) (e) above, the same shall stand rejected and it shall be removed from the site of work by the contractor at his cost within a week time or written orders from the Engineer-in-Charge to do so.

4. The steel reinforcement bars shall be brought to the site in bulk supply of 10 tonnes or more as decided by the Engineer-in-Charge.

5. The Steel reinforcement bars shall be stored by the contractor at site of work in such a way as to prevent their distortion and corrosion, and nothing extra shall be paid on this account. Bars of different sizes and lengths shall be stored separately to facilitate easy counting and checking.

6. For checking nominal mass, tensile strength, bend test, re-bend test etc. specimen of sufficient length shall be cut from each size of the bar at random at frequency not less than that specified below.

| Size of bar     | For consignment below 100 tonnes              | For consignment over 100 tonnes               |
|-----------------|---|---|
| Under 10 mm dia | One sample for each 25 tonnes or part thereof | One sample for each 40 tonnes or part thereof |
| Under 10 mm dia | One sample for each 35 tonnes or part thereof | One sample for each 45 tonnes or part thereof |
|                 | One sample for each 45 tonnes or part thereof | One sample for each 50 tonnes or part thereof |

7. The contractor shall supply free of charge the steel required for testing including its transportation to testing laboratories. The cost of tests shall be borne by the contractor/Department in the manner indicated below. (i) By the contractor, if the results show that the steel does not conform to relevant BIS codes. (ii) By the Department, if the results show that the steel conforms to relevant BIS Codes.

8. The actual issue and consumption of steel on work shall be regulated and proper accounts maintained as provided in Clause 10 of the contract. The theoretical consumption of steel shall be worked out as per procedure prescribed in Clause 42 of the contract and shall be governed by conditions laid therein. In case the consumption is less than theoretical consumption including permissible variations recovery at the rate so prescribed shall be made. In case of excess consumption no adjustment need to be made.

9. The steel brought to site and the steel remaining unused shall not be removed from site without the written permission of the Engineer-in-Charge.

10. In case contractor is permitted to use TMT reinforcement bars procured from ISPs or Secondary producers then :

10.1 The base price of TMT reinforcement bars as stipulated under Schedule "F" shall be reduced by Rs. ---- - /- per MT.

10.2 The rate of providing and laying TMT reinforcement bars as quoted by the contractor in the tender shall also be reduced accordingly by working out rate as done for market analysis of rate that is inclusive of water charges, CP & overheads, Building and other Construction Workers Welfare Cess, Service tax etc. (Contractor's Profit and Over Heads is currently 10%).

10.3 The rates under 10.1 shall be specified by NIT approving authority at the time of issue of NIT. (Note : Conditions nos. 10 (10.1 to 10.3) are not applicable for this work since as per Schedule-F, TMT bars produced by ISPs / reputed Secondary producers are not allowed for this work.

**ADDITIONAL SPECIFICATIONS****1.0 GENERAL :**

1.1 The work shall be carried out as per CPWD Specifications 2009 Vol. I & II with up to date correction slips.

1.2 The work shall be executed and measured as per metric dimensions given in the Schedule of quantities, drawings etc.( F.P.S. units wherever indicated are for guidance only).

1.3 The following modifications in the above specifications and some additional specifications shall however apply:

i) All stone aggregate and stone ballast shall be of hard stone variety to be obtained from quarries approved by Engineer-in-charge and shall conform to the relevant provisions in the CPWD specifications.

ii) Sand to be used for cement concrete work, mortar for masonry and plaster work shall be of standard quality. Sand shall be obtained from sources approved by Engineer-in-charge and shall conform to the relevant provisions in the CPWD specifications. Where only one variety of sand is available, the sand will be sieved for use in finishing work to achieve the required particle size distribution as per CPWD Specifications in order to obtain smooth surface and nothing extra shall be paid to the contractor on this account. If the sand brought to site is dirty, it must be washed in clean water to bring the sand to the required specifications. Nothing extra shall be payable on this account. Crushed stone sand conforming to CPWD Specification obtained from approved sources shall be allowed to be used in cement mortar, plain and reinforced cement concrete.

iii) Brick to be used in the work shall be F.P.S. to be obtained from the local kilns. The sample of the brick shall be got approved by the Engineer-in-charge and shall be of size 10"X5"X3" instead of 22.9cm. x 11.4 cm. x 7.0cm. nominal size as mentioned in CPWD specification 2009 with up-to-date correction slips issued, before the mass quantity is brought to the site. The brick work, the unit of which is mentioned as Cubic meter which includes abbreviated forms of cum or m3 shall be considered to have thickness of multiple of 125mm for the sake of calculation of volumetric content.

1.4 Wherever any reference to any Indian Standard Specification occurs in the documents relating to this contract the same shall be inclusive of all amendments issued their to revision thereof if, any, upto the date of receipt of tenders.

1.5 Unless otherwise specified in the schedule of quantities the rates for all items of the work shall be considered as inclusive of pumping out or bailing out water if required for which no extra payment will be made. This will include water encountered from any source, such as rains, floods, sub-soil water level being high due to any other cause whatsoever.

1.6 The work shall be carried out in accordance with the Architectural drawings, structural drawings and approved shop drawings. The structural shop and architectural drawings shall have to be properly correlated before executing the work. In case of any difference noticed between architectural and structural drawings, the contractor shall obtain final decision of the Engineer-in-charge. In case of any discrepancy in the item given in the schedule of quantities appended with the tender and architectural drawings related to the relevant items, the former shall prevail unless and otherwise given in writing by the Engineer in charge. Nothing extra shall be payable on this account.

**1.7 Product delivery, storage and handling of chemicals**

1.7.1 The contractor shall construct storage space for Chemicals materials to ensure that the storage conditions are as recommended by the manufactures.

1.7.2 All the materials shall be procured and delivered in sealed containers with labels legible and intact.

1.7.3 All the chemicals (polymers, epoxy, water proofing compound, plasticizer, Polysulphide, all exterior and interior paints, polish etc.) shall be procured in convenient packs say 20 litres/Kgs.} capacity packing only or as approved by the Engineer-in-Charge, and not in bigger capacity containers, say 200 litre (Kgs.) drums unless otherwise specifically permitted by the Engineer-in-Charge. One sample from each lot of the chemical procured by the contractor shall be tested in a laboratory as approved by the Engineer – in - Charge.

1.7.4 All material required for the execution of the work shall be got approved, procured and deposited with the Departmental supervisory staff. The materials shall be kept in joint custody of the contractor and the Department. The watch and ward of such material shall, however, remain to be the responsibility of the contractor and no claim, whatsoever, on this account shall be entertained. Different containers of each chemical shall be serially numbered on packing and also consumed in that order. Day-to-Day account of receipt, issue and balance shall be regulated by the Department and proper account shall be maintained at site of work in the prescribed form as per the standard practice.

1.7.5 All the chemicals shall be procured by the contractor directly from the manufacturer. In exceptional circumstances, the contractor may be allowed to procure the materials from the authorized dealers of the manufacturers, if specifically permitted by the Engineer-in-Charge.

1.7.6 The original copies of challan / cash memos towards the quantity of various chemicals procured shall be made available by the contractor at the request from the Engineer-in-Charge and a copy of the same shall be kept in record.

1.7.7 The Name of manufacturers, manufacturer's product identification, manufacturer's mixing instructions, warning for handling and toxicity and date of manufacturing and shelf life shall be clearly and legibly mentioned on the labels of the each container.

1.7.8 The contractor shall submit for the chemicals procured, manufacturer's and / or authorized dealer's certificate regarding supplying and verifying conformance to the material specifications, as specified.

1.7.9 All filled containers shall be handled in safe manner and in a way to avoid breaking container seals.

1.7.10 Empty containers of the chemicals should not be removed from site till the completion of work and shall be removed only with the written approval of the Engineer-in-Charge.

1.7.11 All arrangements for measuring, dosing and mixing of material / chemicals at site have to be made by the contractor.



1.7.12 Contractor shall suitably advise his site Engineer and all the workers as regards safe handling of chemicals. Necessary protective and safety equipment in form of hand gloves, goggles etc. shall be provided by the contractor and be also used at site.

1.7.13 All incidental charges of any kind including cartage, storage and wastage and safe custody of material etc. shall be borne by the contractor and no claim, whatsoever, shall be entertained on this account.

1.7.14 The chemicals shall be tested in an independent laboratory as approved by the Engineer-in-Charge at the frequency as specified. If required, more samples may have to be tested as per the directions of the Engineer-in-Charge. Nothing extra shall be payable on this account. However testing charges shall be borne by the department for the samples satisfying the requirements specified in the tender.

## **2.0 EARTH WORK :**

2.1 During excavation and trenching work etc., the contractors shall ensure compliance to the guidelines in such matters laid down by the local body/ bodies to ensure that there is minimum hazard to the operating personals and users, minimum inconvenience to the users, minimized damage to the underground plant/services of other utilities in a coordinated way, in the interest of public convenience and overall safety.

2.2 Earth work shall be executed as per CPWD specifications. Any trenching and digging for laying sewer lines / waterlines / cables etc. shall be commenced by the contractor only when all men, machinery's and materials have been arranged and closing of the trenches thereafter shall be ensured within the least possible time.

2.3 All the major excavation shall be carried out by mechanical excavator. No extra payment shall be made for that.

2.4 The contractor shall make at his own cost all necessary arrangements for maintaining water level, in the area where works are under execution low enough so as not to cause any harm to the works or problems in carrying out with the execution and the rates for all items of work shall be considered as inclusive of pumping out or bailing out water, if required and for which no extra payment shall be made. This will include water coming from any source, such as rains, accumulated rain water, floods, leakages from sewer and water mains, subsoil water table being high or due to any other cause whatsoever. The contractor shall make necessary provision of pumping, dredging, bailing out water coming from all above sources and excavation and other works shall be kept free of water by providing suitable system approved by the Engineer-in-Charge.

2.5 De-watering required, if any, shall be done conforming to BIS Code IS: 9759 (guide lines for de-watering during construction) and / or as per the specifications approved by the Engineer-in-Charge. Design of an appropriate and suitable dewatering system shall be the Contractor's responsibility. Such scheme shall be modified / augmented as the work proceeds based on fresh information discovered during the progress of work, at no extra cost. At all times during the construction work, efficient drainage of the site shall be carried out by the Contractor and especially during the laying of plain cement concrete, taking levels, etc. The Contractor shall also ensure that there is no danger to the nearby properties and installations on account of such lowering of water table. If needed, suitable precautionary measures shall be taken by the Contractor. Also the scheme of dewatering adopted shall have adequate built in arrangement to serve as stand-bye

to attend to repair of pumps etc. and disruption of power / fuel supply. Nothing extra shall be payable on this account.

2.6 Surplus excavated earth which is beyond the requirement of the Bharat Sanchar Nigam Limited shall have to be disposed of by the contractor at his own cost beyond the municipal limits or at places identified by the local bodies or as directed by the Engineer-in-Charge after obtaining written permission of the Engineer-in-charge and no payment will be made by the BSNL for such disposal of this surplus excavated earth.

### **3.0 R.C.C. WORK:-**

3.1 In respect of projected balconies, projected slabs at roof level and projected verandah, the payment for the RCC work shall be made under the item of RCC slabs, the payment for centering and shuttering of such items shall similarly be paid under the item of centering and shuttering of RCC slab. Nothing extra shall be paid for the side shuttering at the edges of these projected balconies and projected verandahs. All the exposed edge shall however, be finished as per specifications and nothing extra shall be paid for this.

3.2 The term machine batched, machine mixed and machine vibrated design mix cement concrete used in the document shall mean the concrete produced in automatic concrete batching and mixing plant and vibrated by surface vibrator/needle vibrator /plate vibrator, as the case may be to achieve required strength and durability.

3.3 Design mix cement concrete work wherever specified shall be done as per revised CPWD specification 2009 for cement mortar, cement concrete and R.C.C work (in pursuance to IS 456-2000) by installing, using weigh batch / batch-mix plant of suitable capacity conforming to IS 4925 at site of works.

3.3.1 The concrete mix will be designed for minimum workability as per the table given below.

| Placing conditions   | Degree of workability | Slump (mm) |
|--|-----------------------|------------|
| Lightly reinforced section in slab, beams, walls, columns, RCC Raft, column footings etc | Low                   | 25-75      |
| Heavily reinforced section in slabs, beams, walls columns.                               | Medium                | 50-100     |
| Pumped concrete  | Medium                | 75-100     |

The recommended values of slump for various members are given below:-

- (1) Columns 25 – 35 mm
- (2) Beams 30 – 40 mm
- (3) Slabs/Horizontal ties 30- 50 mm.
- (4) Vertical ties 50- 100 mm

3.3.2 The contractor has to submit the names and addresses of the authorised "Ready Mixed Concrete" manufacturing plants from where he intends to procure the "Ready Mixed Concrete" and obtain prior approval of the plants from the Engineer-in-charge. However, if the contractor is permitted to use "Ready Mixed Concrete" in place of normal mix as mentioned in the schedule of quantities, nothing extra shall be paid what so ever for this.

3.3.3 The rates should be quoted inclusive of all materials, labourers, machineries, transporting the mix with agitation in transit mixer to the work side and depositing the mix on platforms with or without staging at required level by pumping and

laying the same at specific location in the form work as per nomenclature of the item, and also inclusive of all taxes, statutory charges, duties etc. all complete against the items mentioned in the schedule of quantities and nothing shall be paid extra on these accounts.

3.3.4 The cement to be used for the "Ready Mixed Concrete" should be either OPC of grade 43 conforming to IS 8112 or Portland slag cement conforming to IS 455 of approved manufacturers after getting the sample of cement tested and got approved from the Engineer-in-charge. The "Ready Mixed Concrete" is to be prepared under controlled condition as per IS 10262 & IS 456 and the type and brand of admixture shall be got approved from the Engineer-in-charge before use. Each batch of supply of concrete should be accompanied with a challan, indicating specific content of ingredients of "Ready Mixed Concrete" which should tally with the approved design mix. The time of manufacture should be indicated in each batch of supply of "Ready Mixed Concrete" and concrete should be laid in the specific location of the form work within the initial setting time of concrete.

3.4. In partial modification of the provision of para 5.2 of revised CPWD specification 2009 for cement mortar, cement concrete and R.C.C. work (in pursuance to I.S. 456-2000) in respect of form work it is provided that basically only steel shuttering shall be adopted in general. However, a combination of steel and shuttering ply conforming to I.S. 848-1974 and I.S. 5539 may be allowed by the Engineer-in-Charge in consideration of the special request of the contractor to maintain quality and speed of the work. In such cases the use of shuttering shall be permitted only for circular columns, beam sides and bottom and in other locations wherever it is felt necessary on account of difficulty in using steel shuttering in such locations. But in other areas like slab, rectangular/square columns etc. steel shuttering shall be invariably used. However, no extra payment or deduction will be admissible or made for use of shuttering ply.

3.5 Non-destructive Testing for Concrete/R.C.C work: - The Engineer-in-Charge shall, at his discretion, can get the non-destructive testing (Such as Ultrasonic Pulse velocity Test etc.) done and the Contractor shall make all necessary arrangements for getting such tests done and make good the same after the test, for which nothing extra shall be paid. The results of such tests shall be binding on the Contractor. In case of non-conformity of the test to the standards, the contractor shall be liable to re-do the concrete work at his cost including the cost of test, subject however, to the acceptability of the work as laid down in the mandatory test defined in the relevant CPWD specifications.

#### **4.0 PRE-CAST RCC WORK**

4.1 The work shall be done in accordance with CPWD Specifications.

4.2 Pre-cast reinforced concrete units shall be of grade or mix as specified. Provision shall be made in the mould to accommodate fixing devices such as hooks etc. and forming of notches and holes. Each unit shall be cast in one operation. A sample of the unit shall be got approved from Engineer-in-charge before taking up the work.

4.3 Pre-cast units shall be clearly marked to indicate the top of member and its location.

4.4 Pre-cast units shall be stored, transported and placed in position in such a manner that these are not damaged.

4.5 The compaction of the concrete shall be done by vibrating, table or external vibrator, as approved by Engineer-in-charge. The rate quoted for the item shall include the element for framework and mechanical vibration.

4.6 In the item of providing and fixing precast reinforced cement concrete in shelves the cost of cutting chases and making good the same shall be inclusive in the item and nothing extra shall be paid on this account.

### **5.0 BRICK WORK**

5.1 The rate shall also include for leaving chases / notches for dowels / cramps for all kinds of cladding to come over brick work.

5.2 Brick work provided around shaft or lift walls or around slab cutouts shall be measured in the brick for corresponding floor level. Nothing extra shall be paid on this account.

5.3 M.S. Strip/ Bar provided at every third course of half brick masonry shall be in single piece. If required, welding joint can be used without overlaps. Nothing extra shall be paid for welding and overlaps.

### **6.0 STEEL WORK :**

6.1 All steel doors, steel windows, steel ventilators, steel glazing, steel grill shall be according to the Architect's detailed drawings and obtained from approved suppliers. These shall conform to C.P.W.D. Specifications-2009. In the case of composite steel windows, rate shall include the cost of coupling mullion and transom etc. Where windows with inside openable shutters are fixed along with windows with shutters openable outside, such inside open able windows shall be fitted with suitable friction hinges and openable outside with box type hinges, level handles or otherwise as approved by the Engineer-in-charge. For such windows, cement, concrete blocks of size 15cm x 23cm x 10cm shall be provided in place of 2 nos. of 15cm x 10cm x 10cm blocks. Nothing extra shall be paid on this account.

6.2 In the case of steel windows, steel doors, steel glazing, steel ventilators, rolling shutters M.S. grill etc. an approved quality priming coat shall be applied over and above a shop coat of primer. Nothing extra shall payable for providing shop coat primer.

### **7.0 FLOORING:**

7.1 All work in general shall be carried out as per CPWD Specifications (Volume 1) 2009 with up-to-date correction slips.

7.2 Whenever flooring is to be done in patterns of tiles and stones, the contractor shall get samples of each pattern laid and approved by the Engineer-in-charge before final laying of such flooring. Nothing extra shall be payable on this account.

7.3 Different stones / tiles used in pattern flooring shall be measured separately as defined in the nomenclature of the item and nothing extra for laying pattern flooring shall be paid over and above the quoted rate. No additional wastage, if any, shall be accounted for any extra payment.

7.4 Samples of flooring stones/ Tile (Kota/ Marble/ Granite/ Ceramic tiles/ Vitrified tiles etc.) shall be deposited well in advance with the Engineer-in-Charge for approval. The sizes of stones for flooring shall be of a size not less than 600mmx600mm or as approved by Engineer-in-Charge. Approved samples should

be kept at site with the Engineer-in-Charge and the same shall not be removed except with the written permission of Engineer-in-Charge. No payment whatsoever shall be made for these samples.

7.5 The Marble/ Kota/ Granite or any other stone shall be fully supported by the details establishing the quarry and its location or source.

7.6 Full width Marble/ Kota/ Granite stone over kitchen platform shall be provided except to adjust for closing pieces. The marble / stone flooring in treads and risers of staircase is to be laid in single piece. Nothing extra shall be paid on these accounts.

7.7 The rate of items of flooring is inclusive of Providing Sunken Flooring in Bathrooms, Kitchen, W.C., etc. and nothing extra on this account is admissible.

7.8 Chasing of required width and thickness shall be made in brick work at skirting location so as to flush the external surface of skirting with internal plastering. No extra payment towards making chases in brick work at skirting shall be made and the same is presumed to be inclusive of rate quoted for the item of providing and fixing skirting.

7.9 Proper gradient shall be given to flooring for toilets, verandah, kitchen, courtyard etc. so that the wash water flows towards the direction of floor trap. Any reverse slope if found, shall be made good by the contractor by ripping open the floor/grading concrete and nothing shall be paid for such rectifications.

7.10 The flooring and skirting will be executed as per pattern shown in the Architectural drawings and as per approval of Engineer-in-Charge and nothing extra shall be payable on this account.

7.11 The rate shall include the cost of all materials and labour involved in all the operations. Nothing extra shall be paid for use of cut/sawn stone/ tiles in the work.

#### 7.12 Vitrified Tile Flooring

7.12.1 The tiles shall be of approved make and shall generally conform to Table 12 of IS15622. The full body Vitrified tiles of specified sizes shall be used & sample of tiles shall be got approved from the Engineer-in-Charge. The Mandatory tests for vitrified tiles shall be got done as per CPWD Specifications (volume 1)/relevant BIS Code.

7.12.2 The vitrified tiles shall be as specified in the item. The tiles shall be of specified colours as shown in the drawings or as approved by Engineer-in-Charge and will be laid in pattern as per architectural drawings. Nothing extra shall be paid for laying tiles in specific pattern. The tiles shall be of first quality of approved make.

### **8.0 SANITARY INSTALLATIONS /WATER SUPPLY / DRAINAGE:**

8.1 The contractor shall be responsible for the protection of the sanitary and water supply fittings and other fittings and fixtures against pilferage and breakage during the period of installation and thereafter until the building is handed over.

8.2 The contractor shall furnish all labour, materials and equipment, transportation and incidental necessary for supply, installation, testing and commissioning of the complete Plumbing / Sanitary system as described in the Specifications and as

shown on the drawings. This also includes any material, equipment, appliances and incidental work not specifically mentioned herein or noted on the Drawings/Documents as being furnished or installed, but which are necessary and customary to be performed under this contract. The Plumbing / Sanitary System shall comprise of following: a. Sanitary Fixtures and Fittings. b. Internal and External Water Supply. c. Internal and External Drainage. d. Balancing, testing & commissioning. e. Test reports and completion drawings.

8.3 For the work of water supply and sanitary installations, the contractor shall engage the approved licensed plumbers and submit the name of proposed plumbing agencies with their credentials for approval of the Engineer-in-Charge. For quality control & monitoring of workmanship, contractor shall assign at least one engineer who would be exclusively responsible for ensuring strict quality control, adherence to specifications and ensuring top class workmanship for the installation.

8.4 The work in general shall be carried out as per CPWD Specifications (Volume II) 2009 with up-to-date correction slips.

8.5 The tendered rates shall include the cost of cutting holes in walls, floors, RCC slabs etc. wherever required and making good the same for which nothing extra shall be paid.

8.6 Nothing extra for providing & fixing CP Brass caps /extension pieces wherever required for CP Brass fittings shall be paid beyond the rates payable for corresponding CP Brass fittings.

8.7 The contractor shall examine all architectural, structural, plumbing, electrical and other services drawings and check the as-built works before starting the work, report to the Engineer In-Charge any discrepancies and obtain clarification. Any changes found essential to coordinate installation of his work with other services and trades, shall be made with prior approval of the Engineer In-Charge without additional cost to the department.

8.8 Samples of all materials like valves, pipes and fittings etc. shall be submitted to the Engineer In-Charge prior to procurement for approval and retention by Engineer In-Charge and shall be kept in their site office for reference and verification till the completion of the Project. Wherever directed a mock up or sample installation shall be carried out for approval before proceeding for further installation without any extra cost.

8.9 All materials and equipment shall conform to the relevant Indian Standards and shall be of the approved make and design. Makes shall be in conformity with list of approved manufacturers as per the tender document.

8.10 Balancing of all water systems and all tests as called for the CPWD Specifications shall be carried out by the contractor through a specialist group, in accordance with the Specifications and Standards. The installation shall be tested and shall be commissioned only after approval by the Engineer In-Charge. All tests shall be carried out in the presence of the representatives of the Engineer In-Charge and nothing extra shall be payable on this account.

8.11 The CCI/CI/PVC pipe and GI pipe etc. wherever necessary shall be fixed to RCC columns, beams etc. with rawl plugs and nothing extra shall be paid for this.

8.12 The variation in consumption of material shall be governed as per CPWD specification and clauses of the contract to the extent applicable.

8.13 The pig lead to be used in joints of 150mm, 100mm, 75mm, 50mm dia of sand cast iron, centrifugally cast (Spun ) iron pipes shall be as per relevant CPWD Specifications. 12.19 The contractor shall bear all incidental charges for cartage, storage and safe custody of materials and shall construct suitable godowns, yards at the site of work for storing materials so as to be safe against damage by sun, rain, fire or theft etc., at his own cost and also employ necessary watch and ward establishment for the purpose at his own cost.

8.14 All fixtures and fittings shall be provided with all such accessories as are required to complete the item in working condition whether specifically mentioned or not in the Schedule of Quantities, specifications, elsewhere in this tender document & drawings. The quoted rates shall be deemed to be all inclusive for a complete item fit for use including all materials, labour T&P, specials, equipment, testing & commissioning etc. Accessories shall include proper fixing arrangement, brackets, nuts, bolts, screws and required connection pieces. Nothing extra whatsoever shall be payable on this account.

8.15 Fixing screws shall be half round head chromium plated brass screws with C.P. washers where necessary or otherwise as provided in the item.

8.16 Porcelain sanitary ware shall be glazed vitreous china of first quality free from warps, cracks and glazing defects and shall conform to relevant BIS codes. Colour of sanitary ware, shall be specified or as selected by the Engineer-in-Charge. Nothing extra shall be payable on this account.

8.17 Horizontal pipes running along ceiling shall be fixed on structural adjustable clamps of approved design. Horizontal pipes shall be laid to uniform slope and the clamps adjusted to the proper levels so that the pipes fully rest on them and are properly secured. 8.18 Contractor shall provide all nuts, bolts, welding material and paint the Clamps with one coat of red oxide and two or more coats of black enamel paint.

8.19 Slotted angle/channel supports on walls shall be provided wherever shown on drawings. Angles/channels shall be of sizes shown on drawings or specified in schedule of quantities. Angles/channels shall be fixed to brick walls with bolts embedded in cement concrete blocks and to RCC walls with suitable anchor fasteners. The spacing of support bolts horizontally shall not exceed 1m.

8.20 Wherever M.S. clamps are required to be anchored directly to brick walls, concrete slabs, beams or columns, nothing extra shall be payable for clamping arrangement and making good with cement concrete 1:2:4 mix (1 cement: 2 coarse sand: 4 stone aggregate 20 mm nominal size) or as directed by the Engineer-in-Charge.

8.21 Rates for all items quoted shall be inclusive of all work and items given in the above mentioned specifications and Schedule of Quantities and applicable for the work under floors, in shafts or at ceiling level at all heights and depths. All rates are inclusive of cutting holes and chases in RCC and masonry work and making good the same. All rates are inclusive of pre testing and on site testing of the installations, materials and commissioning.

## **9.0 WATER PROOFING TREATMENT:**

9.1 The work in general shall be executed as per Manufacturers Specifications or CPWD specifications as applicable.

9.2 Contractor shall also submit the names of water proofing specialist along with information about their technical capabilities and list of similar works executed by the specialized agency in the past for the approval of Engineer-in-charge within 30 days from the date of award of work.

9.3 Total quantity of the water proofing compound required shall be arranged only after obtaining the prior approval of the make by Engineer-in-charge in writing. Materials shall be kept under double lock and key and proper account of the water proofing compound used in the work shall be maintained. It shall be ensured that the consumption of the compound is as per specified requirements.

9.4 The finished surface after water proofing treatment shall have adequate smooth slope as per the direction of the Engineer-in-charge.

#### **9.5 IN SUNKEN/DEPRESSED FLOOR SLABS WATER PROOFING TREATMENT**

9.5.1 After cleaning the surface and removing the loose particles the vertical and horizontal surfaces shall be applied cement slurry @4.40kg per sqm mixed with water proofing compound conforming to IS 2645 in recommended proportion including rounding off junction of vertical and horizontal surface.

9.5.2 20mm cement plaster 1:3 (1 Cement: 3 sand) mixed with water proofing compound in recommended proportion including rounding off junction of vertical and horizontal surface shall be done.

9.5.3 The top coat shall be applied using slurry of neat cement punning @0.242kg/sqm mixed with water proofing cement compound at @0.126kg/sqm.

9.5.4 Before the water proofing treatment is done it shall be ensured that the outlet pipes are properly fixed and the gap between the wall and pipes are properly filled with brick/stone aggregate and cement mortar admixed with proprietary water proofing compound and grouted with cement slurry admixed with proprietary water proofing compound by injection process.

#### **9.6 MEMBRANE WATER PROOFING TREATMENT**

9.6.1 The work in general shall be carried out as per CPWD Specifications or / as per Manufacturer's Specifications . The Applicators authorized by the manufacturers shall only be engaged in the work.

9.6.2 Before the water proofing treatment is done it shall be ensured that the outlet pipes are properly fixed and the gap between the wall and pipes are properly filled with brick/stone aggregate and cement mortar admixed with proprietary water proofing compound and grouted with cement slurry admixed with proprietary water proofing compound by injection process.

#### **9.7 ON TERRACE/ROOF/BALCONIES ETC**

9.7.1 The work in general shall be executed as per Manufacturers Specifications or CPWD Specifications as applicable.

9.7.2 Total quantity of the water proofing compound required shall be arranged only after obtaining the prior approval of the Engineer in Charge in writing. Materials shall be kept under double lock and key and proper account of water proofing



compound used in the work shall be maintained. It shall be ensured that the consumption of the compound is as per specified requirements.

9.7.3 The finished surface after water proofing treatment for floor in sunken portion shall have minimum slope of 1 in 48 unless otherwise decided by the Engineer in Charge.

9.7.4 Before commencement of treatment on floor surface, it shall be ensured that outlet drain/spouts have been fixed and the spout openings have been eased and rounded off properly for easy flow of water.

9.7.5 Contractor shall associate himself with anyone of the specialist firms relating to the water proofing treatment with the approval of Engineer in charge.

9.7.6 Water proofing treatment of all types of work: The Contractor(s) shall submit for the approval of the Engineer-in-Charge, the names of specialized agencies, of repute along with their technical & financial capability proposed to be engaged by him within three months from the date of award who have executed satisfactorily at least one similar work of equal or more magnitude or two similar works of minimum 50% magnitude (Financial) of water proofing items in the agreement during the last seven years.

9.8 GUARANTEE BOND FOR ALL WATER PROOFING ITEMS 10 (Ten) years Guarantee bond in prescribed pro forma given in the tender document shall be submitted by the contractor which shall also be signed by both the specialized agency and the contractor to meet their liability / liabilities under the guarantee bond. However, the sole responsibility about efficiency of water proofing treatment shall rest with the building contractor. 10% (Ten per cent) of the cost of water-proofing work shall be retained as Security Deposit and the amount so deducted would be released after 10 (Ten) years from the date of completion of the entire work under the agreement, if the performance of the treatment is found satisfactory. If any defect is noticed during the guarantee period, the Contractor shall make good all the defects connected to water proofing works originally executed by him including making good the collateral damages likely to cause on contiguous/associated items like ceramic tile flooring, dado, light weight concrete filling in sunken floors, sanitary/water supply pipe lines & fittings/fixtures etc. while rectifying the defects and finally render the building water-proof at his own cost to the satisfaction of the Engineer - in- Charge, and the work for such rectification shall be completed within 15 (Fifteen days) of receipt of intimation of defects in the work. If the defects pointed out are not attended to within the specified period, the same will be got done from another agency at the risk and cost of contractor. However this security deposit can be released in full, if bank Guarantee of equivalent amount for Full 10 (Ten) years is produced and deposited with the department.

**10.0 FINISHING:** The work shall be done in accordance with CPWD Specifications - 2009 Vol. I to Vol. II with upto date correction slips and the manufacturer's specifications where CPWD specifications are not available. The quantity of paint required as per the theoretical consumption including wastages, if any, shall be procured from the approved manufacturer or his authorized dealers and deposited with the representative of the Engineer-in-Charge at site. The paint shall be obtained in smaller packing (around 20 litre). The paint shall be kept in the joint custody of the Department and the Contractor and day-to-day account of receipt and issue shall be maintained. However, the safe custody and watch and ward shall remain to be the responsibility of the Contractor. Nothing extra shall be payable on this account. The name of the manufacturer, manufacturer's product identification, and manufacturer's mixing instructions, warnings and instructions for handling and

application, toxicity and date of manufacturing and shelf life shall be clearly and legibly mentioned on the labels of each container. These details shall be kept in record. The material shall be consumed in the order of material brought to site, first come first consume basis. The Contractor shall obtain and submit to the Department the manufacturer's certificate for compliance of the various characteristics of the materials as per the manufacturer's specifications and also copy of the manufacturer's test report for the record. Empty containers of the paints shall not be removed from site till the completion of the work unless otherwise permitted and shall be removed only with the permission of the Engineer-in-Charge or his authorized representative at site of work. All arrangements for measuring, dosing etc. at site shall be made by the Contractor. Nothing extra shall be payable on this account. The Contractor shall apply samples of each kind of paint for the approval of shade and colour as per the directions of the Engineer-in-Charge before procuring the paint in mass. All incidental charges of cartage, storage, wastage, safe custody, scaffolding, cost of samples and mock ups etc. shall be borne by the Contractor and no claim, whatsoever, shall be entertained on this account.

### **11.0 STAINLESS STEEL RAILINGS**

11.1 Providing, fabricating and fixing in position welded built-up section using stainless pipes and connecting plates, of Grade S.S. 304 and of required diameter & thickness as per the directions of the Engineer-in-Charge, at the junctions of doors, on walls, other locations as directed etc. including cutting, welding, grinding, bending to required profile and shape, hoisting, buffing and polishing, cutting chase/embedding in RCC / Masonry, fixing using stainless steel screws, nuts, bolts and washers or stainless steel fasteners as required to make it rigidly fixed & stable and making good the plaster/flooring etc. all complete, at all floors and all levels as directed by the Engineer-in-Charge.

11.2 Rate includes cost of all inputs of materials, labour, T&P, etc. involved in the work and all incidental charges to execute this item. However, for the purpose of payment only the actual weight of the stainless pipes and stainless steel plates provided and fixed shall be measured in kg.

### **12.0 TESTING OF MATERIAL:**

12.1 The contractor shall produce all the materials in advance so that there is sufficient time for testing and approving of the material and clearance of the same before use in work. A list of preferred BRANDS/MANUFACTURERS/MAKES is attached as APPENDIX – A mentioned forming part of the contract for use in work as per requirement.

12.2 In case of concrete and reinforced concrete work, the contractor shall be required to make arrangement for carrying out compression strength tests at his own costs. He shall render all assistance for the preparation of cubes, safe custody of the same, proper curing and carriage up to the laboratory where the test is to be performed. The cube tests can be performed at any laboratory approved by the Engineer-in-Charge.

12.3 Time allowed for execution of the work provided in clause 5 of Schedule "F" is inclusive of the time required for any kind of testing of materials and preparation of Design mix of cement concrete for all R.C.C. work, time required for initial load testing / routine load testing of piles and time required for testing of weld etc.

**SPECIAL CONDITIONS, OTHER CONDITIONS, TAXES & ROYALTIES**

## 1.0 GENERAL

1.1 The Contractors are advised to inspect and examine the site and its surroundings and satisfy themselves with the nature of site, the means of access to the site, the constraints of space for stacking material / machinery, labour etc. constraints put by local regulations, if any, weather conditions at site, general ground / subsoil conditions etc. or any other circumstances which may affect or influence their tenders. Nothing extra shall be payable on this account. The site is available for work. The contractor shall carry out survey of the work area, at his own cost, setting out the layout and fixing of alignment of the building as per architectural and Structural drawings in consultation with the Engineer-in-Charge and proceed further ensuring full structural continuity and integrated and monolithic construction. Any discrepancy between the architectural drawings and actual layout at site shall be brought to the notice of the Engineer-in-charge.

1.2 The Contractor shall, if require by him, before submission of the tender, inspect the drawings in the Office of the concerned Executive Engineer. The Department shall not bear any responsibility for the lack of knowledge and also the consequences, thereof to the Contractor. The information and data shown in the drawings and mentioned in the tender documents have been furnished, in good faith, for general information and guidance only. The Engineer-in-Charge, in no case, shall be held responsible for the accuracy thereof and/or interpretations or conclusions drawn there from by the Contractor and all consequences shall be borne by the Contractor. No claim, whatsoever, shall be entertained from the Contractor, if the data or information furnished in tender document is different or in-correct otherwise or actual working drawings are at variance with the drawings available for inspection or attached to the tender documents. It is presumed that the Contractor shall satisfy himself for all possible contingencies, incidental charges, wastages, bottlenecks etc. likely during execution of work and acts of coordination, which may be required between different agencies. Nothing extra shall be payable on this account.

1.3 The nomenclature of the item given in the schedule of quantities gives in general the work content but is not exhaustive i.e. does not mention all the incidental works required to be carried out for complete execution of the item of work. The work shall be carried out, all in accordance with true intent and meaning of the specifications and the drawings taken together, regardless of whether the same may or may not be particularly shown on the drawings and/or described in the specifications, provided that the same can be reasonably inferred there from may be several incidental works, which are not mentioned in the nomenclature of each item but will be necessary to complete the item in all respect. All these incidental works / costs which are not mentioned in item nomenclature but are necessary to complete the item shall be deemed to have been included in the rates quoted by the contractor for various items in the schedule of quantities. No adjustment of rates shall be made for any variation in quantum of incidental works due to variation / change in actual working drawings. Also, no adjustment of rates shall be made due to any change in incidental works or any other deviation in such element of work (which is incidental to the items of work and are necessary to complete such items in all respects) on account of the directions of Engineer-in-Charge. Nothing extra shall be payable on this account.

1.4 The contractor(s) shall give to the local body, police and other authorities all necessary notices etc. that may be required by law and obtain all requisite licenses for temporary obstructions, enclosures etc. and pay all fee, taxes and charges which may be levy able on account of these operations in executing the contract. He shall make good any damage to the adjoining property whether public or private and shall supply and maintain lights either for illumination or for cautioning the public at night.

1.5 The Contractor(s) shall take all precautions to avoid accidents by exhibiting necessary caution boards day and night. In case of any accident of labours/contractual staffs the entire responsibility will rest on the part of the contractor and any compensation under such circumstances, if becomes payable, shall be entirely borne by the contractor. The Contractor shall take appropriate protection measures like raising wind breakers of appropriate height on all sides of the plot/area using CGI sheets or plastic and/or other similar material to ensure that no construction material dust fly outside the plot area, for this nothing shall be paid.

1.6 The work shall generally be carried out in accordance with the "CPWD Specifications 2009 Vol. I & II" with up to date correction slips, Additional/Particular Specifications, Architectural/Structural drawings and as per instructions of Engineer-in-Charge. Any additional item of the work, if taken up subsequently, shall also conform to the relevant CPWD specifications as mentioned above. Working (both Architect and structural) drawings will be released progressively to the contractor commensurate to the construction schedule approved by Engineer-in-charge.

(a.) The several documents forming the tender are to be taken as mutually complementary to one another. Detailed drawings shall be followed in preference to small scale drawings and figured dimensions in preference to scale dimensions.

(b) There be any difference or discrepancy between the description of items as given in the schedule of quantities, particular specifications for individual items of work (including special conditions) and I.S. Codes etc., the following order of preference shall be observed :

(i) Description of items as given in Schedule of quantities

(ii) Particular specifications

(iii) Special conditions

(iv) Additional Condition

(v) Tender drawings attached

(vi) CPWD Specifications including correction slips issued up to the last date of uploading/submission of tender.

(vii) General Conditions of Contract for BSNL works including correction slips issued up to the last date of uploading/submission of tender.

(viii) Indian Standards Specifications of B.I.S.

(ix) ASTM, BS, or other foreign origin codes mentioned in tender document.

(x) Manufacturer's specifications and as decided by the Engineer-in-Charge.

(xi) Sound Engineering practices or well established local construction practices.

1.7 The Contractor(s) shall take instructions from the Engineer-in-Charge regarding collection and stacking of materials at any place. No excavated earth or building rubbish shall be stacked on areas where other buildings, roads, services and compound walls are to be constructed. The stacking shall take place as per stacking plan. However, if any change is required, the same shall be done with the approval of Engineer-in-Charge.

1.8 Water tanks, taps, sanitary, water supply & drainage pipes, fittings & accessories should conform to bye-laws of local body/corporation, where CPWD specifications are not available. The Contractor should engage approved, licensed

plumbers for the work and get the materials (fixtures/fittings) tested, by the municipal Body/ Corporation authorities wherever required at his own cost. The Contractor shall submit for the approval of the Engineer-in-Charge, the name of the plumbing agency (along with their working experience in recent past) proposed to be engaged by him.

1.9 The contractor shall make his own arrangements for water and for obtaining electric connections if required and make necessary payments directly to the State Govt. departments concerned. Contractor shall get the water tested from laboratory approved by the Engineer-in-charge at regular interval as per the CPWD Specifications 2009. All expenses towards collection of samples, packing, transportation etc. shall be borne by the contractor. Work shall normally be done in a single shift/day. However if the work is required to be executed in more than one shift in a day for meeting the time lines, the Contractor with prior approval of the Engineer-in-charge, shall have to make necessary arrangements for the same and all costs towards the same shall be deemed to have been included in the quoted rates.

1.10 The contractor will have to work according to program of the work, decided by the Engineer-in-charge. The contractor shall also construct a sample unit complete in all respects within time specified by the Engineer-in-charge and this sample unit shall be got approved from the Engineer-in-charge before mass construction is taken up. No extra claim whatsoever beyond the payments due at agreement rates will be entertained from the contractor on this account.

1.11 If as per municipal rules the huts for labour are not to be erected at the site of work by the contractors, the contractors are required to provide such accommodation as is acceptable to local bodies and nothing extra shall be paid on this account.

1.12 Cement bags shall be stored in separate godowns to be constructed by contractor at his own cost as per sketch which is only indicative and actual size will depend on the site requirements as per CPWD Specification 2009 (Vol.I & II) with up to date correction slips and RCC work in pursuance (IS : 456- 2000) with weather proof roof and walls. Each godown shall be provided with a single door with two locks. The keys of one lock shall remain with BSNL Engineer-in-charge of work (or his authorised representative) and that of the other lock with the authorized agent of the contractor at the site of work so that the cement is removed from the godown according to the daily requirement with the knowledge of both the parties and proper account maintained in standard pro forma. The contractor shall construct suitable godowns, yard or any other arrangement at the site of work for storing all other materials so as to be safe against damage by sun, rain, damages, fire, theft etc. at his own cost and also employ necessary watch and ward establishment for the purpose at his cost.

1.13 The contractor shall be fully responsible for safe custody of the materials even if the materials are under double lock system.

1.14 The contractor shall bear all incidental charges for cartage, storage and safe custody of materials and shall construct suitable godowns, yards at the site of work for storing all other materials so as to be safe against damage by sun, rain, damages, fires, theft etc at his own cost and also employ necessary watch and ward establishment for the purpose at his own cost..

1.15 The contractor shall take all necessary precautions to prevent any nuisance or inconvenience to the owners, tenants or occupiers of adjacent properties and to the public in general and to prevent any damage to such properties from pollutants like

smoke, dust, noise. The contractor shall use such methodology and equipment so as to cause minimum environmental pollution of any kind during construction and minimum hindrance to road users and to occupants of the adjacent properties or other services running adjacent/near vicinity. The contractor shall make good at his cost and to the satisfaction of the Engineer-in-Charge, any damage to roads, paths, cross drainage works or public or private property whatsoever caused due to the execution of the work or by traffic brought thereon by the contractor. All waste or superfluous materials shall be carried away by the contractor, without any reservation, entirely to the satisfaction of the Engineer-in-Charge.

1.16 Utmost care shall be taken to keep the noise level to the barest minimum so that no disturbance as far as possible is caused to the nearby occupants/users of building(s), if any.

1.17 The contractor shall be responsible for the watch and ward/guard of the buildings, safety of all fittings and fixtures including all equipment, services provided by him against pilferage and breakage during the period of Installations and thereafter till the building is physically handed over to the Client Department. No extra payment shall be made on this account and no claim shall be admissible on this account.

## **2.0 OTHER CONDITIONS: -**

2.1 The Contractor shall keep himself fully informed of all acts and laws of the Central & State Governments, all orders, decrees of statutory bodies, tribunals having any jurisdiction or authority, which in any manner may affect those engaged or employed and anything related to carrying out the work. All the rules & regulations and bye-laws laid down by Collector, ANDHRA PRADESH State Govt. and any other statutory bodies shall be adhered to, by the contractor, during the execution of work. The Contractor shall also adhere to all traffic restrictions notified by the local authorities. The extra sewerage charges (one time charges for commencement of work) required to be paid to the Municipal Corporation/ other statutory bodies shall be paid by the department and need not be considered by the contractor. All statutory taxes, levies, charges (including water and sewerage charges, charges for temporary service connections and / or any other charges) payable to such authorities for carrying out the work, shall be borne by the Contractor. The water charges (for municipal water connection as well as tanker water) shall be borne by the contractor. Also, if the contractor obtains water connection for the drinking purposes from the municipal authorities or any other statutory body, the consequent sewerage charges shall be borne by the contractor. The clause 31A of the General conditions of contract for BSNL works is not applicable to the tender. The Contractor shall arrange to give all notices as required by any statutory / regulatory authority and shall pay to such authority all the fees that is required to be paid for the execution of work. He shall protect and indemnify the Department and its officials & employees against any claim and /or liability arising out of violations of any such laws, ordinances, orders, decrees, by himself or by his employees or his authorized representatives. Nothing extra shall be payable on these accounts. The fee payable to statutory authorities for obtaining the various permanent service connections and Occupancy Certificate for the building shall be borne by the Department.

## **3.0 Taxes and Royalties**

3.1 DEFINITION: For the purpose of this agreement, the terms 'GST' shall include Central Goods and Service Tax Act, 2017 (CGST), State Goods and Service Tax Act, 2017 (SGST), Integrated Goods and Service Tax Act, 2017 (IGST), Union Territory

Goods and Service Tax Act, 2017(UTGST) and any other taxes levied under the GST related legislation in India as may be applicable.

3.2 RATE : Rate quoted by the contractor shall be inclusive of all taxes/ cess, Building and other Construction Workers Welfare Cess or any other tax or Cess applicable in respect of this contract. The tenders are also advised to examine the various provisions of GST Act 2017 applicable to works contract as defined in Clause 119 of Section 2 of CGST Act. The rate quoted by the tenderer shall also be inclusive of all applicable taxes including GST on work contract service as per GST ACT after duly considering the benefit of Input Tax Credit of GST on material/goods or services used in work. Tenderers must ensure that full benefit of Input Tax Credit (ITC) likely to be availed by them is duly considered while quoting rates. No payment will be released / reimbursed to the contractor on account of GST paid by them.

3.3 INDEMNITY: It is the responsibility of the supplier/contractor to ensure that outwards supply return (GSTR-1) is tiled correctly and to declare correct information on the invoice and GST portal. In case of mismatch because of vender's fault, prompt amendments must be made by the supplier else supplier shall be required to indemnify BSNL of the loss of credit due to mismatch and BSNL shall recover the said amount from vendor. The compliances to be adhered by supplier includes (but is not limited to) the following:

(i) Uploading appropriate invoice details on the GSTN (Goods and Service Tax Network) within the stipulated time.

(ii) Issuing GST compliant invoice/CN/DN. PO issued by BSNL should be referred by supplier for capturing information on the invoice.

(iii) Acceptance of changes made by BSNL on GSTN on account of non-upload or incorrect upload of details on GSTN. Such changes w.r.t. the mis-match are required to be accepted by supplier within the time limit prescribed under the GST law. It must be noted that in case supplier does not accept such changes within the time limit prescribed under GST law, the loss of input tax credit (if any) would be recovered from the supplier. BSNL reserves the right to be indemnified for the credit loss and recover the said amount from the supplier in case BSNL is unable to claim the input tax credit for any-compliance or default or due to lack of diligence on the part of the supplier. Further in case any credit is not received or short credit is received or in case of any error, because of which no credit is received then such equivalent amount is not liable to be paid by BSNL. Where, however the amount has already been paid by BSNL the same is liable to be recoverable or adjustable against subsequent payments.

3.4 INDEMNITY CLAUSE: It is hereby agreed between both the parties that in case any GST and / or cess liability, interest, penalties or any other tax/ duty/ amount/ charge/ liability/ professional costs related to litigation becomes payable by BSNL or input tax credit is denied to BSNL due to failure of the supplier to comply with the relevant laws/ regulations applicable in India or overseas. Supplier undertakes to indemnify BSNL for an amount equal to amount payable by BSNL and the same shall be recovered by BSNL.

3.5 TAX DEDUCTED AT SOURCE: Nothing contained herein the agreement shall prevent BSNL from deducting tax at source if required under GST Act and GST regulations any law or any regulation. Income Tax and surcharges over Income Tax etc. at the rates fixed by the Ministry of finance, Government of India, shall be deducted from all the running and final bills of the contractor. Should there be any increase in rate of Income Tax and surcharge during execution of the contract, the same shall be payable by the contractor. The Workers welfare cess and or any other cess as per the Govt. regulations will also be recovered from the contractor's bill

3.6 GST INVOICE: It shall be the responsibility of supplier to raise appropriate tax invoice as per provisions of GST Act. BSNL reserves the right to be indemnified for the credit loss in case BSNL is unable to claim the input tax credit for any non-compliance / default in raising appropriate invoice by supplier. Further all invoices should be sent to BSNL promptly. Further the supplier is required to comply following requirement w.r.t. issuance of invoice: \*All the details of supplier (name, address, GSTIN/ unregistered vendor, place of supply, SAC/HSN code etc.,) and other mandatory details shall be mentioned on the invoice. \*Invoice/DN/CN need to be issued timely within the prescribed under GST law. \*In case of any deficient supply, BSNL shall convey the same in a reasonable time to enable the supplier to issue credit note and take tax adjustment. \*It would be the responsibility of the supplier to declare correct information on invoice and GST portal viz. the amount, the place of supply, rate of tax etc. In case, the eligibility of input tax credit is questioned or denied to BSNL on account of default by the supplier, the same would be recovered by BSNL from the supplier. \*Registered location of the both the parties i.e. BSNL and supplier should be mentioned in the agreement with GSTIN No. Further, supplier should raise invoices at the registered premise of BSNL for availment of credit and ensure that the place of supply as per GST law is same as registered premise. \*It shall be the responsibility of supplier to raise invoice within the prescribed timelines. \*E-Way bill number should be mentioned on the invoices.

3.7 DEBIT NOTE: The supplier acknowledges and agrees to issue appropriate debit note/ credit note as prescribed under GST Act and send to BSNL within the prescribed time. All documents should be received well in advance so as to enable BSNL to claim proper credit wherever applicable. Further it shall be the responsibility of supplier to declare the details of such credit note in the return for the month during which such credit note has been issued but not later than September following the end of the financial year in which such supply was made, or the date of furnishing of the relevant annual return, whichever is earlier. BSNL reserves the right to be indemnified for the credit loss by supplier in case BSNL is unable claim the input tax credit for any non-compliance or default or due to lack of diligence on the part of the supplier. 3.8 PAYMENT TERMS: BSNL will make payment to supplier only after the invoice is uploaded by supplier in GST outward return i.e. GSTR-1, and credit as GST is available (reflected in GSTR-2A) to BSNL wherever applicable. Further it is agreed that for claiming payment, the following documents are to be submitted by the Supplier to the paying state along with appropriate invoice.

1. Invoice along with e-way bills.
2. Delivery challans.
3. Consignee Receipt (L.R)
4. Each equipment shall be accompanied by supplier certification confirming adherence to all standards for materials and workmanship quality. On copy of the same shall be sent by the supplier to state quality head/ state operation heads for record.
5. Bill of materials.
6. Any other document as may be demanded by BSNL. Supplier hereby agrees that it will be solely responsible for performing all compliances and making payments of GST, Cesses, interest, penalties of any other tax/ duty/ amount/ charge/ liability arising either out of laws/ regulations applicable in India and overseas or because of demand/ recovery initiated by any revenue authority under laws/ regulations applicable in India or overseas.

3.9 PURCHASE ORDER: It is understood between the parties that supplier shall raise invoice basis purchase order issued by BSNL. In case of any deviation or



disagreement by supplier on place of supply, billing location, HSN code/ SAC Code stated on PO, it shall be the responsibility of supplier to intimate BSNL well in advance. Further, in case supplier raises the invoice on an address other than agreed, it shall be the responsibility of the supplier to modify the invoice.

**3.10 PLACE OF SUPPLY:** For the purpose of this agreement, place of supply under GST Act shall be the place of supply as determined under purchase order raised by BSNL. It shall be the responsibility of supplier to intimate BSNL well in advance in case of deviation / disagreement with the place of supply as determined in PO.

**3.11 DEFICIENT SUPPLY/INCOMPLETE SUPPLY/REJECTED SUPPLY:** Each party to contract agrees that in case of any deficient supply or incomplete supply or rejected supplier, it shall be the responsibility of supplier to issue GST compliance credit note within the reasonable time and tax and take tax adjustment. In case the supplier fails to issue proper credit note within the time stipulated under the GST law, the taxes charged and not adjusted would be borne by the supplier

**3.12 ADVANCE PAYMENT:** Where in terms of the agreement, BSNL pays advance amount to supplier for supply of goods/ services; it shall be the responsibility of supplier to issue GST compliant receipt vouchers or such other document as may be prescribed to BSNL. Further supplier would be registered to issue refund voucher as prescribed under GST Act in case no supply is made and no invoice is raised.

**3.13 COMPLIANCE RATING:** Supplier shall be liable to comply with all the compliances as may be prescribed to ensure that compliance rating is not reduced below the prescribed limit as laid down under GST Act and GST regulations. Supplier shall be required to submit a self- declaration from time to time that, they are not black-listed on the GST portal. Notwithstanding anything contained in agreement, in the event of black listing of supplier i.e. compliance rating reduced below the prescribed limit, the amount related to tax shall be paid to supplier only on receipt of input tax credit to BSNL.

**3.14 E-WAY BILL:** It shall be the responsibility of supplier to obtain e-way bill in case of movement of goods exceeding limit as prescribed under the GST Act. Supplier would indemnify BSNL in case of any non- compliance or default or due to lack of diligence on the part of the supplier to comply with the e-way bill requirement.

**3.15 PENALTY:** It is agreed by supplier that in case of any deviation, default or negligence on the part of supplier due to which it is liable to pay penalty to BSNL, the same shall be recovered by BSNL from supplier along with applicable GST tax ( as may be applicable).

**3.16 LIQUIDATED DAMAGES:** GST (if applicable) on account of liquidated damages due to delay in supply of goods would be borne by supplier.

**3.17 SET OFF:** It is agreed that in case of set off of the security deposit against any claim of the purchaser or BSNL or such other person or person(s) for payment of a sum of money arising out of this contract or under any other contract made by the supplier with the Purchaser or BSNL or such other person(s) contracting through the BSNL, the GST on such set off will be borne by the supplier.

**3.18 MISCELLANEOUS:** Supplier agrees to share the monthly information with BSNL which would be uploaded by the supplier in its GSTR-1 along with the information of input credit in such month. It shall be the responsibility of vendor / supplier to provide reconciliation statement of all the supplies made by it including issuances of

credit note, debit note or other documents as prescribed, within 30th September following the end of relevant financial year.

3.19 Maintenance of Records : It is important for the contractor to maintain separate accounts & records as per Accounts & Records Rules 2017 for this work showing :

(a) the names and addresses of the persons on whose behalf the works contract is executed; (b) description, value and quantity (wherever applicable) of goods or services received for the execution of works contract;

(c) description, value and quantity (wherever applicable) of goods or services utilized in the execution of works contract;

(d) the details of payment received in respect of each works contract; and

(e) the names and addresses of suppliers from whom he received goods or services.

The GST paid shall also be maintained. This is particularly important for Input tax crediting under new GST Act, and also vital to keep away any ambiguity or dispute related thereof with the BSNL. BSNL will not entertain any extra claim due to lacking on contractor's part in this respect or on in any other respect in obedience of statutory rules / guidelines issued by the Competent Govt. in this regard.

3.20 ROYALTY: Any royalties at the prevalent rates shall have to be paid by the contractor on all the boulders / stones, metals, shingle, sand, bajri etc. or any other material collected by him for the execution of the work, direct to the Revenue authority or authorised agent of the State Govt. or Central Govt concerned

#### 4.0 ADDITIONAL CONDITIONS FOR TOWER ERECTION

The following conditions shall be applicable for Tower erection in addition to other conditions given in tender form. Nothing extra shall be paid on these accounts unless otherwise mentioned:-

- 4.1 The works includes handing over of tower to the concerned BSNL unit after acceptance testing.
- 4.2 The tower material shall be stored by the contractor at site of work in such a way so as to prevent distortion and corrosion and nothing extra shall be paid on this account.
- 4.3 The contractor shall arrange at his own expense all tools, plants and equipments for execution of the works within the time schedule specified in the individual work orders. No accommodation shall be provided by the BSNL either for storage of materials or for his staff and he shall make his own arrangement.
- 4.4 For erection & painting of the tower all safety precautions shall be taken in accordance with safety code for erection of structural steel work.
- 4.5 Agency executing the erection of towers should take all precautions to see that no damage occurs to the adjoining structures while executing the work.
- 4.6 Foundation bolts shall be embedded and cast monolithic with concrete as per approved drawings.
- 4.7 The agency has to confirm after erection of tower that the tilt, twist and rotation of the tower are within specified limits. The agency also has to check the verticality of the tower after erection as per specifications. The verticality of tower shall be within the limit of (+ / -) 25mm as given in IS:12843 : 1989, Table iii(b) (i.e. the bottom of the line joining to the centre of the top of the tower and the centre of the base of the tower shall be within this limit. This may be checked in the field after the erection of tower at site.
- 4.8 The site of work may be changed by the Engineer-in-charge due to exigencies of the service within / adjoining revenue districts for which nothing extra shall be payable except the approved contract rates.
- 4.9 Tower fabrication is to be done strictly as per written orders of Engineer-in-Charge. Supply and tower erection will be as per time schedule given by Engineer-in-Charge.
- 4.10 All materials shall be straightened and or flattened by pressure unless required for a shape of curvilinear form before fabrication and shall be free from twists. Straightening shall not damage the material. The parts when assembled adjacent surfaces shall be in close contact. Hammering shall not be permitted for straightening.
- 4.11 Painting of galvanized steel towers is required to give additional protection and to give 'Day warning' as per additional protection and civil aviation specifications. Painting shall be done by specialized agencies only and all safety precautions shall be taken in accordance with the safety code for erection of steel tower.
- 4.12 APPLICATION OF ETCH PRIMER AND PAINT  
[i] After cleaning the tower members a first coat of an etch primer has to be applied to the tower structure members. The etch primer consists of polyvinyl butyl phosphoric acid catalyst and zinc chromate base and are supplied separately. They should be mixed before use in specified ratio of four parts base to one part catalyst or as specified by the manufacturer. The primer is to be applied uniformly to get a very thin and almost invisible coat and every part of the tower structure should be treated with this primer. Subsequent painting of the zinc chromate primer should be

commenced within two hours of application of the primer. The etch primer once mixed should be used up immediately.

[ii] After 48 hours of application of primer, the first coat of the paint should be applied carefully, well brushed into the surface, corners, crevices etc. should be uniform and even. The second coat of paint should be applied 48 hours after the application of the first coat. Care should be taken to see that the painting is not carried out at the hottest time of the day and air pockets should be avoided.

[iii] No driers such as Litharge or Turpentine are to be used. The practice of mixing kerosene oil with paint is strictly forbidden.

(iv) The primer and the paints used should be got approved prior to their use.

(v) The painting shall conform to civil aviation guideline.

[vi] To conform to Civil Aviation regulations the towers shall be painted in alternate bands of international orange and international white, terminating with orange at the top and the bottom, Height of each band should be not exceed 6 metres and should not be less than 0.5 mt. The correct shade for the international orange corresponds to ISI shade 592 as given in the Indian Standard Institution Publication-colours for ready mixed paint, IS: 1755, IS: 2732-1964.

#### 4.13 RECTIFICATION / REPAIRS TO DAMAGED PARTS

Damaged components of the steel work should be rectified as per directions of the Engineer-in-charge and minor damages to the galvanizing shall be made good by cleaning the damaged portion free of all rust and applying a zinc rich paste to the same thickness as the original coat of galvanizing.

#### 4.14 ERECTION

(i) It shall be ensured that structural components with correct markings as indicated in drawings are used in correct position.

(ii) At the base connections the foundation bolts shall be located correctly using templates and grouted ensuring that all templates are in one horizontal plane. After erection of the first panel, its verticality shall be checked and corrected if necessary.

(iii) Further erection work shall proceed panel-by-panel, bolts and nuts shall be finally tightened up to the torque specified using torque wrenches. Verticality of the tower shall be checked after complete erection of each panel. Each panel shall be completed in all respects and shall have the approval of the Engineer-in-charge before proceeding to the next panel.

(iv) If a panel is to be left incomplete, it shall be ensured if necessary, by erection of temporary bracings that all the members erected form a stable configuration, sufficient to withstand dead and wind loads.

(v) The joint shall be made by drawing the light members into position with barrel drifts. Drifts may be used on the heavier members only to secure them in correct position. No member shall be force fitted. Any error in steel work, which prevents the assembly and fitting up to the parts by the proper use of drifts, shall be investigated immediately. If any defect or deficiency in the member comes to notice, the same shall be rectified as per directions of the Engineer-in-Charge.

(vi) Hot dip galvanized contact surfaces of joints shall be free of oil, paint and lacquer or other coatings and shall be scored by wire brushing or light blasting.

**SPECIAL CONDITION FOR ERECTION OF STEEL TOWER( B)**

The following conditions shall be applicable in addition to other conditions given in tender form. Nothing extra shall be paid on these accounts unless otherwise mentioned.

- 1.0** All structural steel members like high tensile steel angles, Tees and Plates etc. shall be conforming to IS: 2062-2006 and IS: 8500-1991. The contractor shall procure all structural steel members i.e. Angles, tees, Plates, nuts & bolts etc. (as required) conforming to relevant I.S. Codes from main producers as approved by the Ministry of Steel namely SAIL, TISCO and RINL or BIS approved. However, in case of procurement from other BIS approved manufacturers, prior approval of BSNL shall be required and materials from approved manufactures are only allowed to be used in the work. However, the material procured from other BIS approved manufacturer may also be allowed provided the samples of the materials proposed to be used are got tested by the Engineer-in-charge, and the same is successfully passed on all parameters as per provisions of the relevant I.S. Codes. In case the test results indicate that the steel arranged by the contractor does not conform to I.S. Codes, the same shall stand rejected and shall be removed from the site of work within three days from date of receipt of written order of the Engineer-in-charge to do so. The proof of manufacturer of structural steel members from virgin billets purchased from main steel producers is to be furnished by the agency before tower members/ templates are cut.
- 2.0** The Nuts, bolts, plain / spring washers shall be procured from producers approved by Power Grid Corporation of India or equivalent. Nuts and bolts of grade 5.6 conforming to relevant IS codes as per IS: 6639-1972, IS: 12427-2001, IS: 1363 (Part I)-1992 IS: 1364-2002, IS: 1367-2002 (Part 8) and plain washers as per IS: 6610-1972 & spring washers of type 'B' as per IS: 3063-1994 shall be used.
- 3.0** Erection of the tower and painting shall be done through specialized agencies only and all safety precautions shall be taken in accordance with safety code for erection of structural steel work (IS: 7205)
- 4.0** Agency executing the Transportation and erection of towers should take all precautions to see that no damage occurs to the adjoining structures while executing the work. Also, all the workers on the execution site should be adequately insured along with third party insurance for any unforeseen injury to passer-by or occupants of adjoining buildings. Agency shall be solely responsible for any mishap on these accounts.
- 5.0** The site of work may be changed by the Engineer-in-charge due to exigencies of the service within/ adjoining revenue districts for which nothing extra shall be payable except the approved contract rates.
- 6.0** The mounting structure for antenna shall be of steel work and shall be such as to allow a nominal azimuth adjustment of (+/-) 5 degree and an elevation adjustment of (+/-) 5 degree. The design of antenna supporting cage and platform shall be in accordance with the specification given.

## 7.0 STRAIGHTENING

All materials shall be straightened and or flattened by pressure unless required for a shape of curvilinear form before fabrication and shall be free from twists. Straightening shall not damage the material. The parts when assembled adjacent surfaces shall be in close contact. Hammering shall not be permitted for straightening. Sharp kinks or bends shall be rejected.

## 8.0 CUTTING

Cutting may be affected by shearing, flame cutting or sawing. The surface so cut shall be clean, smooth, square and free from any distortion.

## 9.0 HOLES

- (i) Holes for bolts shall be drilled using jigs provided with hardened steel bushes and shall not be punched or formed by flame cuttings process. All drill burns shall be completely removed. Drilling of holes shall be done before galvanizing.
- (ii) Holes on both sides of the bend line in a bent member shall be drilled after bending. The relative position of these holes shall be checked using proper templates.
- (iii) Holes shall be circular and of a diameter 1.5 mm more than the dia. of the bolt.
- (iv) Holes shall be drilled at right angles to the surface of the plates or angles, unless otherwise specified.
- (v) The accuracy of location of hole shall be such that for any group when assembled they shall admit the bolt at right angles to the plane of the connection.
- (vi) Spacing of bolts and edge distances shall be in accordance with IS 800-1984.
- (vii) Butting ends of main leg members shall be cut with saw. Flame cutting or shearing shall not be permitted.

## 10.0 TOLERANCES

Fabrication tolerance shall not exceed those specified in IS 7215-1974 as applicable to group "B" structure.

## 11.0 GALVANIZING

- 11.1 Hot dip galvanizing protects steel from corrosion by providing a thick, tough metallic zinc coating, which completely covers the steel surface and seals it from the corrosive action of its environment. The galvanized coating provides outstanding abrasion resistance. Where there is damage or minor discontinuity in the coating of zinc, protection of the steel is maintained by the cathodic action of the surrounding galvanized coating. Metallic zinc is strongly resistant to the corrosive action of normal environments and hot dip galvanized coatings therefore provide long-term protection for steel.

11.2 Zinc for galvanizing should conform to IS 13229-1991.

11.3 All members and fasteners of Tower member/ bolts are to be hot dip galvanized. Galvanizing of members of the tower shall conform to IS 4759 and 2629. Bolts and other fasteners shall be galvanized in accordance with IS 1367 (part 13). The total mass of galvanizing coating shall not be less than 610gm/sqm (i.e.85 micron) thickness.

## **12.0 PAINTING**

Painting of galvanized steel towers is required to give additional protection and to give 'Day warning' as per additional protection and civil aviation specifications. Painting shall be done by specialized agencies only and all safety precautions shall be taken in accordance with the safety code for erection of steel tower.

### **12.1 COASTAL AREA**

All steel galvanized sections like L angles, flats, tubular sections, bolts and nuts etc. shall be given a coat of ETCH primer. Zinc Chromate primer shall be applied over ETCH primer. Synthetic enamel paint of two or more coat thickness shall be applied over the above.

### **12.2 NON COASTAL AREA:**

In the non-coastal area Zinc Chromate may be applied instead of zinc phosphate painting shall be done in accordance with IS 1477 Part I & II. Priming coat of zinc Chromate/phosphate shall conform to IS 104.

### **12.3 CLEANING**

Dust, grease and rust on galvanized tower members namely angles, tees, plates railing, ladders, racks etc. shall be removed by wire brushing and cleaned with a piece of cloth.

### **12.4 APPLICATION OF ETCH PRIMER**

After cleaning the tower members a first coat of an etch primer has to be applied to the tower structure members. The etch primer consists of polyvinyl butyl phosphoric acid catalyst and zinc chromate base and are supplied separately. They should be mixed before use in specified ratio of four parts base to one part catalyst or as specified by the manufacturer. The primer is to be applied uniformly to get a very thin and almost invisible coat and every part of the tower structure should be treated with this primer. Subsequent painting of the zinc chromate primer should be commenced within two hours of application of the primer. The etch primer once mixed should be used up immediately.

### **12.5 APPLICATION OF PAINT**

After 48 hours of application of primer, the first coat of the paint should be applied carefully, well brushed into the surface, corners, crevices etc. should be uniform and even. The second coat of paint should be applied 48 hours after the application of the first coat. Care should be taken to see that the

painting is not carried out at the hottest time of the day and air pockets should be avoided.

**12.6 SPECIAL REMARKS**

(i) The painting shall be done carefully so that all corners and crevices of the mast receive the paint and no base surface is left exposed anywhere. Special care is to be taken in applying paint at the place where galvanized coating has got removed.

(ii) No driers such as Litharge or Turpentine are to be used. The practice of mixing kerosene oil with paint is strictly forbidden.

(iii) The primer and the paints used should be got approved prior to their use.

(iv) The painting shall conform to civil aviation guideline.

**12.7 PAINTS**

Paints shall be synthetic enamel of the best quality and anticorrosive and withstand exposures to outside conditions. They should be of standard quality equivalent to synthetic enamel paint of Shalimar or Berger paints or Asian paints.

**12.8 ORANGE AND WHITE BANDS (DAY MARKINGS)**

To conform to Civil Aviation regulations the towers shall be painted in alternate bands of international orange and international white, terminating with orange at top and the bottom, Height of each band should be not exceed 6 metres and should not be less than 0.5 mt. The correct shade for the international orange corresponds to ISI shade 592 as given in the Indian Standard Institution Publication-colours for ready mixed paint, IS: 1755, IS: 2732-1964.

**13.0 RECTIFICATION / REPAIRS TO DAMAGED PARTS**

13.1 Damaged components of the steel work should be rectified as per directions of the Engineer-in-charge minor damages to the galvanizing shall be made good by cleaning the damaged portion free of all rust and applying a zinc rich paste to the same thickness as the original coat of galvanizing.

13.2 Members of components, which are dented, bent or twisted in transit or by handling during erection shall not be used on work but shall be replaced as directed by the Engineer-in-Charge.

**14.0 ERECTION**

(i) It shall be ensured that structural components with correct markings as indicated in drawings are used in correct position.

(ii) At the base connections the foundation bolts shall be located correctly using templates and grouted ensuring that all templates are in one horizontal plane. After erection of the first panel, its verticality shall be checked and corrected if necessary.

(iii) Further erection work shall proceed panel-by-panel, bolts and nuts shall be finally tightened up to the torque specified using torque wrenches.



Verticality of the tower shall be checked after complete erection of each panel. Each panel shall be completed in all respects and shall have the approval of the Engineer-in-charge before proceeding to the next panel.

(iv) If a panel is to be left incomplete, it shall be ensured if necessary by erection of temporary bracings that all the members erected form a stable configuration, sufficient to withstand dead and wind loads.

(v) The joint shall be made by drawing the light members into position with barrel drifts. Drifts may be used on the heavier members only to secure them in correct position. No member shall be force fitted. Any error in steel work, which prevents the assembly and fitting up to the parts by the proper use of drifts, shall be investigated immediately. If any defect or deficiency in the member comes to notice, the same shall be rectified as per directions of the Engineer-in-Charge.

(vi) Packing plates shall be provided at the joints as shown on approved drawings in order to make up the change in the thickness of the parts jointed. No other packing plates shall be used.

(vii) Hot dip galvanized bolts and nuts and washers of grade 5.6 shall be provided in all connections involving leg member's main diagonals as well as horizontal through inter section of the main diagonals in k brace, panels and plain bracings

(viii) Hot dip galvanized contact surfaces of joints providing with hot dip galvanized bolts nuts and washers shall be free of oil, paint and lacquer or other coatings and shall be scored by wire brushing or light blasting after galvanization and prior to assembly.

(ix) Bolts used for connections shall not be less than 12mm dia. And the length shall be such that not more than half of the pitch of the thread lies inside the grip length. The threaded portion of the bolt shall protrude by not less than 3mm beyond the lock nut after it has been fully tightened.

(x) Bolts and nuts shall be tightened by using the part turn method. The nut shall be brought to the snug, tight position after which it will be given a further half to one turn depending upon the length of the bolt. In joints with several fasteners all the nuts bolts shall be brought to the snug tight position, before tightening further systematically. The nut rotation from snug tight condition is given in the table below:

**NUT ROTATION FROM SNUG TIGHT CONDITION**

| Bolt length<br>(as measured from underside of head to extreme end of point) | Bolts faces<br>Normal to bolt axis. | One face normal<br>To bolt axis & other face sloped not more than 1:20 (bevel washer not used) | Bolt faces slope not more than 1:20 from normal to bolt axis (bevel washers not used). |
|---|-------------------------------------|--|--|
| Upto including 4 dia.   | 1/3turn                             | 1/2 turn   | 2/3 turn   |
| Over 4 dia. But not exceeding 8 dia.  | 1/2 turn                            | 2/3 turn   | 5/6 turn   |
| Over 8 dia. But not exceeding 12 dia.                                       | 2/3 turn                            | 5/6 turn   | 1 turn.  |

- (xi) Alternatively, nuts may be tightened using a calibrated wrench so that the proof load of the bolt specified in IS 1367 is achieved "snug tight is defined as the tightness attained by a few impacts of an impact wrench or the full effort of a man using an ordinary spud wrench. Following this initial operation, bolts shall be placed in remaining holes in the connection and brought to snug tight position".

#### 14.1 VERTICALITY TOLERANCES

The verticality of towers of different heights shall be within the provisions of Table-1(III)(b) of IS:12843:1989, viz.  $+ H / 1000$  or  $\pm 20$  mm (whichever is less) and  $H/1500$  or  $\pm 25$  mm (whichever is less) for towers up to and including 30M height and over 30M height respectively. (H refers to the height of tower).

#### 14.2 WORKING PLATFORM AND LADDER

A set of 3 (three) platform with railing as per the drawing shall be provided at height of 34M, 36.4M and 38.8M respectively. A resting platform shall also be provided at a height of 20M from the ground level as per the details provided in the specifications. A ladder up to the top most platform inside the tower and cable tray assembly shall also be provided as per the specifications attached.

A working platform with railings is provided at a height from where erection and maintenance of Antenna, Aviation lamps, Lightning arrester etc. can be done easily. A ladder from rooftop up to top of platform at tower is provided with safety rings. Width of ladder shall be minimum 300 mm and safety ring of 750 mm shall be provided. Entry from ladder up to top of platform shall be such that no extra efforts will require to reach at the platform. Width of platform should be minimum 600mm.

#### 15.0 WAVE GUIDE

A tray of galvanized m.s. angle and flats of 600 mm width shall be provided as wave-guide to carry the feeder cables from Antenna fixed at top of tower up to the BTS. This shall not bend sharply at right angles at turning point to avoid damage to running feeder cables.

Waveguide is provided in towers to carry the feeder cables from Antenna fixed at top of tower up to Transmission room. It is a tray of galvanized M.S. angles and Flats of 600mm width.

- (a) Wave guide should enter straight into the termination at last length.
- (b) Precaution should be taken to avoid twisting of the wave-guide while tightening the nut of the termination flange.
- (c) Twisting can be permissible by an amount of 1 over 5 meters of wave guide length.
- (d) Bend in the wave-guide should be less than 2M diameters.
- (e) Wave-guide should be clamped suitably at all the stages on wave-guide rack and at proper places at approx. every 2 meters length in bend portion.

**16.0 MEASUREMENTS**

- 16.1 Unless otherwise specified, for new members required for erection, the payment shall be made on weight basis. The weight shall be calculated as under.
- 16.2 The weight of all the structural members including tees, angles, channels, flats, rods, bars, tubes, gusset plates, splice plates, chequered plates, cleats, brackets, antenna, holding pipes, lightening arrestor pipe etc. shall be measured as given below.
- 16.3 The weight of nuts & bolts, washers, packing pieces etc. shall not be measured for payment purposes.
- 16.4 The actual dimensions (length & width) of the members shall be measured in running meters correct to a centimeter and the thickness shall be measured correct to a millimeter.
- 16.5 For calculation of weight, the coefficients as given in the standard tables of BIS codes shall be followed.
- 16.6 In case the coefficients are not available in BIS Codes, than the coefficient available in other standard tables shall be followed.
- 16.7 In case the coefficients are neither available in BIS Codes nor in other standards, than the coefficients shall be derived based on actual weight taken at site.
- 16.8 In case none of the above is possible, the actual weight shall be measured at site before erection.
- 16.9 No deductions shall be made for rivet or bolt holes made as per drawings and no additions shall be made in weight due to galvanizing of the members.
- 16.10 If actual weight measured at site, is less than the weight as per BIS codes/ other standards, then the actual weight shall be measured.

**17.0 PROTECTION OF LIFE, PROPERTY AND EXISTING FACILITIES :**

- 17.1 The contractor is fully responsible for taking all possible safety precaution during preparation for and actual performance of the works, and for keeping the construction site in a reasonable safe condition. The Contractor shall protect all life and property from damage or losses resulting from his construction operations and shall minimize the disturbance and inconvenience to the public.
- 17.2 In this connection, the attention of the contractors are drawn to the safety measures and precautions including code of conduct while safely carrying out the work and also detailed Engineering Instructions enumerated in this tender document.
- 17.3 The contractor shall be solely liable for all expenses for and in respect of repairs and / or damage occasioned by injury of or damage to such underground and over-ground structures or other properties and undertake to indemnify and keep indemnified the BSNL from and against all actions, cause of actions, damages, claims and demands what-so-ever either in law or in equity and all losses and damages and costs (inclusive between attorney and client), charges and expenses in condition therewith and / or incidental thereto.

- 17.4 The current market value of any commodities lost as a result of any damage to the aforesaid existing facilities shall be paid by the contractor together with such additional sums necessary to liquidate the personal or property damages resulting there from.

**18.0 INSURANCE**

Without limiting any of his other obligations or liabilities, the contractor shall, at his own expense, take and keep comprehensive insurance including third party risk for the plant, machinery, materials, etc. brought to the site and for all the work during the execution. The contractor shall also take out workmen's compensation insurance as required by law and undertake to indemnify and keep indemnified the BSNL from and against all manner of claims and demands and losses and damages and cost (including between attorney and client) charges and expenses that may arise in regard the same or that the BSNL may suffer or incur with respect to and/or incidental to the same.

**19.0 INDEMNITIES:**

- 19.1 The contractor shall all the times hold the BSNL harmless and indemnify from against all actions, suits, proceedings, works, cost, damages, charges, claims and demands of every nature and descriptions brought or procured against BSNL, its officers, and employees and forthwith upon demand and without protest or demur to pay the BSNL any or all losses and damages and cost (inclusive between attorney and client) and all costs incurred in endorsing this or any other indemnity or security which the BSNL may now or at any time have relative to the work or the contractor's obligation or in protecting or endorsing it's right in any suit or other legal proceedings, charges and expenses and liabilities resulting from or incidental or in connection with injury, disease or disablement to or death of any person(s) including employee(s) of the contractor or damage to property resulting from or arising out of or in any way connected with or incidental to the operations caused by the contract documents. In addition the contractor shall reimburse the BSNL or pay to the BSNL forthwith on demand without protest or demur all costs, charges and expenses and losses and damages otherwise incurred by it in consequences of any claims, demand and actions which may be brought against the BSNL arising out of or incidental to or in connection with the operation covered by the contract.
- 19.2 The contractor shall at his own cost at the BSNL request defend any suit or other proceeding asserting a claim covered by this indemnity, but shall not settle, compound or compromise any suit or other finding without first consulting the BSNL.
- 20.0** The work shall be executed as per programme approved by the Engineer-in-charge of the work. No claim whatsoever will be entertained on this account.
- 21.0** No payment shall be made to the contractor for any damage caused during the execution of work because of cause(s) not covered under Clause 43 of the Contract. The damage to work will be made good by the contractor at his own cost, and no claim on this account shall be entertained.
- 22.0** Some restrictions may be imposed by the security staff etc. on the working and/ or movement of labour, materials etc. and the contractor shall be bound

to follow all such restrictions/ instructions and nothing extra shall be payable on this account.

- 23.0** The contractor shall comply with proper and legal orders and directions of the local or public authority or municipality and abide by their rules and regulations and pay all fees and charges which he may be liable and nothing extra shall be payable on this account. The work shall be carried out without infringing on any of the local Municipal Bye-Laws.
- 24.0** The rate for every item of work to be done under this contract shall be for all heights, depths, lengths and widths of the structure (except where specially mentioned in the item) and nothing extra will be paid on this account.
- 25.0** The contractor shall maintain in good condition all work during execution till completion of entire work allotted to him.
- 26.0** The contractor shall cause the site to be cleared thoroughly of rubbish, scaffolding materials etc. before the actual date of completion of the work as well as time to time as per directions of the Engineer-in-charge of the work.
- 27.0** The contractor shall make his own arrangement for obtaining electrical connection, if required and make necessary payments directly to the department concerned.
- 28.0** The contractor shall be responsible to arrange at his own cost all necessary tools and plants required for execution of the work.
- 29.0** The rate of all items of work, shall, unless clearly specified otherwise, include cost of all labour, material and other incidental inputs involved which are essential to complete the work as per entire satisfaction of the Engineer-in-Charge.
- 30.0** For the purpose of recording measurement for preparing running account bills, the abbreviated nomenclature indicated in the standard schedule of rates relevant to the contract may be adopted. The abbreviated nomenclature shall be taken to cover all the materials and preparations as per the complete nomenclature of the relevant items in the agreement and other relevant specifications.
- 31.0** In case of items for which abbreviated nomenclature is not available in the standard relevant schedule of rates and also in the case of extra and substituted items of work for which abbreviated nomenclature is not provided in the agreement the full nomenclature of items shall be reproduced in the measurement books and bill forms for running account bills.
- 32.0** Whenever any reference to any Indian standard specifications occurs in the documents relating to this contract the same shall be inclusive of all amendments issued thereto if any, up to the date of receipt of the tender.
- 33.0** The contractor shall take instruction from the Engineer-in-Charge regarding collection and stacking of materials at any place.
- 34.0** The site of work should be seen by the tenderer before quoting his rates with respect to approaches to the site and conditions of the same. If any approach

road from main road is required at the site or existing approach is to be improved and maintained, for cartage of materials by the contractor, the same shall be provided, improved and maintained by the contractor at his own cost.

- 35.0** If as per municipal rules the huts for labourers are not to be erected at the site of work by the contractor, the contractors are required to provide such accommodation as is acceptable to local bodies and nothing extra shall be paid on this account.
- 36.0** The contractor shall take all precautions to avoid all accidents by exhibiting necessary caution boards such as day and night boards, speed limit boards and flags, red lights and providing barriers etc. He shall be responsible for all damages and accidents caused due to negligence on his part. No hindrance shall be caused to traffic during the execution of work. Nothing extra shall be paid on this account. Any damage done by the contractor to any existing work during the course of execution of the work awarded to him shall be made good by him at his own cost.

#### **4.15 ACCEPTANCE TESTING (AT)**

The completed work shall be inspected for approval for "Acceptance Testing". After completion of work, the contractor will offer the completed work for inspection and approval of the A/T as per the directions of the Engineer-in-charge and he will also has to provide necessary assistance to the AT team in carrying out inspection and obtaining AT clearance from them. If the completed work is not found satisfactory as per the prescribed specifications, corrective measures pointed out by the A.T team and ordered by the Engineer-in-charge shall be carried out immediately by the contractor without any additional expenditure liability to the BSNL and nothing extra shall be payable on this account. **Security Deposit shall be released after successful completion of the A.T.**

CONTRACTOR  
ENGINEER[C]

EXECUTIVE

**APPENDIX –A****LIST OF PREFERRED BRANDS / MANUFACTURERS / MAKES FOR CIVIL****WORKS.**

NOTE: - 1) A List of Preferred Brand Names of Various Materials / Products are shown below for usage in execution of Work. However, Approved equivalent material of any other Specialized Companies / Firms may also be used, in case it is established that the Brands Specified below are not available in the market and subject to Approval of the alternate Brand by the Engineer In charge.

2) It must be ensured, in general, that all materials to be used in the works shall bear BIS Certification mark. In cases where for a particular material/product, BIS Certification Mark is not available, then the material proposed to be procured can be used subject to the condition that it should conform to CPWD Specifications and relevant BIS codes. In such cases written approval of the Engineer-in -Charge shall be obtained before use of such material in their works.

3) The list given below does not absolve the Executing Agency from their responsibility for using these products. It is only after, they are satisfied about the quality and performance, the products shall be used. To achieve this, proper check on the quality of the product, actually to be used, should be exercised.

| <b>Material</b>  | <b>Preferred Make</b>   |
|--|---|
| Grouting Compound.   | Fosroc, HILTI, Laticrete  |
| Cement   | ACC, Ultratech, Jaypee Cement, Vikram , J.K. Cement, Shree Cement, Cement Corporation of India, Gujarat Ambuja Cement |
| Water Proofing Compound  | Fosroc, CICO, SIKA, Pidilite, , BASF.   |
| Reinforcement Steel  | SAIL, TISCO, RINL   |
| Ready Mix Concrete   | Ultra Tech, ACC, LAFARGE , RMC Ready Mix (India), RDC Concrete (India) Pvt.Ltd.                                       |
| Bitumen impregnated fiber board  | Shalitek board (S/S) of shalimar products or equivalent   |
| Expansion Joint sealing compound   | Shalimar/ Capitex   |
| Non-asbestos fiber cement board  | Charminar, Visakha  |
| Admixtures   | Fosroc, Pidilite, Roff.   |
| Structural Steel Sections  | TATA, SAIL,RINL, JINDAL Steel & Power Ltd., J SW  |
| Fly ash cement (Non modular) bricks conforming to IS:12894-2002, class designation 7.5 | M/s Prakash International Ltd., M/s Aparna Enterprises Ltd.   |
| Rigid PVC pipes-working pressure 4kg/cm <sup>2</sup>                                   | Supreme, Prince, Ashirwad, Sudhakar, Astral, Finolex  |
| Flush door shutter   | Kitply, Standard, Kutty, Anand, Greem Ply, Century  |
| LAMINATES  | Greenlam /Formica/ Merinolam / Royal Touche /Century  |
| Phenol formaldehyde synthetic resin type adhesive ( Glue )                             | Fevicol / Vamicol   |

|  |  |
|--|--|
| Mortice latch & lock.  | Dorset, Dorma or approved equivalent                     |
| Plyboard.  | Green Ply, Garnet, Century, Kit Ply,                     |
| Stainless steel Tower bolts, Pull Handles etc                                  | Dorset, Dorma or approved equivalent                     |
| Stainless steel Aldrops  | Globe, Decowell or approved equivalent                   |
| Glass.   | Modi, Saint Gobain, Asahi, Atul, Glaverbel, Pilkington . |
| Mirror Glass.  | Modi Guard , Atul  |
| Aluminium Door fittings.   | Everite, Jyothi, Classic, Amit, Mepro                    |
| Hydraulic door closer / Floor Spring   | Godrej, Hardwyn, Everite, Dorma, Dorset, Magnum.         |
| Marine plywood.  | Kenwood, Kityply, Greenply.                              |
| PVC Door shutter   | Rajashri, Sintex.  |
| Steel Nuts, Bolts and Screws .   | Atul, Hilti .  |
| Ball Bearing Hinges and Spring Hinges  | Dorma, Hafele, Geze, Dorset, Magnum                      |
| Stainless Steel Screws Kundan, Arrow, Nettlefold, GWK.                         |  |
| Stainless Steel Friction stay hinges   | Hafele, Earl Bihari                                      |
| Stainless Steel Screws   | Kundan, Arrow, Nettlefold, GWK.                          |
| Structural Glazing   | Glazing Modi, Saint Gobain, Asahi, Glaverbel.            |
| Structural Steel, Bar, Flats, Angle, Tee Sections                              | SAIL, TATA(TISCO), RINL                                  |
| M.S. Pipe, Tubes   | TATA, Jindal   |
| Pressed steel door frames  | MPP (Metal profile projects) / Shakti Metal doors        |
| Stainless steel ( Grade 304)   | Salem, Jindal, SAIL                                      |
| Aluminium Composite Panels (ACP)   | Alstrong, Alucobond, Aluplex, Alubond                    |
| White Cement.  | Birla White, J.K. white, Travancore.                     |
| Vitrified ceramic tiles.   | Johnson, RAK, Naveen, Kajaria,                           |
| Ceramic glazed tiles   | Kajaria, NITCO, Somany, Johnson, Orient Bell Ltd, RAK.   |
| Unglazed Heavy Duty Vitrified Tiles  | Somany ( Dura Gres ), Kajaria (Pavigres).                |
| Precast Terrazo Tiles  | NITCO , Hindustan  |
| Precast Chequered Tiles  | NITCO Hindustan  |
| Glass Mosaic Tiles Palladio  | Palladio, Coral, Mridul, Bisazza.                        |
| PVC Flooring   | LG Hausys, GerFlor, Armstrong                            |
| UPVC Windows   | Fenesta, Kommerling , Rehau.                             |
| Unglazed Heavy Duty Paver/Parking Tiles  | Somany ( Dura Stone ), Johnson (Endura                   |
| Tile Adhesives   | Laticrete, ArdexEndura, Weber, Roff. SIKA, Ferrous.      |
| Rigid PVC rain water pipes   | Supreme, Prince, Sudhakar, Astral, Finolex               |
| PVC moulded fittings/ Accessories for unplasticised Rigid PVC rain water pipes | Supreme, Prince, Sudhakar, Astral, Finolex               |
| Precoatedgalvanised iron profile sheets  | Tata-bluescope, Jindal, Trackdeck                        |
| Actactic Polypropylene (APP) Modified Water Proof Membrane -                   | STP, Bitumat Co. Ltd.                                    |
| Cement based wall care putty   | Birla Wall Care, J.K. Wall putty, Berger                 |



|  |   |
|--|---|
|  | Paints , Asian Paints.  |
| Texture plaster finish with base texture   | NCL ALLTEK , Spectrum   |
| Acrylic Distemper/Plastic emulsion, primers, exterior emulsion                           | ICI Dulux, Asian Paints, Berger, Nerolac.                                   |
| Synthetic Enamel Paint.  | ICI Dulux, Asian Paints, Berger, Nerolac.                                   |
| Water proof cement paint.  | Snowcem India, ICI Dulux, Berger.   |
| Anti Corrosive Bitumastic Paint  | Asian/Berger/Shalimar   |
| PU Enamel Metallic Paints on MS Structure & Epoxy paints                                 | SKK, Asian, Akzonobel   |
| Aluminium sections.  | Jindal, Indal, Hindalco,  |
| Adhesive Tape  | Norton  |
| E.P.D.M. Gaskets   | Anand/ Roop/Bohra/Hanu  |
| Silicon Gaskets  | Sree Gaurav, Roop   |
| PVDF/Powder Coaters  | MJ Coaters, Radiant   |
| Stainless steel handles for glass doors  | Polo, Venus, Inox   |
| Water proofing compound  | Fosroc ,Sika, Pidilite, CICO  |
| Toughening /Heat Strengthening plant of Glass  | Fuso Glass India Private Limited or approved equivalent                     |
| Calcium Silicate False Ceiling Tiles -   | Aerolite Co, Hilux  |
| Gypsum Board False Ceiling Tiles   | Saint Gobain, Lafarge, Armstrong Co.  |
| Mineral Fibre Board False Ceiling Tiles  | Armstrong, Decosonic.   |
| Vitreous China Sanitary Ware   | Parryware, Neycer, Hindware, Cera.  |
| Centrifugally cast (spun) Iron Pipes & Fittings.   | NECO , HIF, SKF, Bengal Iron Corporation (BIC)                              |
| Centrifugally Cast (spun) Pipes (LA) & Fittings ( Water Supply Pipes)                    | Electro steel, Kesoram, LANCO Industries.                                   |
| Anodised / Powder Coated Aluminium Fittings / Fixtures -                                 | Everite, Jyoti, Shakti.   |
| PVC gratings.  | Prince/Prayag.  |
| CP fittings & accessories.   | Jaquar , Marc, Plumber, ESS ESS, TOTO.                                      |
| PTMT Fittings  | Prayag, Shakti  |
| Fire Clay Sinks  | Sunfire, Parryware, Hindware.   |
| G.I. Pipes   | Jindal (Hissar), Tata, Zenith.  |
| G.I. Fittings.   | Unik, Zenith, HB.   |
| Water supply Valves  | Zoloto, RB ,Leader, ARCO  |
| CPVC pipes and fittings  | Supreme, Astral, Finolex, Ashirwad  |
| Water supply fixtures/fittings like bib cocks, wall mixtures ,angle cocks, shower panels | JAQUAR or approved equivalent   |
| PVC water tank.  | Sintex, Uniplast, Durocon, Polycon, Supreme. (with ISI mark embossing only) |
| Stainless Steel Sinks  | Nirali, Kaff, Hindware, Johnson, Signature, Neelkanth.                      |
| RCC Pipes  | Indo., Hindustan, Balaji Pipe Industries, Indian Hume Pipes Ltd.            |
| Stone ware pipes & Gully traps.  | Perfect, Hind or Crystal.   |
| CI Manhole cover   | SKF, HIF, Neco, Bengal Iron Corporation (BIC).                              |
| Gun Metal Valves / Non Return Valves<br>Zoloto, Leader, Sant.                            | Zoloto, Leader, Sant.   |

|                    |                                 |
|--------------------|---------------------------------|
| C.I. Sluice Valves | Zoloto, Leader, SANT, Kirloskar |
|--------------------|---------------------------------|

CONTRACTOR

EXECUTIVE ENGINEER[C]

**Appendix – XV**

Notice for appointment of Arbitrator  
(Refer Clause-25)

To

The Chief Engineer  
BSNL Civil Zone

---

Dear Sir,

In terms of Clause 25 of the agreement, particulars of which are given below, I/We hereby give notice to you to appoint an arbitrator for settlement of disputes mentioned below:

1. Name of applicant:
2. Whether applicant is individual/Prop Firm/Partnership Firm/Ltd Co
3. Full address of the applicant
4. Name of the work and contract number in which arbitration sought
5. Name of the Division which entered into contract
6. Contract amount in the work
7. Date of contract
8. Date of contract, Date of initiation of work
9. Stipulated date of completion of work
10. Actual date of completion of work (if completed)
11. Total number of claims made
12. Total amount claimed
13. Date of intimation of final bill (if work is completed)
14. Date of payment of final bill (if work is completed)
15. Amount of final bill (if work is completed)
16. Date of request made to SE for decision
17. Date of receipt of SE's decision
18. Date of appeal to you
19. Date of receipt of your decision

Specimen signatures of the applicant  
(only the person/authority who signed the contract should sign)

I/We certify that the information given above is true to the best of my / our knowledge. I/We enclose following documents.

1. Statement of claims with amount of claims.
- 2.
- 3.
- 4.

Yours faithfully,  
(Signature)

Copy in duplicate to:

1. The Executive Engineer  
\_\_\_\_\_Division

**CORRECTION SLIP NO. 6  
(TO GCC for civil works - 2006)**

| Clause No. | Present Provision   | Proposed Provision   |
|------------|---|--|
| Clause 7   | <p>No payment shall be made for work .....<br/>Rates as decided by Engineer - in - charge.</p> <p>The amount admissible will as far as possible be paid by <u>10<sup>th</sup></u> working day after the day of presentation of the bill by the contractor to the Engineer - in - charge or his Asstt. Engineer together with the account of the material issued by the BSNL, or dismantled materials, if any. In the case of works outside the headquarter of the Engineer - in - charge, the period of <u>ten</u> working days will be extended to <u>fifteen</u> working days.</p> <p>All such interim payment .....detailed measurement thereof.</p> | <p>No Change.</p> <p>The amount admissible will as far as possible be paid by <u>30<sup>th</sup></u> working day after the day of presentation of the bill by the contractor to the Engineer - in - charge or his Asstt. Engineer together with the account of the material issued by the BSNL, or dismantled materials, if any. In the case of works outside the headquarter of the Engineer - in - charge, the period of <u>thirty</u> working days will be extended to <u>forty five</u> working days.</p> <p>No change</p> |

| SCHEDULE OF QUANTITIES  |   |          |     |           |          |        |
|---|---|----------|-----|-----------|----------|--------|
| <b>Name of work :- “Shifting of Shelter and Providing E/A foundation at CHILAKALADONA in Kurnool District.(3rd Call)”</b> |   |          |     |           |          |        |
| Item No.  | Description of Item   | Quantity |     | Rate (Rs) | Unit     | Amount |
| 1   | Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m. |          |     |           |          |        |
| a)  | All kinds of soil.  | 10.50    | Cum |           | One Cum. |        |
|   | (Rupees . . . . .)  |          |     |           |          |        |
| 2   | Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.   | 10.50    | Cum |           | One Cum. |        |
|   | (Rupees . . . . .)  |          |     |           |          |        |
| 3   | Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering- all work upto plinth level:  |          |     |           |          |        |
| a)  | 1:5:10 (1 cement : 5 coarse sand (zone-III) derived from natural sources : 10 graded stone aggregate 40 mm nominal size derived from natural sources)   | 0.90     | Cum |           | One Cum. |        |
|   | (Rupees . . . . .)  |          |     |           |          |        |
| 4   | Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering- all work upto plinth level:  |          |     |           |          |        |
| a)  | 1:2:4 (1 cement : 2 coarse sand (zone-III) derived from natural sources : 4 graded stone aggregate 20 mm nominal size)  | 3.90     | Cum |           | One Cum. |        |

|    |  |       |     |  |  |          |
|----|--|-------|-----|--|--|----------|
|    | derived from natural sources)  |       |     |  |  |          |
|    | (Rupees . . . . .)   |       |     |  |  |          |
| 5  | Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level : |       |     |  |  |          |
| a) | 1:1.5:3 (1 cement : 1.5 coarse sand (zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources)                                  | 1.60  | Cum |  |  | One Cum. |
|    | (Rupees . . . . .)   |       |     |  |  |          |
| 6  | Centring and shuttering including strutting, propping etc. and removal of form for:  |       |     |  |  |          |
| a) | Foundations, footings, bases of columns, etc. for mass concrete  | 2.20  | Sqm |  |  | One Sqm. |
|    | (Rupees . . . . .)   |       |     |  |  |          |
| b) | Lintels, beams, plinth beams, girders, bressumers and cantilevers  | 5.00  | Sqm |  |  | One Sqm. |
|    | (Rupees . . . . .)   |       |     |  |  |          |
| c) | Columns, piers, abutments, pillars, posts and struts   | 5.00  | Sqm |  |  | One Sqm. |
|    | (Rupees . . . . .)   |       |     |  |  |          |
| 7  | Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level.   |       |     |  |  |          |
| a) | Thermo-Mechanically Treated bars of grade Fe-500D or more.   | 300.0 | KGs |  |  | One KG.  |
|    | (Rupees . . . . .)   |       |     |  |  |          |
| 8  | Smooth finishing of the exposed surface of R.C.C. work with 6 mm thick cement mortar 1:3 (1 Cement : 3 fine sand).   | 18.00 | Sqm |  |  | One Sqm. |
|    | (Rupees . . . . .)   |       |     |  |  |          |
| 9  | Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth  |       |     |  |  |          |

|    |   |       |     |  |          |  |
|----|---|-------|-----|--|----------|--|
|    | in:   |       |     |  |          |  |
| a) | Cement mortar 1:6 (1 cement : 6 coarse sand)  | 0.50  | Cum |  | One Cum. |  |
|    | (Rupees . . . . .)  |       |     |  |          |  |
| 10 | Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundations and plinth in :   |       |     |  |          |  |
| a) | Cement mortar 1:4 (1 cement : 4 coarse sand)  | 10.00 | Sqm |  | One Sqm. |  |
|    | (Rupees . . . . .)  |       |     |  |          |  |
| 11 | Structural steel work in single section, fixed with or without connecting plate, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.   | 22.00 | KGs |  | One KG   |  |
|    | (Rupees . . . . .)  |       |     |  |          |  |
| 12 | 12 mm cement plaster of mix :   |       |     |  |          |  |
| a) | 1:6 (1 cement: 6 coarse sand)   | 2.00  | Sqm |  | One Sqm. |  |
|    | (Rupees . . . . .)  |       |     |  |          |  |
| 13 | Providing and fixing 19mm thick approved quality Marineplywood as per IS 710 in floors, partitions, cupboards,racks, storage units and similar locations etc. including cutting to required size and fixing with necessary nails, screws, clamps all complete as per direction of Engineer-in-Charge,   | 6.00  | Sqm |  | One Sqm. |  |
|    | (Rupees . . . . .)  |       |     |  |          |  |
| 14 | Providing and fixing sheet homogeneous Polyvinyl chloride sheet in flooring and skirting in approved pattern on a smooth and damp proof base using rubber based adhesives of approved quality and manufacturer like DunlopS-758,Fevicol SR 998 or equivalent including rolling with light wooden roller weighing about 5kg and providing copper strips etc all complete | 6.00  | Sqm |  | One Sqm. |  |

|               |  |      |     |  |       |  |
|---------------|--|------|-----|--|-------|--|
|               | as directed by Engineer-in-Charge in approved colour and shade.  |      |     |  |       |  |
|               | (Rupees . . . . .)   |      |     |  |       |  |
| 15            | Dismembering the 2.00m x 3.00m BTS prefabricated Shelter on all the sides and bottom base and its support rails , roof , floor without damaging for reuse in future etc., complete and transfer the materials from Mantralayam to Chillakaladona , all as directed by the Engineer-in-Charge.                | 1.00 | Job |  | Each. |  |
|               | (Rupees . . . . .)   |      |     |  |       |  |
| 16            | Erection of BTS shelter of available size upto 3.0 mx 2.5m x 3 m over Steel Structural members for base after segregation/sorting of the shelter as per drawings with all its accessories including Cable tray inside shelter for 12 meter runway , as supplied as per the direction of Engineer-in-charge . | 1.00 | Job |  | Each. |  |
|               | (Rupees . . . . .)   |      |     |  |       |  |
| <b>TOTAL:</b> |  |      |     |  |       |  |

**CONTRACTOR**

**Executive Engineer (Civil),  
BSNL Civil Division,  
Tirupati**