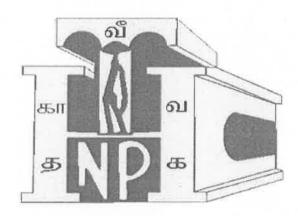
## TAMIL NADU POLICE HOUSING CORPORATION LTD

( A GOVERNMENT OF TAMILNADU UNDERTAKING )

(ISO 9001 - 2015 CERTIFIED COMPANY)



# RENOVATION OF EXISTING WORKING WOMEN'S HOSTEL BUILDING AT ADYAR IN CHENNAI CITY.

NO.132, E.V.R. SALAI, KILPAUK, CHENNAI-600 010.





#### SPECIAL CONDITIONS

## IMPORTANT INFORMATIONS TO THE TENDERERS FOR FILLING UP OF TENDER CODING SHEET INCLUDED IN THE TENDER SCHEDULE

- 1. Rates should be quoted in the coding sheet enclosed in the tender schedule without fail.
- 2. This tender schedule includes (i) Tender Notice (ii) Detailed tender specification (i.e., schedule 'A') (iii) Other terms & conditions of the tender including drawings. (iv) Tender Coding sheet. In order to simplify the work and for early decision to be taken on the tender the quantities of items are given only in the tender coding sheet. The contractors are requested to read the detailed specification and quote the rates clearly in the tender coding sheet. Quoting the rates in the tender coding sheet for all the items will only be taken up for comparison and shall be final. The contractors need not quote the rates in the schedule containing detailed specification. Even if it is quoted in the schedule containing detailed specification, it will not be taken up for tender comparison.
- 3. The Contractors are requested to fillup the rates neatly without over writing. Otherwise the decision of the TNPHC on these rates to be takenup for comparison is final
- 4. The contractor should make sure that the rates both in figures and in words filled up in the coding sheet are exactly the same.
- 5. The tenderer should fill up the Amount for each item in the Amount Column as well as total amount in the coding sheet without fail. Otherwise the tender will not be taken for comparison.
- 6. The items, which are not included in this work are shown as deleted in the coding sheet. Contractor should not quote the rates in Coding sheet for such of those items shown as deleted. Even if it is quoted it will be ignored.
- 7. The tenderer / contractor will make his/her/their own arrangements to procure and use the ISI Brand cement and steel required for the work.
- 8. It should be clearly understood that the rate quoted by the tenderer / contractor is inclusive of the cost of 43 grade ordinary portland cement / SRC and steel and other incidental charges such as conveyance, loading, unloading, stacking at site and testing charges etc., complete.
- 9. The tenderer / contractor will produce test certificate obtained from any one of the Govt. institutions for cement and steel brought to site. As and when required by the Department the cement and steel brought to the site shall be tested by the Department from any one of the approved Govt. institutions and only when the test results confirm to the ISI specification they will be allowed to be used in the works.
- 10. The tenderer should sign all the pages of the tender schedule without fail. Otherwise the tender will be summarily rejected.
- 11. The tenderer / Contractor should strictly follow above instructions without fail.

#### ANNEXURE - [R]

### TENDER DETAILS FOR RENOVATION OF EXISTING WORKING WOMEN'S HOSTEL BUILDING AT ADYAR IN CHENNAI CITY UNDER SOCIAL WELFARE DEPARTMENT.

1. FILE NUMBER

SE / CC / DB / 1241/ 2022

2. TENDER NOTICE NUMBER

SE/CC - 58/ 2021 - 22 Dt:31.03.2022

3. NAME OF WORK AND

Renovation of Existing Working Women's Hostel Building at

VALUE OF PUT TO TENDER

Adyar in Chennai City under Social Welfare Department.

Rs.68.20 Lakhs (with GST)

4. DATE OF SALE OF TENDER

11.04.2022 (12 Noon) To 20.04.2022 (5.30 PM)

5. DATE OF RECIEPT OF TENDER

22.04.2022 (upto 3.00 PM)

6.DATE OF OPENING OF TENDER

22.04.2022 (at 3.15 PM)

7.EMD AMOUNT (With GST)

Rs.44,200/- (Rupees Forty four thousand and two hundred only)

(To be drawn in favour of Executive Engineer/TNPHC Ltd.,

The tender received without EMD

will be summarily rejected).

Rs.10,620/- (Rupees Ten thousand six hundred and twenty only)

(with GST) (Drawn in favour of Executive Engineer/Chn Dn-I

TNPHC Ltd, Kilpauk Chennai-10)

8.COST OF TENDER DOCUMENTS

9. PERIOD OF COMPLETION OF WORK:

6 Months

10.THE TENDER SCHEDULE IS TO BE

At the O/o the Supdg.Engr/ C.C TNPHC Ltd.,

**PLACED** 

No.132, E.V.R salai, Kilpauk, Chennai - 10, as per the

Time and date specified above

11.BOOK LET INCLUDED IN THIS TENDER SCHEDULE

Schedule-A, Terms & Conditions &

Tender coding sheet (One Booklet)

: 93 Pages

**DETAILS OF SALE OF TENDER SCHEDULE** 

NAME OF CONTRACTOR

COST OF TENDER SCHEDULE PAID

Rs.10,620.00 (Including taxes and surcharge)

A. DETAILS OF BANKER & BRANCH

B. DD/PAY ORDER/BANKER'S CHEQUE

NO. & DATE

Spl.Gr. Draughting Officer / CC

Note: The attested copies as a proof of registration with upto date renewal, solvency with encumbrance certificate, Current Income Tax, Sales tax Verification Certificate, GST Registration certificate, Performance certificate etc., shall be enclosed.

#### TAMIL NADU POLICE HOUSING CORPORATION LIMITED

#### **Tender Notice**

Office of the Superintending Engineer/CC, Tamil Nadu Police Housing Corporation Limited.

For and on behalf of the TNPHC Ltd sealed tender is invited for the under mentioned work so as to reach the Superintending Engineer/C.C, Tamil Nadu Police Housing Corporation Limited, No.132, E.V.R. Salai, (Poonamallee High Road), Near G-3 Police Station, Kilpauk, Chennai - 600 010, not later than 3.00 P.M. on......................(Refer Annexure"R" Serial No. 5 ). The tenders will be opened by the Superintending Engineer/C.C, Tamil Nadu Police Housing Corporation Limited, at his office at 3.15 P.M. as per Superintending Engineer's/C.C office clock, on the same date in the presence of the tenderers or their authorised representative, who choose to be present for the work of \*

(Refer Annexure "R" Serial No. 3)

The tender should be in the prescribed form obtainable from the Office of the Superintending Engineer/CC, Tamil Nadu Police Housing Corporation Limited / down loaded from www.tenders. tn. gov.in . The tenders will be opened bytheSuperintendingEngineer/C.C, Tamil Nadu Police Housing Corporation Limited or his delegate at the place and as above mentioned.

- 1. The tenderers or their agents are expected to be present at the time of opening of tenders. The tender receiving officer will on opening each tender prepare a statement of the attested and unattested corrections therein and hand it over to the tenderer concerned and initials all such corrections in the presence of the tenderer. If any of the tenderers or their agents find it inconvenient to be present at the time, then in such a case the tender receiving Officer will on opening the tender of the absentee tenderer make out a statement of the unattested corrections and communicate to him. The absentee tenderer shall then accept the statement of corrections without any question whatsoever.
- 2. Tenders must be submitted in sealed covers and should be addresssed to the Superintending Engineer/CC, Tamil Nadu Police Housing Corporation Limited, the name of the tenderer and the name of the work being noted on the cover.

If the tender is made by an individual it shall be signed with his full name and his address shall be given. If it is made by a firm it shall be signed with the co-partnership name by a member of the firm who shall also sign his own name, and the name and address of each member of the firm shall be given. If the tender is made by a Corporation, it shall be signed by duly authorised officer, who shall produce with his tender, satisfactory evidence of his authorisation. Such tendering Corporations may be required before the contract is executed to furnish evidence of its corporate existence.

Each tenderer must also send a certificate of Income-tax verification from the appropriate Income - tax Authority in the
form prescribed therefor. This certificate will be valid for one year from the date of issue for all tenders submitted during
the period.

In the case of proprietary and partnership firm will be necessary to produce the certificate aforementioned for the proprietors and each of the partners as the case may be.

If the tenderer is a registered contractor and if a certificate for the current year had already been produced by him during the calender year in which the tender is made it will be sufficient if particulars regarding the previous occasion on which the said certificate was produced are given:

All tenders received without certificate as aforementioned will be summarily rejected.

The Earnest Money deposit (with GST) will be retained in the case of successful tenderer and will not carry any interest. It will be dealt with as provided for in the tender.

\*NAME OF WORK

+ Alternatively the Earnest Money deposit (with GST) to the required value will be accepted in any one of these forms.

Superintending Engineer / CC

Demand Draft from any one of the Nationalised Bank/Scheduled Bank in favour of the Executive Engineer (Refer annexure "R" Serial No. 7) NSC/KVP should be pledged in favour of the Executive Engineer (Refer annexure "R" serial No. 7). The NSC/KVP must be accompanied with covering letter indicating the details of the NSC/KVP which are enclosed along with the tender.

- 5. The tenderwillremain valid for a period of 90 days from the last date for receipt of tender. The validity period can be extended further if the contractor gives his consent in writing, specifying the period of extension.
  - (i). The tenderer whose tender is underconsideration shall attend the office before the end of the period specified by written in tim ation to him. If the tenderer fails to attend the office before the end of specified period, his tender will not be considered. He shall for the with, upon and in tim ation being given to him of acceptance of his tender by the officer authorized, make security deposit (with GST) of 2% of the value of contract in one of the forms prescribed in TNPHC by taking into account of the amount of earnest money deposital heady deposited with the tender, It would be sufficient to pay the balance amount to make up the 2% of the value of contract for the purpose of security deposit, which has to be remitted only in the shape of NSC /DD /Pay order/Banker cheque accounts of postal department as per the form prescribed. National savings scripts /accounts of postal department pledged in favour of the Executive Engineer concerned. The security deposit together with the earnest money deposit and the deductions made at 5% of the value of each bill towards with held amount vite clause 64-1 of General condition to the contract, shall be retained as security for the due fulfillment of contract such deposits hall not be a range of the value of each bill towards with held amount vite clause 64-1 of General condition to the contract, shall be retained as security for the due fulfillment of contract such deposits hall not bear any interest.
  - (ii). On receiptofwritten communication of acceptance of tender if the tenderer fails to pay the requisite security deposit within the period specified in the written communication or backs out from the tender or withdraws his tender, the earnest money deposits hall be for feited.

    If the contractor fails to carryout the contract, after paying the requisite deposits, then he will be liable for the excess expenditure, if any incurred to complete the work as contemplated in the General conditions to the contract
  - (iii). It shall be expressly understood by the tenderer, that on receipt of written communication of acceptance of tender from the accepting authority, there emerges a valid contract between the TNPHC and the tenderer for execution of the work written agreement. Hence for this purpose, the tender documents i.e., tender notice, tender offered by the contactor, General conditions to the contract, special conditions to the contract, negotiation, correspondences, written communication of acceptance of tender, etc., shall constitute a valid contract and that will be the foundation of the rights of both the parties to the contract

Provided that, it shall be open to the accepting authority to insist execution of any written agreem entby the tenderer, if administratively considered necessary or expedient

- 6. The tenderer shall exam ine closely the general conditions of the contract of Tamil Nadu Building Practice and also general conditions of contract contained there in and sign the copy of the Tamil Nadu Building Practice and its addendational so carefully study before submitting his tender unitrates which shall be for finished work in site. He shall also carefully study the drawings and additional specifications and all the documents connected with the contract. The Tamil Nadu Building Practice and other documents connected with the contract such as specifications, plans, descriptive specification sheet regarding materials etc., can be seen at any time between 11.00 a.m. and 5.00 p.m. on office days in the office of the Superintending Engineer aforementioned.
- 7. The tenderer炳attention is directed to the requirements form a terrals under the chuse 溺aterials and W orkm anship in the General conditions to contract M a terrals confirming to the Indian Standard Specifications shall be used on the work and the tenderer shall quote his rates accordingly.
- 8. Every tenderer is expected, before quoting his rates to inspect the site of proposed work. He should also inspect quarries, and satisfy himself about the quality and availability of materials such as Bricks, Sand & HBS jelly etc. The best class of materials shall be allowed to use on the work. In every case the materials must comply with the relevant standard specifications. Samples of materials called for in standard specifications, or in this tender notice or as required by the Executive Engineer in any case shall be submitted for the Executive Engineer 's approval before the supply to the site of work is begun. Accordingly the tenderers are requested to quote there own workable rates.

The Tamil Nadu Police Housing Corporation Limited will not however after acceptance of contract rate pay any extra charges for lead or for any other reasons in case the contractors is found later on to have misjudged the materials available. Attention of the contractor is direct to the General conditions of the contract regarding payment of seigniorages tolls etc., subject to price adjustment clause provided for in this tender schedule.

<sup>\*\*</sup> To be struck out if such copies are not to be issued for sale.

The Tenderer's particular attention is drawn to sections and clauses in the General Conditions of contract dealing with:

- 1. Test, inspection and rejection of defective materials and work
- 2. Carriage
- 3. Construction plant
- 4. Water and Lighting
- 5. Cleaning up during progress and for delivery
- 6. Accidents
- 7. Delays and
- 8. Particulars of Payment

The contractor should closely peruse all the specification clauses which govern the rate he is tendering.

- 10. A schedule of quantities accompanies this tender notice, it shall be definitely understood that the Executive Engineer, aforementioned does not accept any responsibility for the correctness or completeness of this schedule and that this schedule is liable to alterations, omission, deductions or additions at the discretion of the Executive Engineer, Tamil Nadu Police Housing Corporation or as set forth in the conditions of contract. The Tenderer will however base his lump-sum tender on this schedule of quantities. He should quote specific rates for each item in the schedule and the rate should be in Rupees and Paise. The rates should be written both in words and figures and the units in words. The tenderer should also show the totals of each item and the grand total of the whole contract. The Schedule A accompanying the lump-sum tender shall be written legibly and free from the erasures. Over-writings or conversions of figures corrections where unavoidable should be made by crossing out, initialing, dating and re-writing.
- 11. Tenders offering a percentage deduction from or increase on the estimate amount and those not submitted in proper form or in due time will be rejected. Rates or Lump-sum amounts for items not called for shall not be included in the tender. No alteration which is made by tenderer in the contract form, the conditions of Contract, the drawings ,specification, or quantities accompanying same will be recognised and if any such alterations are made the tender will be void.
- 12. The tenderer should work out his own rates without reference being made to the Tamil Nadu Police Housing Corporation Limited current schedule of rates or to the estimated rates which are not open for inspection to tenderers.
- 13. The attention of the tenderer is directed to the contract requirements as to the time of beginning work, the rates of progress and the dates for the completion of the whole work and its several parts. The following rate of progress and of proportionate value of work done from time to time as will be indicated by the Executive Engineer's certificates of the value of work done will be required. Date of commencement of this programme will be the date on which the site ( or premises) is handed over to the contractor. This subject to the G.O.Ms.No.60 PWD (G2) Dept, Dt: 14.03.2008 forms part of the agreement.

#### Period of Contract - 6 Months

	Period after date of commencement	Percentage of work completed (Based on Contract Lumpsum amount)	
8	1st Month	20% of whole Work	
	2nd Month	40% of whole Work	
	3rd Month	60% of whole Work	
	4th Month	80% of whole Work	
	5th Month	90% of whole Work	
	6th Month	100% of whole Work	

NOTE :The periods to be entered an column for the purpose of defining of the rate of progress may be fixed by the SuperintendingEngineer / Executive Engineer to suit each care.

- 14. No parts of the contract shall be sublet without written permission of the Executive Engineer, nor shall transfer be made up power of attorney, authorising others to receive payment on the contractors behalf.
- 15. If further necessary information is required the "Superintending Engineer" of the Tamil Nadu Police Housing Corporation Limited will furnish, detail but it must be clearly understood that tenders must be received in order, and according to instructions.
- 16. The Superintending Engineer, or other sanctioning authority reserves the right to reject any tender or all the tenders without assigning any reasons therefor.

- '. The tenderers who are themselves not professionally qualified shall undertake to employee qualified Technical men at their cost to look after work. The tenderer should therefore state in clear terms whether they are professionally qualified or whether they undertake to employ technical staff and if so give their professional qualifications of the staff to be employed. In case the selected tender is one who has undertaken to employ technical staff under him he should see that one of the staff is always at site of the work during working hours personally checking all items of work and paying extra attention to such works as may demand special attention eg. reinforced concrete works etc.
- 18. Tenderer submitting a tender which the tender accepting authority considers excessive and / or indicative of the insufficient knowledge of current prices or definite attempt at profitering will render himself liable to be debarred permanently from tendering or for such period as the tender accepting authority may decide.
- 19. The fact of submitting the tender implies that the tenderer have actually inspected the site of works and have examined before tendering the nature and extent of various kinds of soil at various depths and have based their tenders on such examination by them and no future representation in this regard will be considered.
- 20. A statement giving particulars of equipment and resources that will be put at the disposal of the work under the following classification should accompany the tender.
- (a) Equipment (Transport of materials Viz. lorries and carts, concrete mixers)
- (b) Organisation (i) Technical (ii) Unskilled
- (c) Resources in materials like teak wood, steel etc. and extent to which departmental help is not required for procurement of materials and transport of the same. Subject to the cluase 6 of special conditions.
- (d) Methods that will be adopted to speed up the work to ensure completion within or less than the time fixed for completion.
- 21. The Executive Engineer, reserves to himself the right of alloting the different sub-works to different contractors or one and the same contractor as he may decide after the receipt of tenders.
- 22. The contractors are liable to pay a penalty for non-employment of the technical staff as laid down in the conditions of employment of Technically qualified personnel.
- 23. The cost of materials supplied will be recovered from the bills or any other amounts due from the contractors.
- 24. Retention money deposit (RMD) (with GST) at 5% shall be recovered from each bill based on the value of work done by the contractors 50% of RMD (i.e., 2 1/2 %) received from the bills would be paid to the contractor along with final bill. The balance 50% (i.e., 2 1/2 %) of the total value of work will be retained on the final bill of the work for the period one year reckoned from the date of completion of work in order to enable the department to watch the effect of all seasons of the work. The contractor should furnish in indemnity bond for further period of four years. If any defects are notified in the above said period the defects should be rectified by the contractor at his own cost as directed by departmental officers and no extra payment to be made for the redification of such work.
- 25. Action against the contractors who have participated in the earlier tenders but failed to execute the agreement on some pretext after receipt of the work order will be taken as per the G.O. in force.
- 26. No tenderer is permitted to withdraw his / her / their tender at any stage. If any tenderer withdraws his / her / their offer with in the tender validity period his / her / their EMD / SD (with GST) shall be forfeited and his / her / their name(s) will be noted for blacklisting.
- 27. The contractors those who have got registered their names in TNPHC Ltd (or) PWD in the appropriate class and monetary limit with upto date renewal, are eligible to participate in the tender and they are requested to produce the latest registration copy issued by the department concerned. The contractors those who have carried out such type of similar works are most preferable.
- 28. Income Tax return Certificate (2020-21 / 2021-22).
- 29. Sales tax verification certificate (2016-17). The total Annual turnover amount, Tax paid and other details should be covered in the Sales tax verification certificate. Otherwise the Sales tax verification certificate will not be considered and such tender shall be rejected summarily.
- 30. Revenue solvency issued by the Tahsildar with upto date EC should be uploaded. The details of Survey number, area etc., of the property mentioned in the solvency certificate and Encumbrance certificate should be tallied. If any discrepancies, the same will not be considered. Encumbrance certificate should be obtained from the date of solvency certificate issued by the Tahsildar, on or after the date of tender notice of the respective works. EC should be free from Encumbrance. If EC is obtained from the Government website, the same also be considered.
- 31. Incase the tender is made by an individual, the tender documents shall be signed by the individual with his name and address and submit along with a copy of (duly attested by Notary public / Gazatted officer) proper contractor registration certificate

- 32. Incase the tender is made by registered firm, it shall be signed by the Managing Partner (or) the person authorized by the firm, with full name of the firm and address. The proof shall be submitted along with the copy of partnership deed and current renewal for firm registration. i.e., Form 'C' obtained from registar of firms with proof of renewal (Copies should be duly attested by Notary/Gazatted officer).
- 33. Incase the tender is made by a limited company or a limited corporation, it shall be signed by a duly authorized person holding the power of attorney for signing the tender in which case a certified copy of the power of attorney shall accompany the tender. The Articles of Memorandum of the Company and profile of the company with company incorporation certificate copies with seal (duly attested by Notary or a Gazatted Officer) shall be submitted along with his / their tender.
- 34. Incase a tenderer, tendered in the Name and Style of Proprietorship concern the tenderer should have registered his firm name in the respective registrar office and enclose the copy of Proprietorship Deed (duly attested by the Notary / Gazatted Officer) along with the tender. The sole propritor alone should sign in the tender documents.
- 35. The Performance Certificate in having satisfactorily executed and completed building works / related works. (The completed value shall be more than 50% of the value of the contract put to tender (with GST) in a single contract) directly issued by the concerned organization during past five years. The evidence for the same should be produced from an officer not less than the rank of the Superintending Engineer of the Government or Government undertakings / Responsible person of the Private organizations. Incase of contractors who have executed works in TNPHC Ltd, the satisfactory performance certificate in the prescribed formate from the Superintending Engineer concerned of TNPHC Ltd, should be furnished.
- 36. The tenderer should sign all the pages of the tender schedule without fail. Otherwise, the tender will be summarily rejected.
- 37. The contractor should submit the TDS certificate issued by the Income Tax Department for the private work experience.
- 38. The Private experience should be supported along with TDS statement (i.e., Form 16A & Form 26AS).
- The copies of credentials, documents, should be got attested by Notary Public / Gazetted officer of state or Central Government.
- 40. EMD exemption is not entertained vide G.O Ms.No.270 Finance (salaries) department dated .19.09.2017.
- 41. The tender will be considered only after satisfactory production of the credentials by the intending tenderers such as previous performance, nature and value of work done and required valid Registration certificate with upto date renewal, Income Tax, Solvency, Sales Tax Verification certificate etc.,
- 42. The tenderer should be registered with GST.
- 43. The total value of a contract / Service which exceeds Rs.2.50 Lakhs, 2% GST TAX at source will be deducted. (1% CGST & 1% SGST) as applicable from time to time in addition to 1% or 2% of TDS as per IT act.
- 44. The tenderer shall quote the rates and prices (both in figures and words) for all the items of the works described in the Bill of Quantities excluding GST.
- 45. Government of India has notified vide Notification No.20/2017- Central Tax (Rate), dated 22<sup>nd</sup> August, 2017 and Notification No.24/2017- Central Tax (Rate), dated 21<sup>st</sup> September, 2017, the concessional rate of the Goods and Services Tax (GST) at 12% [CGST at 6% + SGST at 6%] is leviable for any Government contract, Whether Civil or Electrical, irrespective of the Goods and Services Tax (GST) rate applicable on purchase of goods used in the execution of Government Contract. And the GST amount will be calculated at 12% from the sum of total tendered value quoted by the tenderer for construction cost (excluding GST) specified in the BOQ, subject to GST rate applicable from time to time as recommended by the GST Council
- 46. All duties, taxes, and other levies except GST, payable by the contractor under the contract, or for any other cause shall be included in the rates, prices and total Bid Price submitted by the Bidder.
- The Contractor should be required to indicate their GST registration number under the Goods and Services Tax (GST) Act 2017 in the tender form. The Central Goods and Services (CGST) Act 2017, the Integrated Goods and Services (IGST) Act 2017 and the Tamil Nadu Goods and Services (TNGST) Act 2017 have been enacted and enforced from 01.07.2017. Under the new tax regime, GST (comprising CGST, SGST and IGST) on works contracts for Government work was finally notified at 12 percent. As per the Tamil Nadu Goods and Services (TNGST) Act 2017, with effect from 01.07.2017.

#### OFFICE OF THE SUPERINTENDING ENGINEER / CC TAMIL NADU POLICE HOUSING CORPORATION LIMITED

#### **TENDER**

Dated	
To The Superintending Engineer/C.C Tamil Nadu Police Housing Corporation Ltd., Chennai.	
Sir,	
I/We do hereby tender and if this tender be accepted, undertake to execute the following works.	
As shown in the drawings and described in the specifications deposited in the Office of the Superintending Engir Tamil Nadu Police Housing Corporation Limited with such variations by way of alterations, additions to, and omissions the said works and method of payment as are provided for in the conditions of contract for the sum of Rupees. (in wand figures)	from
or such other sum as may be arrived at under the clause of the General conditions of contract relating "Payment on lump-sum basis or by final measurement at unit prices".	g to
I/We have also completed the priced list of items of Schedule "A" annexed (in words and figures) for which I/We at to execute the work and receieve payments on detailed final measurement at Unit Prices.	gree
I/We hereby distinctly and expressly declare and acknowledge that, before the submission of my/our tender I/We have refully followed the intructions in the tender notice and have read the Tamil Nadu Building Practice and the Prelimi Specifications therein and that I/We have made such examination of the contract documents and the plans, specificat and quantities and of the location where the said work is to be done and such investigation of the work required to be and in regard to the material required to be furnished as to enable me/us thoroughly to understand the intention of the said the requirements, covenants, agreements, stipulations and restrictions contained in the contract, and in the said pand specification and distinctly agree that I/ we will not hereafter make any claim or demand upon the Corporation baupon or arising out of any alleged misunderstanding or misconception, or mistake on my part of the said requirements, agreements, stipulations, restrictions and conditions.	inary tions done ame lans ased
*** I/We being a registered contractor enclose an income-tax verification / have/ already produced an income tax verificate certificate in respect of (here particulars of the previous occasion on which the certificate was produced should be given.	ation
the sum of Rs	
*** I/We hereby enclose the proof of authority vide the payment of Bid Securityexemp me/us from the payment of Bid Security.	oting
Note. *** to be scored out if not applicable.	

If my/our tender is not accepted this sum shall be returned to me/us on my/our application when intimation is sent to me / us of rejection or at the expiry of 90 days/ from the date of this tender whichever is earlier. If my / our tender is accepted, the Earnest Money deposit (with GST) shall be retained by the Corporation as security for the due fulfillment of the contract. If upon written intimation to me/us by the Executive Engineer indicating that my/our presence is required for the purpose of enquiry. I/we fail to attend the said office before the end of Period specified on such intimation and if upon intimation being given to me / us by the Executive Engineer of acceptance of my/our tender. I/We fail to make the additional Security deposit (with GST) or to enter into the required agreement as defined in the tender notice, then I/We agree to the forfeiture of Earnest Money deposit (with GST). Any notice required to be served to me / us here under shall be sufficiently served on me / us if delivered to me / us personally or forwarded to me / us by post (registered or ordinary) or left at my / our address given herein such notice shall if shall if send by post be deemed to have been served on me/us at the time when in due course of post it would be delivered at the address to which it is sent.

I/We fully understand that the written agreement to be entered into between me /us and the Corporation shall be the foundation of the rights of both the parties and the contract shall not be deemed to be complete under the agreement has first been signed by me/us and then by the proper officer authorised to enter into contracts on behalf of the Corporation.

I am / we are professionally qualified and my/ our qualification are given below.

SI.No. Name

Contractor

I / We will employ the following technical staff for the supervising the work and will see that one of them is always at site during working hours personally checking all item of works and paying extra attention to such works as require special attention (e.g.) Reinforced Concrete work.

Name of members of technical staff
Proposed to be employed

Note (a) The last two clauses should be Scored out if the cost of the work involved in less than Rs.10,000/-

(b) The tenderer should score out the last clause or the penultimate according as they are themselves professionally qualified or undertake to employ technical staff under them.

#### RATE OF PROGRESS

(Fill in from tender notice)

Period after the Commencement of

Percentage of work to be Completed on the whole work

#### TAMIL NADU POLICE HOUSING CORPORATION LIMITED

No.132, E.V.R. SALAI, (POONAMALLEE HIGH ROAD), KILPAUK, CHENNAI - 10.

#### SCHEDULE 'A'

Name of Work: Renovation of Existing Working Women's Hostel Building at Adyar in Chennai city under Social Welfare Department.

- A The Quantities here given are those upon which the lumpsum tender cost of the work is based, but they are subject to alterations, omissions, deductions or additions are provided for in the conditions of this contract and do not necessarily show the actual quantities of work to be done. The Unit rates excluding GST amount are the governing payments of extras or deductions or omissions according to the conditions of the contract as setforth in the General conditions to the contract of the Tamil Nadu Building practice and other conditions or specifications of this contract.
- B. It is to be expressly understood that the measured work is to be taken net (not withstanding any custom or practice to the contrary) according to the actual quantities when in place and finished according to the drawing or as may be ordered from time to time by the Chief Engineer and the cost calculated-by measurement or weight at the respective prices without any additional charge for any necessary or contingent works connected therewith. The rates quoted excluding GST amount are for works in site and complete in every respect.

Name of work: Renovation of Existing Working Women's Hostel building at Adyar in Chennai City under Social Welfare Department

S.	Item No		DESCRIPTION OF WORK		RATE	UNIT IN	
No	Tiem 140	QTY	DESCRIPTION OF WORK	TNBP NO.	IN FIG. AND IN WORDS	FIG. AND IN	AMOUNT
1	2	3	4	5	6	7	8
1	1.1 *		Earth work excavation for foundation in all soils and sub-soils to the required depth as may be directed except in hard rock requiring blasting but inclusive of shoring, strutting, and bailing out water wherever necessary and refilling the sides of foundation with excavated earth in 150mm thick layers well watered rammed and consolidated and depositing the surplus earth in places shown clearing and levelling the site with an initial lead of 10 metres and lift as specified here under etc. complete in all respects complying with relevant standard specifications. (Including Refilling).  a) 0 to 2m depth.	& 24		1m³ (One Cubic metre)	E
2	3.1		Plain cement concrete 1:5:10 (One of cement, five of sand and ten of hard broken stone Jelly) for foundation using 40 mm gauge hard broken stone jelly inclusive of shoring, strutting and bailing out water wherever necessary ramming, curing etc., complete in all respects complying with relevant standard specifications and as directed by the departmental officers.	28		1m³ (One Cubic metre)	
3	3.2		Plain cement concrete 1:2:4 (One of cement two of sand and four of Hard Broken Stone jelly) using 20mm gauge hard broken stone jelly excluding shuttering and centering but including laying, curing and finishing with relevant standard specifications in foundation and basement, and other similar works & as directed by the departmental officers.	28		1m³ ( One Cubic metre )	
4	6.2		Brick work in CM 1:5 (One of cement and five of sand) using chamber burnt bricks of size 9"x4½"x3" (23x11.4x7.5 cm) in foundation and basement including dewatering wherever necessary proper setting, curing etc., complete with relevant standard specifications.	31 & 31-C		1m³ (One Cubic metre)	

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S. No	Item No	QTY	DESCRIPTION OF WORK	TNBP NO.	RATE IN FIG. AND IN WORDS	UNIT IN FIG. AND IN WORDS	AMOUN
1	2	3	4	5	6	7	8
5	33		Plastering with CM 1:5 (One of cement and five of sand) 12mm thick finished with neat cement including providing band cornice, ceiling cornice, curing, scaffolding, etc., complete in all respects and complying with relevant standard specifications.	56 & 57		1m <sup>2</sup> (One Square metre)	
6	41		Painting the new Iron work and other similar works such as PVC /ASTM Pipes, Kerb Stone and grills with two coats of approved first class synthetic enamel ready mixed paint of approved quality and brand, the paint should be supplied by the contractor at his own cost. (The quality and the brand of paint should be got approved by the Executive Engineer before use) complying with relevant Standard specifications.	66 & 66A	ę.	1m <sup>2</sup> (One Square metre)	
7	112		Electrical arrangement Supplying and fixing of 300 mm dia sweep AC exhaust fan of approved ISI quality including necessary wall opening, fixing and finishing the wall opening and making good including cost of material, labour for fixing, chipping and redoing necessary inter connection, scaffolding, hire charges for tools and plants etc., all complete as directed by the departmental officers.			1 No (One Number)	
8	7.2.3		Providing and applying silicon sealent for expansion joint treatment for the vertical wall, roof trap side using approved sealent material including cost of sealent material, labour charges etc all complete and as directed by the departmental officers			1 RMT (One Running Metre)	17

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S. No	Item No	QTY	DESCRIPTION OF WORK	TNBP NO.	RATE IN FIG. AND IN WORDS	UNIT IN FIG. AND IN WORDS	AMOUNT
1	2	3	4	5	6	7	8
9	18.1		Providing Form work and centering for reinforced cement concrete works including supports and strutting up to 3.30m height for plane surfaces as detailed below with all cross bracings using mild steel sheets of size 90cm x 60cm and MS 10 gauge stiffened with welded mild steel angles of size 25mmx25mmx3mm for boarding laid over silver oak or country wood joists of size 10cmx6.5cm spaced at about 90cm centre to centre and supported by casurina props			1 m <sup>2</sup> (One Square	
			10cm to 13cm dia spaced at 75cm intervals and removing the same after a specified period without damaging the R.C.C works etc., complete complying with standard specifaction and as directed by the departmental officers.  a. For Column footings, plinth beam, Grade beam, Raftbeam, Raft slab etc.,	× -		metre)	
10	22.3.9		Providing Cup-board Shutter with frame using termite / water proof plywood of 19mm thick over which laminated sheet of 0.8mm thick				
	# -		fixed inside the shutter and 1mm thick fixed in the outside of the shutter using fevicol along with necessary furniture fittings, such as, hydralic hinges, tower bolt, handles, multi purpose locks etc., as directed by the Departmental Officers. The design pattern, water proof plywood, laminate sheet and other materials should be got approved from the Executive Engineer befoe use on work etc., all complete and as directed by the departmental officers			1m <sup>2</sup> (One Square metre)	
11	29.9.4		Supplying and fixing of Colour matt finish floor Tiles of size 305x305mm (12"x12") for flooring and other similar works (Best approved superior quality and the same shall be got approved from the Executive Engineer before using) over cement mortor 1:3 (One of cement and three of sand) 20mm thick including fixing in position, cutting the tiles to the required size wherever necessary pointing the joints with Grout (Tile joint filler), curing, finishing etc., all complete and as directed by the departmental officers. (The brand quality of tiles should be got approved from EE before use).			1m <sup>2</sup> (One Square metre)	

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S. No	Item No	QTY	DESCRIPTION OF WORK	TNBP NO.	RATE IN FIG. AND IN WORDS	UNIT IN FIG. AND IN WORDS	AMOUN'
1	2	3	4	5	6	7	8
12	29.9.5		Supplying and fixing of Colour matt finish Wall Tiles of size 12"x18" for wall and other similar works (Best approved superior quality and the same shall be got approved from the Executive Engineer before using) over cement plastering in CM 1:2 (One of cement and two of sand) 10mm thick including fixing in position, cutting the tiles to the required size wherever necessary, pointing the joints with Grout (Tile joint filler), curing, finishing etc., all complete and as directed by the departmental officers. (The brand quality of tiles should be got approved from EE before use).			Im <sup>2</sup> (One Square metre)	
13	44.6.1		Supplying and fixing of 110mm dia PVC SWR pipe with ISI mark confirming to IS 13952:1992 type 'A' for Rain water down fall pipe (to be got approved from the EE/SSE/CE before use in works) with relevant specials such as gratings, shoes, bends, offsets confirming to IS 14735 including jointing with seal ring confirming IS 5382 with leaving a gap about 10mm to allow thermal expansion with necessary UPVC "U" Breacket / clamps, teak wood plugs, etc., of approved quality and including fixing C.I. gratings at the junction of parapet and floor or roof slab etc., including finishing etc., complete complying with relevant standard specifications.			1 RMT (One Running Metre)	
14	50.3.2	s t r	Labour charges for removing the tree/ green grasses in terrace floor/water tank slabs and ide walls clearing the trees without affecting he adjacent structures including the cost of equired tools and plants and clearing the debris tway from the site etc., all complete and as directed by the departmental officers.			1 Job ( One Job)	

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S. No	Item No	QTY	DESCRIPTION OF WORK	TNBP NO.	RATE IN FIG. AND IN WORDS	UNIT IN FIG. AND IN WORDS	AMOUNT
1	2	3	4	5	6	7	8
15	52.1.1		Supplying, laying, fixing and jointing the following PVC pipes as per ASTM D - 1785 of schedule 40 of wall thickness not less than the specified in IS 4985 suitable for plumbing by threading of wall thickness including the cost of suitable UPVC specials like Elbow, Tee reducers, Plug, unions, bend, coupler, nipple/UPVC gate valve, UPVC check and UPVC / ball valve etc., wherever required above the ground level including the cost of teflon tape, PVC special clamps, nails, etc., fixing on wall to the proper gradient and alignment and redoing the chipped of masonry etc., as directed by the departmental officers. (The brand and quality of pipes and specials should be got approved by the EE/SE/CE before use in works) a) 32mm dia ASTM D schedule 40 threaded PVC pipe with necessary UPVC specials			1 RMT (One Running Metre)	
16			b) 25mm dia ASTM D schedule 40 threaded	_		1 RMT	19)
10			PVC pipe with necessary UPVC specials			(One Running Metre)	
17		- 1	c) 20mm ASTM D schedule 40 threaded PVC pipe with necessary UPVC specials			1 RMT (One Running Metre)	
18	54.12		Supplying and fixing of 15mm dia Engineering Polymer Tap (Long body) of best quality including cost of materials, labour charges for fixing the tap with required specials etc, all complete and as directed by the departmental officers., (The quality and brand of fittings should be got approved from Executive Engineer before use).			1 No. ( One Number )	
19	54.2.2		Supplying and fixing of 15mm dia Engineering Polymer Tap (Short body) of best quality including cost of materials, labour charges for fixing the tap with required specials etc, all complete and as directed by the departmental officers., (The quality and brand of fittings should be got approved from Executive Engineer before use).			1 No. ( One Number )	

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S. No	Item No	QTY	DESCRIPTION OF WORK	TNBP NO.	RATE IN FIG. AND IN WORDS	UNIT IN FIG. AND IN WORDS	AMOUNT
1	2	3	4	5	6	7	8
20	56.3.1		Supplying and fixing of Indian Water Closet white glazed (oriya type) of size 580 mm X 440 mm of approved make with ISI mark (to be got approved from EE before use) with PVC SWR grade 'P' or 'S' trap, including concrete packing, filling portion with earth, flooring the area with 75mm thick brick jelly concrete in CC 1:8:16 (one of cement, eight of crushed stone sand and sixteen of brick jelly) using 40mm size brick jelly and top left rough to receive the floor plastering but including anti-syphonage connection, curing, etc. all complete and as directed by the departmental officers.  In Ground floor.		9	1 No. ( One Number )	
21	56.4.1		Supplying and fixing of Indian Water Closet white glazed (oriya type) of size 580 mm X 440 mm of approved make with ISI mark (to be got approved from EE before use) with PVC SWR grade 'P' or 'S' trap, including concrete filling the sunk portion with brick jelly lime concrete proportion of brick jelly to lime being 32:12½ by volume (32 cft of 20mm gauge brick jelly and 12½ cft of slaked lime) (No sand) and top 75mm thick brick jelly concrete in CC 1:8:16 (one of cement, eight of crushed stone sand and sixteen of broken brick jelly) using 40mm size brick jelly including plastering the sides of sunk portion in CM 1:3 (one of cement and three of crushed stone sand) 12mm thick mixed with water proofing compound at 2Kg / m² and top left rough to receive the floor plastering but including antisyphonage connection, one coat of bitumen for the sides, bottom and curing etc., complete in all floors.  (Other than ground floor)			1 No. ( One Number )	

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S. No	Item No	QTY	DESCRIPTION OF WORK	TNBP NO.	RATE IN FIG. AND IN WORDS	UNIT IN FIG. AND IN WORDS	AMOUNT
1	2	3	4	5	6	7	8
22	58.3	4	Supplying and fixing the following dia PVC (SWR) pipe with ISI mark confirming to IS 13952:1992- type 'B' for soil line with relevant specials confirming to IS 14735 including jointing with seal ring confirming to IS 5382 with leaving a gap about 10mm to allow thermal expansion, fixing the pipes into walls with necessary wooden plug, screws, holding wherever necessary and making good of the dismantled portion with necessary connections to sanitary fittings etc., complete in all respects and as directed by the departmental officers.  a) 110mm dia PVC SWR pipe including all required PVC specials etc., all complete.,			1 RMT (One Running Metre)	
23			b) 75mm dia PVC SWR pipe including all required PVC specials etc., all complete.,			1 RMT (One Running Metre)	
24	68.2.2		Wiring with 1.5 sqmm PVC insulated single				
			core multi strand fire retardant flexible copper cable with ISI mark confirming to IS: 694/1990, 1.1.k.v. grade cable with continuous earth by means of 1.5sq.mm PVC insulated single core multi strand fire retardant flexible copper cablewith ISI mark confirming to IS: 694/1990, 1.1.k.v. grade cable in Surface run of PVC rigid conduit pipe heavy duty with ISI mark with suitable size PVC box (Fire retardent box) of required thickness concealed and covered with 3 mm thick laminated hylem sheet for 5 Amps 5 pin plug socket point at convenient places including circuit mains, cost of all materials, specials, etc., all complete (open wiring)			1 No. ( One Number )	
25	70.5.2		Supply and fixing of 4' long 18 W Crystal Glass LED tube Light with ISI mark including cost of all materials such as twincore flex wire, TW round block and labour charges for fixing in position etc all complete and as directed by the departmental officers (The material should be got approved from the Executive Engineer before use)			1 No. (One Number)	

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S. No	Item No	QTY	DESCRIPTION OF WORK	TNBP NO.	RATE IN FIG. AND IN WORDS	UNIT IN FIG. AND IN WORDS	AMOUNT
1	2	3	4	5	6	7	8
26	77.4.1		Supplying, laying and concealing of PVC pipe of 25mm dia with necessary specials and other materials including run of 1no. Fish wire for drawing cable for T.V/Telephone including cost of materials and labour charges etc all complete.			1 RMT (One Running Metre)	
27	77.5.1		Run of main with 2 wires of 1.5 sq.mm. PVC insulated single core multi strand fire retardant flexible copper cablewith ISI mark confirming to IS: 694/1990,1.1 kv grade cable with continuous earth by means of 1.5 sq.mm PVC insulated single core multi strand fire retardant flexible copper cable with ISI mark confirming to IS: 694/1990,1.1. k.v. grade cable in surface run of 19mm/20mm dia rigid PVC conduit pipe heavy dutywith ISI mark cost of all materials, specials etc., all complete. (Open wiring)			1 Rmt (One Running metre)	
28	77.7.1		Run off main with 2 wires of 2.5 sq.mm. PVC insulated single core multistrand fire				
			retardant flexible copper cable with ISI mark confirming to IS: 694/1990,1.1 kv grade cable with continuous earth by means of 1.5 sq.mm PVC insulated single core multi strand fire retardant flexible copper cable with ISI mark confirming to IS:694/1990,1.1. k.v. grade cable in surface Run of 19mm/20mm dia rigid PVC conduit pipe heavy duty with ISI mark cost of all materials, specials etc., all complete.(Open wiring)			1 RMT (One Running Metre)	

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S. No	Item No	QTY	DESCRIPTION OF WORK	TNBP NO.	RATE IN FIG. AND IN WORDS	UNIT IN FIG. AND IN WORDS	AMOUNT
1	2	3	4	5	6	7	8
29	82.3.		Supply and fixing of LED Street lighting luminaries suitable for fixing 30 watts LED Street light fittings with LED with heavy gauge aluminium sheet fabricated canopy treated primered and painted with stove enameled CRCA sheet steel contact gear cum reflector tray duly finished glossy white for optimum				
			reflection with clear ribbed acrylic bowl fixed to aluminium frame with gasket lining secured to canopy by means of hinges for one side and foggle - catches in the other side for minimum projection against dust and water entry all prewired upto terminal block complete with all accessories such as copper wire, LED, bulb etc., complete using 25mm dia GI 'B' class pipe for 1.50m length, confirming to ISI specifications and including labour charges for fixing street light fittings in EB pole / wall etc., complete as directed by the departmental officers. (The quality and brand of entire fitting should be got approved from Executive Engineer before use).			1 No. (One Number)	
30	96.7.2		Removing and relaying the existing rubber moulded hydraulic pressed paver block (Interlocking tiles) of 63mm thick including proper slopes, levelling and labour charges for removing and relaying with necessary tools and plants etc as per the complete complying with standard specifications and as directed by Department Officers			1m <sup>2</sup> (One Square metre)	
31	207.3.5		Painting the old walls two coats with 1 <sup>st</sup> class ready mixed plastic emulsion paint of best approved quality colour and shade including Thorough scrapping the old surface, clean removal of dirt and dust etc., complete including cost of necessary brushes, labour charges, putty etc., complying with relevant standard specification. (The paint should be supplied by the contractors at his own cost. The quality and shade of the paint should be got approved by the Executive engineer before use.)	65A		1m <sup>2</sup> (One Square metre)	

S.	Item No		DESCRIPTION OF WORK		RATE	UNIT IN	
No		QTY		TNBP NO.	IN FIG. AND IN WORDS	FIG. AND IN WORDS	AMOUN'
1	2	3	4	5	6	7	8
32	207.4		Painting the old wood work with two coats of approved Ist class synthetic enamel paint including thorough scrapping the old paint using sand paper as required by the departmental officers including cost of material, labour for painting, supplying etc., all complete as directed by the departmental officers. (the paint quality and shade should be got approved by Executive Engineer before using.)		,	1m <sup>2</sup> (One Square metre)	
33	207.6		Painting the old iron work with two coats of ready mixed first class synthetic enamel paint including thorough scrapping the old paint using sand paper as required by the departmental officers (the quality and the shade of paint should be got approved by the Executive Engineer before use). Complying with relevant standard specification.			1m <sup>2</sup> (One Square metre)	
34	216.3		Supply,fabricating and errection of steel truss (weight basis) in suitable Tee angle, rafter, purlins, cross, 'I' angles, supporting angle, including cost of bolt and nut including welding charges and one coat of redoxide primer etc., conveyance charges of materials and labour charges for erection and hire charges for required tools and plants etc., all complete in all respects and as directed by the departmental officers.			1 kg ( One Kilogram )	
35	219.6.1		Supplying and fixing of following electrical fittings (Heigher end ) of approved make ISI including cost and labour charges for fixing etc., all complete as directed by the departmental officers. (The electrical fittings should be got approved from the EE before use).				
			a) 6A Modular Switches 6A - 230V 1W - 1 Module			1 No. (One Number)	
36			b) 6A 5 pin Universal Socket (230V) 2 Module			1 No. (One Number)	
37			c) Combined plates of 12 module cover plate (Plastic)			1 No. (One Number)	

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S. No	Item No	QTY	DESCRIPTION OF WORK	TNBP NO.	RATE IN FIG. AND IN WORDS	UNIT IN FIG. AND IN WORDS	AMOUN'
1	2	3	4	5	6	7	8
38			d) Fan step regulator 100W 1 Module			1 No. (One Number)	
39	221.2		Removing the existing damaged iron window frame and shutter repairing and refixing the same in position including cost of necessary tools and plants, hinges, tower bolts, handle, labour charges etc all complete and as directed by the departmental officers size $(1.00 \times 1.65 \text{m} = 2 \text{nos} = 1 \text{ Job})$		2	l Job ( One Job)	
40	242.2.2		Dismantling the damaged floor finish and dadooing walls in cement mortar with Mosaic tilex/Glazed tiles/Cuddapah slabs without affecting the adjacent structures including the cost of required tools and plants and clearing the debris away from the site etc., all complete and as directed by the departmental officers.			1m <sup>2</sup> ( One Square metre )	
41	343.2.2		Supplying and fixing of Galvanium Roof sheet of 0.47mm thick including cost of all materials, cutting, welding & labour charges, fixing in position with necessary screws, nuts, scaffolding etc., all complete, as directed by the departmental officers. (The Material quality & brand should be got approved from the Executive Engineer before use).		,	1m <sup>2</sup> ( One Square metre )	
42	344.5		Supply & Fixing of Bevelled edge mirror of approved quality and brand of size 600x450x5.5mm shelf type mounted in the PVC / Fibre Glass framed with necessary hard board backing including labour for fixing in position etc., complete and as directed by the departmental officers.			1 No. (One Number)	+
43	362.2.2		Supplying and fixing of Stain free nano Polish Vitrified Tiles of size 600x600x8mm for flooring and other similar works(best approved quality, colour and shade and the same shall be got approved from the EE befroe use) in cement mortar 1:3 (one of cement and three of sand) 20mm thick including fixing in position, cutting the tiles to the required size wherever necessary pointing the joints with grout (Tile joint filler), curing, finishing etc., all complete and as directed by the departmental officers.			1m <sup>2</sup> (One Square metre)	

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S. No	Item No	QTY	DESCRIPTION OF WORK	TNBP NO.	RATE IN FIG. AND IN WORDS		AMOUNT
1	2	3	4	5	6	7	8
44	387		Supplying and erecting in position of 50 litres capacity industrial model reverse osmosis water cum purifier to deliver potable water with world health organisation (WHO) standards with following accessories: a) MS skid - 1no, b) Media 11054no vessel with 20nb multiport valve (with media pubble and fine sand and activated carbon filling) set c) Feed pump 0.50HP - 1no, d) Vertical pump 2-9, 2.00HP/Single phase - 1no, e) Membrane 40x40 filmtech (or) equivalents/osmonic (USA) - 1no and pressure gauge - 2nos, f) Flow meter - 1no 20" filter with housing - 1no, low pressure switch - 1no, level switch - 1no and necessary CPVC pipes and fittings. The system shall be provide with two panel control system with necessary stainless valaves and fittings and float control etc. The rate should be inclusive of all civil works, wherever necessary to install the system in postion and intact.etc as per the complete complying with standard specifications and as directed by Department Officers. (The brand should be got approved from the Executive Engineer before use.)			1 Set. (One Set)	
45	387.2		Providing Polymer Coating (Water Proof Coating) for sunken portion of toilet with following specification and the surface shall be cleaned to remove all dust, foregin, matters lose materials or any other deposits of contamination by rubbing with wire brush. Slurry: Dry blend and polymer liquid blend shall be mixed into the desired ratio as per recommendation of the supplier. The mix shall be stirred thoroughly until no bubbles remain in the mix. Any lumps found in mix shall be removed. Apply first coat of polymer modified cementitious slurry by brush on wet cleaned surface. After drying, second coat shall be applied on the first coat as directed by the departmental officers etc. The rate inclusive of cost of materials and labour, etc as per the complete complying with standard specifications and as directed by Department Officers.			1m <sup>2</sup> (One Square metre)	

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S. No	Item No	QTY	DESCRIPTION OF WORK	TNBP NO.	RATE IN FIG. AND IN WORDS	UNIT IN FIG. AND IN WORDS	AMOUNT
1	2	3	4	5	6	7	8
46	387.3		Increasing one metre height of the existing compound wall by providing MS angle in "Y" shape of size (50mm x 6mm thickness), grouting the same in the existing compound wall and laying galvanized barbed wires of 11 ply and in additional to that circular shape barbed wires in between the angles ("Y" shape).			1 RMT (One	
					(One Running Metre)		
47	387.4		Supply and fixing of Prefabricated puf security cabin with toilet arrangements of size 8' x 5' x 8 feet.  Main Structure: The Structure Consists of bottom frame Ms rectangle pipe of size: 60X40, 4numbers of corner Colum's with 60X60 SHS Sq pipe and top frame will be of 60X40				
			ectangular Pipes.  Valls: The Insulated wall Cladding Shall be one with sandwich type Panels including Ms upports for wall panels. The panels shall be nade out of 0.4mm thick Pre Coated plain heets at outer side and inner side, Puf total nickness of wall panel shall be 50mm. PU nust be CFC free. Self-extinguishing, fire stardant type having density of 4kg/CUM. he panels are joined together by tongue and roove method and placed in the vertical frections.  oof: The Insulated Roof Cladding Shall be one with sandwich type Panels including Ms		1 No (One Number)		
			done with sandwich type Panels including Ms 60X40 rectangular Supports for Roof panels. The panels shall be made out of 0.4mm				

S. No	Item No	QTY	DESCRIPTION OF WORK	TNBP	RATE IN FIG.	UNIT IN FIG.	AMOUNT
				NO.	AND IN WORDS		
1	2	3	4	5	6	7	8
			thick Pre Coted plain sheets at outer side and inner side of 0.25, Puf total thickness of Roof panel shall be 30mm Thickness .PU must be CFC free. Self-extinguishing, fire retardant type having density of 4kg/CUM. The panels are joined together by tongue and groove method .  Door: The work includes Main Door Puf Insulated panels of thickness 50mm, Door Size 1900mmX800mm - 1No Electrical &Plumbing: SECURITY CABIN: The cabin Comes with Open Tube light -1 no, 5 pin plug &socket — 2nos , 1No Wall Mountable Fan, 1 No Bulk Head Lamp outside the cabin and Writing Table (Slab) TOILET CABIN: The Toilet Comes 1 No Open Tube Light with ON —OFF Switch & 1 No bulk Head light outside the cabin. PLUMBING: 1 No EWC with flus tank, 1no Health faucet, 1 No Wash Basin Including Water Tap and 1No Exhaust fan with necessary plumbing and necessary electrical wiring. Floor: 18mm cement board screwed to the Base Grid, floor will covered with1mm thick Vinyl flooring for Toilet Anti skid bath room tiles with good quality Lifting Hooks/EYE: Necessary Hooks /EYE provided for Loading and un loading the cabin. etc all complete and as directed by the departmental officers				
48	452.1		Supplying and fixing of 1000W/230V 50 c/s AC supply Automatic electric water heater with copper container with Glass wool / puf insulation wilth M.S powder coated shell of 25 itres capacity of best approved quality with SI mark including cost of labour charges, cost of fixing with all necessary connections, clamps, screws etc. complete as per relevant standard specification and as directed by the departmental officers. (Electric water heater shall be got approved from the E.E. before use.) higher end)			1 No. (One Number)	

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S. No	Item No	QTY	DESCRIPTION OF WORK	TNBP NO.	RATE IN FIG. AND IN WORDS		AMOUNT
1	2	3	4	5	6	7	8
49	619.2.1		Supplying and fixing of following dia GM Gate Valve (heavy duty) Conforming to I.S Specifications including cost materials and labour charges for fixing of etc., all complete and as directed by the departmental officers. (The materials should be got approved from the EE before use)		*		
			a) 25mm GM gate value			1 No. ( One Number)	
50			b) 32 mm GM gate value			1 No. ( One Number)	
51	619.2.3		Supplying and fixing of Angle Valve Conforming to I.S Specifications including cost materials and labour charges for fixing with required specials of etc., all complete and as directed by the departmental officers. (The materials should be got approved from the EE before use)			1 No. ( One Number)	
52	695		1. Supply & installation of Wall Mountable, Electrical operated SANITARY NAPKIN PAD DISPOSAL MACHINE made of mild steel powder coated of size 530H x 250B x 250L (in mm) with Double wall Ceramic Board technology 'PUF' insulation, LCD display of size 16x2cm, burn capacity 8-10 pads per cycle, cycle time 20-25minutes, push control button, pad storage of 45nos (approx.), 200-250pad burn per day, 1000-1500W heater power, Auto cut off for power saving and has Big door opening which makes it convenient to load used Sanitary Napkins, Easy removing Ash Collecting tray for cleanliness, Ceramic Insulation for external thermal protection, Front Opening Door, having an emission outlet outside the room for the smoke developed during the Napkin burning time, Smoke outlet (ITI FAUNA-L or equivalent) etc., all complete as directed by the departmental officers. The brand and product has to be got approved by the Executive engineer before installation. etc. all complete in all respects as directed by the departmental officers. (The brand and quality of the wash basin should be got approved from the Executive Engineer before use.)			1 No. (One Number)	

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S. No	Item No	QTY	DESCRIPTION OF WORK	TNBP NO.	RATE IN FIG. AND IN WORDS	UNIT IN FIG. AND IN WORDS	AMOUNT
1	2	3	4	5	6	7	8
53	755.1		Supplying and fixing of screen cloth with aluminium curtain rods including cost of materials, labour charges for fixing and transportation charges etc all complete and as directed by the departmental officers			1m <sup>2</sup> ( One Square metre )	
54	755.2		Providing and fixing of fly proof PVC mesh (Mosquito net) with necessary velcro arrangements and finishing neatly, and fixing in position complying with relevant standard specifications etc., all complete and as directed by the departmental officers. (The brand / quality of Mosquito net should be got approved from EE before use).			1m <sup>2</sup> (One Square metre)	
55	856		Supply and fixing of stored pressure ABC (Mono Ammonium Phospate) Powder Type Fire Extinguisher of 6 kg. capacity as per IS:15683 with pressure gauge, discharge hose & control nozzle, wall mounting bracket, safety clip etc., including conveyance, all incidental charges, neccessary scaffolding and re-doing the dismantled portions to its original condition wherever found neccessary etc, complete as per standard specification and as directed by the Departmental Officers. Make: Excellent / Safety first / equivalent			1 No (One Number)	
56	868.1	: : : :	Supply and installation of 2MP network bullet camera of 3.60mm fixed lens (2.80mm optional) smart IR upto 30m IR distance (Outdoor camera) of approved make norden including cost of materials and transportation charges etc., complete as per standard specification and as directed by the Departmental Officers (The brand should be got approved from the Executive Engineer before use.)			1 No. (One Number)	

S. No	Item No	QTY	DESCRIPTION OF WORK	TNBP NO.	RATE IN FIG. AND IN WORDS		AMOUNT
1	2	3	4	5	6	7	8
57	868.2		Supply of 16 channel - 2 sata (2nos hard disk) network video recoder (higher end) for CCTV and supports decoding H.265+/H.265/H.264+/H.264 video formats up to 4K high-definition live view, storage and playback up to 16-ch @ 1080p decoding capacity Up to 80 Mbps high incoming			1 No.	
	1		bandwidth ensures IP cameras can be connected 1 HDMI and 1 VGA interfaces both interfaces support independent video output 2 HDDs for continuous video recording etc., complete as per standard specification and as directed by the Departmental Officers (The brand should be got approved from the Executive Engineer before use.)			(One Number)	
58	868.3		Network Switch: Supply and installation of L2 PoE Switch, 24Port, 10/100/1000, 2SFP Ports with support for Auto VLANS and support features like IP4/IP6, QoS, advanced security management, PoE management along with 4U Rack Should support 802.3af (802.3at Type 1)			1 No.	
			specification etc., complete as per standard specification and as directed by the Departmental Officers (The brand should be got approved from the Executive Engineer before use.) make:Dlink/equivalent Warranty: One year			(One Number)	
59	868.4		Supply of 2TB hard disk for the NVR for extended recording including cost of materials etc., complete as per standard specification and as directed by the Departmental Officers (The brand should be got approved from the Executive Engineer before use.) (Higher and)			1 No. (One Number)	

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S.	Item No		DESCRIPTION OF WORK		RATE	UNIT IN	
No		QTY		TNBP	IN FIG.	FIG.	AMOUNT
		QIY		NO.	AND IN	AND IN	AMOUNI
					WORDS	WORDS	
1	2	3	4	5	6	7	8
60	868.5		Supply of 4U Rack (higher end)with				
			Powermanager tray rack standard: Conforms to				
			DIN 41494 or equivalent standard Construction:				
			Welded, Front Door: Lockable Toughened				
			Glass Door, Basic Frame: Steel, Equipment				
			Mounting: DIN Standard Slots, Mounting			-	
			Angle: 19" Mounting angles made of formed			1 No.	
			steel, Standard Finish: Powder Coated, Top and			(One	
			Bottom Cover: Welded to Frame, Vented and			Number)	
			Field Cable entry exit cut outs, Standard Color:			1 (dillioti)	
			Grey etc all complete . etc., complete as per				
			standard specification and as directed by the				
			Departmental Officers (The brand should be got				
	V		approved from the Executive Engineer before				
			use.)				
			usc.)				
61	868.6		Supply & installation of 80 CM (32") LED TV				4
	000,0		with High Dynamic Range, X-Reality™ PRO				
			and One-button YouTube(NATIVE 50 HZ),				
			BLACK BEZEL, BLACK STANDOF				
			Resolution: HD Ready (1366x768)   Refresh				
			Rate: 60 hertz with Connectivity: 2 HDMI ports,				
			2 USB ports, Sound : 20 Watts Output with				
			Open Baffle Speaker, ClearAudio+ technology,				
			TV MusicBox, Smart TV Features: Prime Video				
			Smart TV   Screen Mirroring   Netflix   HDR				
			Gaming, Display: HDR   X-Reality Pro			1 No.	
			Motionflow XR 100 with required			(One	
		,	Vguard/equivalent voltage stabiliser etc., all			Number)	
		- 11	complete as directed by the departmental				
			officers. The brand and product has to be got				
			approved by the Executive engineer before				
			installation etc., complete as per standard		1		
			specification and as directed by the				
			Departmental Officers (The brand should be got				
			approved from the Executive Engineer before				
			ise.)				
		I	Model: (LG-32LT 340C / equivalent)				
2	868.8		Supply of weather proof camera junction box of				
,∠	000.0						160
		- 1	size 4"x 4" for outdoor cameras of approved	1			
			make including cost of materials etc., complete			1 No.	
1			s per standard specification and as directed by			(One	
			he Departmental Officers (The brand should be			Number)	
		1 -	got approved from the Executive Engineer				
		1	pefore use.)		- 1	1	

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S. No	Item No	QTY	DESCRIPTION OF WORK	TNBP NO.	RATE IN FIG. AND IN WORDS		AMOUNT
1	2	3	4	5	6	7	8
63	868.9		Supply and installation of CAT 6 unarmoured Cable for LAN & CCTV including cost of materials and labour charges for laying etc., all complete complying with relavent standard specification and as directed by the departmental officer (The brand should be got approved from the Executive Engineer before use.)	(2)		1 RMT (One Running Metre)	
64	869.3		Supply of Cat6 I/O RJ45 Jack Housing: ABS+PC, UL 94V-0, with optional colour contact bracket: PC, UL 94V-2, transparent RJ45 Jack contact: phosphor bronze with nickel plated finish: 50 micro-inch gold plated on plug contact area IDC: Housing: PC + Glass Fiber, UL 94V-2 terminal: Phosphor Bronze, Tin Plated IDC CAP: ABS, UL 94V-0 etc., complete as per standard specification and as directed by the Departmental Officers (The brand should be got approved from the Executive Engineer before use.)	8	550 - 42	1 No. (One Number)	
65	869.5		Installation, commissioning and testing charges of whole CTTV system, Wifi acess and dish arrangements with proper connection etc., complete as per standard specification and as directed by the Departmental Officers (The brand should be got approved from the Executive Engineer before use.)			1Job. (One Job)	
66	960.1		Computer, printer, TV, Accessories Supplying & installing of LENOVA V250 SLIM TOWER (10NNA 01 AIH)/equivalent with 4GB DDR4 RAm1 TB HDDI intel core-i3, 4GB, 1 TB, DOS)desktop with Monitor 19.5", HD screen, Keyboard and Mouse (one + two) including cost of materials and labour charges for installation etc., all complete complying with relavent standard specification and as directed by the departmental officer (The brand should be got approved from the Executive Engineer before use.) Warranty: 3 years	T		1 No. (One Number)	

S. No	Item No	QTY	DESCRIPTION OF WORK	TNBP NO.	RATE IN FIG. AND IN WORDS	UNIT IN FIG. AND IN WORDS	AMOUNT
1	2	3	4	5	6	7	8
67	960.2		WIFI Supply of Indoor 802.11ac Wave 22 x 2:2 Wifi access point with wall mounting kit and POE Injector including cost of materials and labour charges for installation etc., all complete complying with relavent standard specification and as directed by the departmental officer (The brand should be got approved from the Executive Engineer before use.)			1 No. (One Number)	-
68	960.4		Supply of 2U Rack (higher end) with Power manager tray rack standard: Conforms to DIN 41494  equivalent standard Construction: Welded, Front Door: Lockable Toughened Glass Door, Basic Frame: Steel, Equipment Mounting: DIN Standard Slots, Mounting Angle: 19" Mounting angles made of formed steel, Standard Finish: Powder Coated, Top and Bottom Cover: Welded to Frame, Vented and Field Cable entry exit cut outs, Standard Color: Grey etc., all complete complying with relavent standard specification and as directed by the departmental officer (The brand should be got approved from the Executive Engineer before use.)			1 No. (One Number)	
69	960.5		Supply, installation, testing & commissioning of 8-Port Fast Ethernet PoE Smart Managed Switch (D-Link DES-1210-08P / equivalent) with 8 x 10/100BASE-TX PoE, Supports IEEE 802.1p QoS, Bandwidth Control, Auto Surveillance VLAN, Auto Voice VLAN, Cable Diagnostics, Web Interface w/PC-based SmartConsole Utilityetc., all complete as directed by the departmental officers. The brand and product has to be got approved by the Executive engineer before installation. etc., all complete complying with relavent standard specification and as directed by the departmental officer (The brand should be got approved from the Executive Engineer before use.) Warranty; one year			1 No. (One Number)	

Contractor

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S. No	Item No	QTY	DESCRIPTION OF WORK	TNBP NO.	RATE IN FIG. AND IN WORDS		AMOUNT
1	2	3	4	5	6	7	8
	960.6		Supply, delivery and installation of LED Television of size 43" (109.22 cm) make LG essential commercial TV multiple use (43LT340COTB) with resolution of 1,920 x 1,080 (FHD), Brightness 400 cd/m2 broad casting system – digital, audio output 10w+10w speaker system, quick menu, USB cloning,				
			wake on LAN, self-Diagnostics (USB), lock mode, one channel Map, USB auto play back, time scheduler, anti theft system, voltage Hz 100-240v,50/60Hz etc., including costof materials, labour for fixing etc., all complete and as directed by the departmental officers.(The brand should be got approved from the Executive Engineer before use.)	*		1 No. (One Number)	
71	960.7.1		Supply and delivery of Canon printer MF232W type - laser, functionally - all in one (print, scan and copy) and printer output mono (black), compatible cartridge 337; page yield - 2400 pages; page size supported A4, B5, A5, Legal,				
			Letter, Statement etc of approved make including cost of materials and transportation charges etc., all complete complying with relavent standard specification and as directed by the departmental officer (The brand should be got approved from the Executive Engineer before use.)  Warranty: One year			1 No. (One Number)	
72	960.8		Supplying & installing of DTH services including cost of materials and labour charges for intallation and proper alignmet setting for channels etc., all complete complying with relavent standard specification and as directed by the departmental officer (The brand should be got approved from the Executive Engineer before use.) (TV dish HD BOX)			1 No. (One Number)	

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S. No	Item No	QTY	DESCRIPTION OF WORK	TNBP NO.	RATE IN FIG. AND IN WORDS		AMOUNT
73	960.9	3	Supply, Installation & testing of Standalone Biometric Fingerprint Time and Attendance System (Grey)Fingerprint Capacity: 10,000,Transaction Capacity: 1,00,000,Card Capacity: 10,000,Fingerprint sensor: 500 DPI Optical sensor(ESSL X990 or equivalent)etc., all complete as directed by the departmental officers. The brand and product has to be got approved by the Executive engineer before installation.		6	1 No. (One Number)	8
74	961		Warranty: One year  Supply and delivery of PHILIPS GC181/equivalent 1000W Dry Iron box (Black) etc., all complete complying with relavent standard specification and as directed by the departmental officer (The brand should be got approved from the Executive Engineer before use.)  Warranty: One year			1 No. (One Number)	
75	972.2.1		Supply and delivery of 5KVA static UPS without battery; In built LCD LED panel for continous information about static operations, pure sine wave output with constant voltage frequency, ECAC technology (Error correction analogue compare) and system having 3-Phase power supply and charger block with LED display and LED indiactions including smart Bypass selection switch and output voltage selection: 220V/230V including cost of materials and transportation charges etc., all complete complying with relavent standard specification and as directed by the departmental officer (The brand should be got approved from the Executive Engineer before use.) 3 years warranty			1 No. (One Number)	
76	972.3	i I I I I I I I I I I I I I I I I I I I	Supply and delivery of Exide/equivalent inverter plus 100Ah SMF battery (Sealed maintenance free) of size 35.60 x 40.60 x 33cm with corrosion resistant, flexible oxidation and nighly punture resistance, discharging for longer back up time etc including cost of materaials and transportation charges etc all complete and as directed by the departmental officers (The brand should be got approved from the Executive Engineer before use.)			1 No. (One Number)	

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S. No	Item No	QTY	DESCRIPTION OF WORK	TNBP NO.	RATE IN FIG. AND IN WORDS	UNIT IN FIG. AND IN WORDS	AMOUNT
1	2	3	_ 4 4	5	6	7	8
77	972.4		Battery Stand for 100 AH: Supplying and delivery of Standard Battery Stand for housing 100 AH SMF Batteries, including cost of battery terminal and inter linking cables etc all complete and as directed by the departmental officers (The brand should be got approved from the Executive Engineer before use.)		4.	l No. (One Number)	
78	972.5		Testing, commissioning and installation charges for UPS arrangements with proper connectionsetc all complete and as directed by the departmental officers		,÷	1 Job. (One Job)	
79	988.1	x	Supplying of Duroflex/equivalent mattress - cozy mattresses 75"x36"x4" with 4"coir including a pair of pillows of size 16"x24 etc complete complying with standard specifications and as directed by Department Officers. (The brand should be got approved from the Executive Engineer before use.)			1 No. (One Number)	
80	988.2		Providing and Fixing for the foldable study table size of (0.6m x 0.4m) using 10mm MDF sheets and all the neccesarry works etc the complete complying with standard specifications and as directed by Department Officers. (The brand should be got approved from the Executive Engineer before use.)			1 No. (One Number)	: ::
81-	988.3		Supply and delivery of Plastic Chairs Nilkamal /equivalent for study table area. etc complete complying with standard specifications and as directed by Department Officers. (The brand should be got approved from the Executive Engineer before use.)			1 No. (One Number)	
82	988.5		Supplying and fixing of 3 seater SOFA made upof teak wood on Parents room, with 40 density foam upholstered with cotton fabric/velvet. etc complete complying with standard specifications and as directed by Department Officers. (The brand and model should be got approved from the Executive Engineer before use.)			1 No. (One Number)	

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S. No	Item No	QTY	DESCRIPTION OF WORK	TNBP NO.	RATE IN FIG. AND IN WORDS	UNIT IN FIG. AND IN WORDS	AMOUNT
1	2	3	4	5	6	7	8
83	988.6.1		Supply and delivery of Iron table stand with press holder, foldable and height adujtment / ironing board with multi function ironing table including cost of materials, labour charges and transportation charges etc as per the complete complying with standard specifications and as directed by Department Officers. (The brand should be got approved from the Executive Engineer before use.)			1 No. (One Number)	
84	988.7		Supplying and delivery of Pillow Covers (16" x 24") & Bed sheets (Single) etc the complete complying with standard specifications and as directed by Department Officers. (The brand should be got approved from the Executive Engineer before use.)  Fabric: Cotton			1 Set. (One Set)	
85	988.7.1		Supply and delivery of pillow of approved make Duroflex/equivalent including cost of materials and transportation charges etc all complete and as directed by the departmental officers (The brand should be got approved from the Executive Engineer before use.)			1 No. (One Number)	
86	988.8.1	; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	Supply and delivery of steel junior table with one drawer and one cupboard with table top 18mm prelaminated particle board. The frame shall be of MS round 1" 18G pipe with enamel painted finish of size 48" Length x 24" width x 30" Height and model no: SST-1A/equivalent including cost of materials, labour charges and transportation charges etc all complete and as directed by the departmental officers (The brand should be got approved from the Executive Engineer before use.)	-		1 No. (One Number)	
87	989	( ( ( (	Supplying and delivery of Garbage Bins (Plastic) of 5 litre capacity etc complete complying with standard specifications and as directed by Department Officers. (The brand and model should be got approved from the Executive Engineer before use.)	-		1 No. (One Number)	

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r No	Item No	QTY	DESCRIPTION OF WORK	TŅBP NO.	RATE IN FIG. AND IN WORDS	UNIT IN FIG. AND IN WORDS	AMOUNT
1	2	3	4	5	6	7	8
88	989.1		Supplying and delivery of Garbage Bins(Plastic) for kitchen waste of 75 litecapacity with lid of Red & Green Colour box etc the complete complying with standard specifications and as directed by Department Officers. (The brand should be got approved from the Executive Engineer before use.)			1 No. (One Number)	
89	989.2		Supplying and delivery of Cloth floor mat of Size 100x45cm of approved good quality etc the complete complying with standard specifications and as directed by Department Officers. (The brand should be got approved from the Executive Engineer before use.)		i a	1 No. (One Number)	
90	989.4		Supplying & fixing of Concrete Stone Bench of required size of approved good quality etc the complete complying with standard specifications and as directed by Department Officers. (The brand should be got approved from the Executive Engineer before use.)			1 No. (One Number)	×
91	989.5		Supply of First Aid Box complete with all First Aid Medicines etc the complete complying with standard specifications and as directed by Department Officers. (The brand should be got approved from the Executive Engineer before use.)			1 No. (One Number)	

NO. OF CORRECTIONS

# TAMIL NADU POLICE HOUSING CORPORATION LTD.,

No.132, E.V.R. Salai, (Poonamallee High Road), Kilpauk, Chennai - 600 010.

Renovation of Existing Working Women's Hostel Building at Adyar in Chennai city under Social Welfare Department. SCHEDULE 'B' Name of work

The attested copies as a proof of registration with upto date renewal, solvency with encumbrance certificate, Current Income Tax, sales tax verification certificate, GST Registration Certificate, performance certificate ets., shall be enclosed. Note

Description

Drawing No.

SI. No.

Layout

Note: (i) All drawings to be signed by the contractor as well as the officer entering contract.

Remarks

All drawings can be seen in Division Office €

CONTRACTOR

# Schedule 'C'

# **Additional Specifications**

- 1. The Contractor shall make his own arrangements for clean, fresh water for use on the work and shall meet all charges therefor.
- All iron work or steel work of everykind, except such as is to be embedded in cement concrete shall immediately on arrival at the site be properly scrapped and wire brushed and given a priming coat of redlead paint without claim for extra.
- The Teak Wood shall be of best Indian Wood only and the country wood shall be species like Pillamardu or Kariamarudhu only and shall be subject to inspection and approval by the Executive Engineer before use on work.
- 4. Holes and chasis for electric wiring, water supply, drainage etc., shall be provided as directed during the progress of work without claiming any extra charges.
- 5. All external corners, edges of beams, edges of door and window openings etc., shall be finished with chamber and also truly vertical or horizontal as the case may be. The rate of plastering shall include the cost of finishing as above. No extra for finishing the corners, edges etc., will be paid.
- 6. The arrangements for MS rods for reinforcement for each RCC work shall be in accordance with the working drawings supplied.
- The planks for forms and centering for RCC work shall be of well seasoned timber approved by the Executive Engineer according to sub clause 10 of T.N.B.P. No. 30. They must be made smooth and perfectly level at top so as to give a smooth and even finish to the R.C.C. Ceiling. Alternatively, the contractor may use steel sheets over wooden frame provided, the required finish to the underside of the slabs is obtained. Mango planks shall not be used under any circumstances. Centering and form works shall be provided to the extent and area ordered by the Executive Engineer during the execution. Finishing shall be done as per sub-clause 15 of TNBP No. 30.
- 8. All cement concrete for RCC works shall be machine mixed and vibrated
- 9. All lime mortar shall be grinded in a mortar mill as per TNBP.
- 10. The rates for brick work in all the floors includes the labour charges for fixing the frames of doors and windows and fixing G.I. pipes outlets for windows as per sub-clause 14 of TNBP No.31.
- 11. The rate for plastering includes providing cornice, band cornice, ceiling cornice and skirting wherever necessary as directed by the Department officers.
- 12. It is not obligatory to supply any materials (Controlled or non-controlled) required for the constructions. The contractor is expected to make his own arrangements. The quality of these materials should confirm with the specification given in ISI. Ordinary Portland Cement 43 Grade grey colour SRC if necessary based on site condition (without any extra cost) confirming to IS Specification should be used. Steel rods should also confirming to ISI.
- 13. Steel rods should be cut and placed as reinforcement with proper anchorage to the available rods at site so as to ensure the minimum wastage possible.
- 14. The cement brought by the contractor for use should carefully stacked in approved stores and on works as and when required the proper care so as to ensure the minimum wastage possible.

- 15. All the dismantled work should be made good plastered and cement painted to match the original surface.
- 16. For all RCC works the rate shall include the treatment of bearings as per plan of TNBP. No extra payment will be made.
- 17. If the rates are not separately called for, similar items of works in different floors, the contractor should quote, one rate applicable for all the floors indicated in the detailed plans, any claims for extra rates for such items floorwise will not be entertained under any circumstances.
- 18. The contractor should not employ the labour below the age of adults.
- 19. If night work required to fulfill the agreed rates of progress, all arrangement shall be made by the contractor inclusive of lighting without any claim for extra rate.
- 20. Rates: The tenderer shall quote their rates for the finished item of work only as given in the schedule it shall be clearly understood that no increase in the rates tendered for will be permissible on any account after the tenders are accepted.
- 21. The tenderer should fill up the Amount for each item in the Amount Column as well as total amount in the coding sheet without fail. Otherwise the tender will not be taken comparison.
- 22 The rate for all the items shall be quoted for in the metric units.
- 23. The tenderer shall examine closely the General conditions of contract of the Tamil Nadu Building Practice and sign the copy kept in the office into taken of such study before submitting his tender. Unit rates which shall be for finished work in site.
- 24. The electrical works should be executed by a person or firm holding 'A' grade or 'B' grade licence issued by Licensing Board and Government of Tamil Nadu.
- 25. Once the offer of the tenderer is accepted by the TNPHC, if either the tenderers choose to withdraw this tender or for any reason refused to execute the agreement and comply with the terms of the tender and agreement, the amount deposited by the tenderer towards the EMD/SD and A.S.D. (with GST) shall be forfeited and tenderer shall not be entitled to refund the same.
- 26. The contractor should take risk insurance against fire, other usual risk for all or any loss or damages occasioned by or arising out of acts of God, and in particular un precedented flood, volcanic eruption, earthquake or other convulsion of nature, invasion, the act of foreign enemies, hostilities or warlike operations (before or after declaration of war) rebellion, military or usurped power, such policy should cover the construction period against the risk by the construction at his / their own cost and produce to the concerned Executive Engineer / Superintending Engineer within one month from the date of execution of the agreement failing which the TNPHC shall be entitled to take out what ever policy as may be required to cover those eventualities and to effect recovery towards the cost of such policies from the contractor's payments with a penalty of 50% on the cost of such policies.
- 27. Water closet, basins, urinals, sinks and other sanitary ware shall be of approved make as required in the ralevant items.

  The fixing of these should be in accordance with the special specifications after the completion of the work.
- 28. The clamps of G.I. pipes fittings should not be spaced more than 6' part from the wooden plug for pipe and bracket fittings should be properly fixed in C.M. 1:3 in holes made in and not hammered into the walls. The size of plugs should be not less than 1" square at this end and at the other end with the depth of not less than 3".
- 29. The contractor should procure approved quality of paint only in containers. The above container should be used in the present of the Assistant Executive Engineer and got approved before use. On any account paint in other than original container will not be allowed for use.

- 30. Recovery under Revenue recovery Act: Whenever any amount has to be paid by the contractor in lieu of determination of the contract by virtue of clause 57.4 (TNBP) for any amount that may be due or may become due from the contractor under the present and the contractor is not responding to the demand for the payments of the said amount, then the TNPHC Ltd. shall be entitled to recover the said amount under the provisions of the Tamil Nadu Revenue Recovery Act.
- 31. The contractor is bound by all the condition of clauses of standard General condition of contract as amended time to time if is the course the contract, any G.O. is issued introducing new condition or clauses (for PWD / Other department), Supplemental Agreement must be executed by the contractor for implementing the condition.
- 32. Any extension of time may not be granted by the authority unless the delay is caused by the Department.
- 33. In the event of the work transferred to any other unit Division the Executive Engineer / Assistant Executive Engineer who is incharge of the units / Divisions/ Sub Divisions having jurisdiction over the above shall be competent authority to exercise all the powers and privilege of TNPHC and to act on behalf of TNPHC.
- 34. The contractor shall form his own approach road to the work sites for which no extra will be due to him. On completion of work the contractor shall not be permitted to remove the materials laid for the formation of road. If the contractor is allowed to use the existing roads, he shall maintain them in good condition on at his own cost throughout the period of contract.
- 35. The work should be executed in accordance with the circular instruction of the Chief Engineer issued time to time. Copy of the circular instruction can be perused in the department office during office hours.
- 36. During the course of contract period deductions of Income Tax shall be made as per the provisions of the Income Tax Act amended from time to time as applicable.
- 37. Royalty / seigniorage charges due for use of any quarry land shall be paid by the contractor.
- 38. The contractor should be responsible for the safe custody storage of materials under dry conditions at the place of work spot approved by the Executive Engineer.
- 39. The contractor should abide by the contractor's labour regulation of PWD framed by Tamil Nadu.
- 40. Impounding minimum 10 cm of water over roofs for 48 hours before laying the weathering course and pressed tiles to check the water tightness.
- 41. Xerox copy of the certificate for the technical personnels to be enclosed along with the tender.
- 42. Action against the contractors who have participated in the earlier tenders but failed to execute the agreement on some pretext after receipt of the work order will be taken as per the G.O. in force.
- 43. No tenderer is permitted to withdraw his / her / their tender at any stage. If any tenderer withdraws his / her / their offer with in the tender validity period his / her / their EMD / SD (with GST) shall be forfeited and his / her / their name(s) will be noted for blacklisting.
- 44. The contractors those who have got registered their names in TNPHC Ltd (or) PWD in the appropriate class and monetary limit with upto date renewal, are eligible to participate in the tender and they are requested to produce the latest registration copy issued by the department concerned. The contractors those who have carried out such type of similar works are most preferable.
- 45. Income Tax return Certificate (2020-21 / 2021-22).
- 46. Sales tax verification certificate (2016-17). The total Annual turnover amount, Tax paid and other details should be covered in the Sales tax verification certificate. Otherwise the Sales tax verification certificate will not be considered and such tender shall be rejected summarily.
- 47. Revenue solvency issued by the Tahsildar with upto date EC should be uploaded. The details of Survey number, area etc., of the property mentioned in the solvency certificate and Encumbrance certificate should be tallied. If any discrepancies, the same will not be considered. Encumbrance certificate should be obtained from the date of solvency certificate issued by the Tahsildar, on or after the date of tender notice of the respective works. EC should be free from Encumbrance. If EC is obtained from the Government website, the same also be considered.
- 48. Incase the tender is made by an individual, the tender documents shall be signed by the individual with his name and address and submit along with a copy of (duly attested by Notary public / Gazatted officer) proper contractor registration certificate

- 49. Incase the tender is made by registered firm, it shall be signed by the Managing Partner (or) the person authorized by the firm, with full name of the firm and address. The proof shall be submitted along with the copy of partnership deed and current renewal for firm registration. i.e., Form 'C' obtained from registar of firms with proof of renewal (Copies should be duly attested by Notary/Gazatted officer).
- 50. Incase the tender is made by a limited company or a limited corporation, it shall be signed by a duly authorized person holding the power of attorney for signing the tender in which case a certified copy of the power of attorney shall accompany the tender. The Articles of Memorandum of the Company and profile of the company with company incorporation certificate copies with seal (duly attested by Notary or a Gazatted Officer) shall be submitted along with his / their tender.
- 51. Incase a tenderer, tendered in the Name and Style of Proprietorship concern the tenderer should have registered his firm name in the respective registrar office and enclose the copy of Proprietorship Doed (duly attested by the Notary / Gazatted Officer) along with the tender. The sole propritor alone should sign in the tender documents.
- 52. The Performance Certificate in having satisfactorily executed and completed building works / related works. (The completed value shall be more than 50% of the value of the contract put to tender (with GST) in a single contract) directly issued by the concerned organization during past five years. The evidence for the same should be produced from an officer not less than the rank of the Superintending Engineer of the Government or Government undertakings / Responsible person of the Private organizations. Incase of contractors who have executed works in TNPHC Ltd, the satisfactory performance certificate in the prescribed formate from the Superintending Engineer concerned of TNPHC Ltd, should be furnished.
- 53. The tenderer should sign all the pages of the tender schedule without fail. Otherwise, the tender will be summarily rejected.
- 54. The contractor should submit the TDS certificate issued by the Income Tax Department for the private work experience.
- 55. The Private experience should be supported along with TDS statement (i.e., Form 16A & Form 26AS).
- 56. The copies of credentials, documents, should be got attested by Notary Public / Gazetted officer of state or Central Government.
- 57. EMD exemption is not entertained vide G.O Ms.No.270 Finance (salaries) department dated .19.09.2017.
- 58. The tenderer should be registered with GST.
- 59. The total value of a contract / Service which exceeds Rs.2.50 Lakhs, 2% GST TAX at source will be deducted. (1% CGST & 1% SGST) as applicable from time to time in addition to 1% or 2% of TDS as per IT act.

#### SCHEDULE 'D'

Applicable to all cases of work where a minimum of fifty workers are employed except works relating to roads, Channels and Canals.

#### For the provision of health and sanitary arrangements for workers:

The Contractor's special attention is invited to clauses to the General conditions of contract of Tamil Nadu Building Practice and he is requested to provide at his own expense the following amenities to the satisfaction of the Chief Engineer.

### 1. First Aid:

At the work site there shall be maintained in a readily accessible place, first aid appliances and medicines including adequate supply of sterlised dressings and sterlised cotton wool. The appliances shall be kept in good order. They shall be placed under the charge of the responsible person who shall be readily available during working hours.

# 2. Drinking Water:

- a. Water of good quality fit for drinking purposes shall be provided for the work people on a scale of not less than
   15 litres per head per day.
- b. Where drinking water is obtained from an intermittent public water supply, each work place shall be provided with storage tank where such drinking water shall be stored.
- c. Every water supply storage shall be at a distance of not less than 15 metres from any latrine drain or other source of Pollution. Where water has to be drawn from an existing well which is within such prominity of latrine, drain or any other source of pollution the well shall be properly chlorinated before water is drawn from it for drinking. All such wells shall be entirely closed it and to be provided with a trap door which shall be dust and water proof.
- d. A reliable pump shall be fitted each covered well, the trap door shall be kept locked and opened only for cleaning or inspection which shall be done atleast once a month.

# 3. Latrines and Urinals:

There shall be provided within the precincts of every work place latrines and urinals in an accessible place and the accommodation separately for each of them, shall be on the following scale or on the same as directed by the Executive Engineer in any particular case.

		Seats
i.	Where the number of person employed does not exceed 50 persons	2 nos
ii.	Where the number of persons employed exceed 50 but does not exceeds 100	3 nos
iii.	For every additional 100	3 nos

If women are employed separate latrines and urinals screened from those for men shall be provided on the same scale.

Except in work places provided with water flushed latrines connected with a water store sewage system all latrines shall be provided with receipt table on dry earth system, which shall be cleaned atleast four times daily and atleast twice during working hours and kept in a strictly sanitary conditions. The receiptance shall be tarred inside and outside atleast once a year.

# 4. Washing and Bathing places:

Adequate washing and bathing places shall be provided separately for men and women, such places shall be kept in clean and drained condition. Bathing or washing should not be allowed in or near any drinking water well.

The excreta from the latrines shall be disposed off at the contractor's expense to the out way pits approved by the local public health authority. The contractor shall also employ adequate number of scavengers and conservancy staff to keep the latrines and urinals in a clean condition.

# 5. Sheds During Rest:

At the work site there shall be provided free of cost two suitable sheds one for male and the other for female for rest fit for the use of labourers.

- 6. At every work place at which 50 or more women workers are ordinarily employed there shall be provided two huts of suitable size for the use of children under age of 6 years belonging to such women. One hut shall be used for infants games and play and the other as their shed room. The huts shall not be constructed on a lower standard than following.
  - i. Thatched roofs
  - ii. Mud floors and walls
  - iii. Planks spread over the mud floor and covered with matting.

The use of the huts shall be restricted to children, their attendants and mothers of the children.

#### 7. Canteen:

A cooked food canteen on a moderate scale be provided for the benefits of workers if it is considered expedient.

#### 8. Shed for Women:

The contractor should provide at his expense shed for housing his workman. The shed shall be on a standard not less than the cheap shelter type to live in which the work people in the locality are accustomed to. A foot area of about 6'x5' for 2 persons shall be provided. The sheds are to be in rows with 5 feet clear space between rows if conditions could permit. The work people shall be laid out in units of 400 persons each. Each unit to have a clear space of 12m alround.

# TAMIL NADU POLICE HOUSING CORPORATION LTD.,

# ADDITIONAL CONDITIONS OF TENDER AND AGREEMENT

- Once the offer of the tender is accepted by the Corporation, if either the tenderer chooses to withdraw his tender or any
  reason refused to execute the agreement and comply with the terms of the tender and Agreement the amount deposited by
  the tenderer towards EMD/SD and ASD (with GST) shall be forfeited and the tenderer shall not be entitled for the refund for
  the same.
- 2. The contractor/contractors shall take risk insurance at his/their own cost against losses due to floods and other acts of God. No claim from the Contractor shall be entertained by the department for such losses.

3. i) Earnest Money Deposit (with GST)

1% (one) upto Rs.20.00 lakhs of estimate value plus 1/2% (half) of the

amount by which the estimated value exceeds Rs. 20.00 lakhs

ii) Security Deposit (with GST)

Will be 2% (two) of the contract value minus the E.M.D. already remitted

along with the tender

ii) Retention Money Deposit (with GST) :

At 5% (five) shall be recovered from the each bill based on the

value of work done by the contractors.

- 4. a 50% of retention money deposit (with GST) amount recovered from the bills would be paid to the contractor along with final bill
  - b. The E.M.D., SD and A.S.D. (with GST) shall be released only after the expiry of six months from the date of completion of
  - c. Balance 50% of RMD (with GST) will be released after expiry of one year from the date of completion of work for which the contractor has to give a written under taking in the form of an indemnity bond for further period of 4 years (As per G.O.Ms.No.283 Public Works (G2) Dept, Dt: 21.05.1999).
- The total value of a contract / Service which exceeds Rs.2.50 Lakhs, 2% GST TAX at source will be deducted. (1% CGST & 1% SGST) as applicable from time to time in addition to 1% or 2% of TDS as per IT act.
- The tenderer shall quote the rates and prices (both in figures and words) for all the items of the works described in the Bill of Quantities excluding GST.
- 7. Government of India has notified vide Notification No.20/2017- Central Tax (Rate), dated 22<sup>nd</sup> August, 2017 and Notification No.24/2017- Central Tax (Rate), dated 21<sup>st</sup> September, 2017, the concessional rate of the Goods and Services Tax (GST) at 12% [CGST at 6% + SGST at 6%] is leviable for any Government contract, Whether Civil or Electrical, irrespective of the Goods and Services Tax (GST) rate applicable on purchase of goods used in the execution of Government Contract. And the GST amount will be calculated at 12% from the sum of total tendered value quoted by the tenderer for construction cost (excluding GST) specified in the BOQ, subject to GST rate applicable from time to time as recommended by the GST Council.
- 8. All duties, taxes, and other levies except GST, payable by the contractor under the contract, or for any other cause shall be included in the rates, prices and total Bid Price submitted by the Bidder.
- 9. The Contractor should be required to indicate their GST registration number under the Goods and Services Tax (GST) Act 2017 in the tender form. The Central Goods and Services (CGST) Act 2017, the Integrated Goods and Services (IGST) Act 2017 and the Tamil Nadu Goods and Services (TNGST) Act 2017 have been enacted and enforced from 01.07.2017. Under the new tax regime, GST (comprising CGST, SGST and IGST) on works contracts for Government work was finally notified at 12 percent. As per the Tamil Nadu Goods and Services (TNGST) Act 2017, with effect from 01.07.2017.
- 10. In the case of disputes for claims upto Rs. 50,000 /- the Chief Engineer, Tamil Nadu Police Housing Corporation Limited, shall be final deciding authority. In case of claims exceeds Rs. 50,000/- it should be referred to court of Law in Tamil Nadu.

- 11. If the contractor quotes unworkable rates in the tender, special additional security deposit will be levied at the discretion of the Chief Engineer, Tamil Nadu Police Housing Corporation apart from usual deposits.
- 12. The contractors / tenderers who are covered under the Employees Provident fund and Miscellaneous Provision Act 1952 shall produce the Code No. (Regn. No) of their establishment. If the contractors are not covered under the above said Act, they shall furnish a declaration to that fact.
  - It is obligatory on the part of the contractor to recover the Employees Provident Fund Subscription from the Employees who work under them/him/her and remit to the Regional Provident Fund Commissioner.
- 13. Further, if any modifications or amendments are issued by the concerned department / Government from time to time, the same is applicable as and when such orders are issued. The contractors should be aware of the rules stipulated on this by the concerned department / Government.
- 14. All the dismantled work should be made good to match the original surface.
- 15. The contractor shall make use of kiln burnt ground moulded country bricks/stock bricks of clear designation so having average compressive strength of 35 kg/cm2 for country bricks and 50 kg/cm2 for chamber Burnt / stock bricks.
- 16. The testing shall be done by the contractor at his own cost for all the building materials such as cement, sand, bricks, steel, pressed tiles, water, etc., & the finished products like concrete cubes. Every consignment of cement and steel supply should be tested for quality at contractors own cost.
- 17. On evaluation of tender, if it is found that if the overall quoted amount of the tender is less than 5 to 15% of the value put to tender, the contractor shall pay an additional security deposit at 2% of the estimate value put to tender. If the tender discount exceeds 15% the contractor shall pay an additional security deposit of 50% of the difference between the quoted amount and estimate amount by means of Demand Draft / Pay Order / Banker's Cheque from any one of the Nationalized bank / Scheduled bank in favour of the Executive Engineer Concerned / NSC / KVP should be pledged in favour of the respective the Executive Engineers.. Failure to furnish the additional security deposit within 15 days from the date of receipt of acceptance order and execute the agreement shall entail cancellation of award of contract with forfeiture of EMD furnished.
- 18. The Contractor shall make their own arrangements for the levelling instruments at site of work.
- 19. It is obligatory on the part of the successful tenderer that they should upgrade their registration in the appropriate class from the department where they have registered as registered contractor as per rules inforce before concluding the agreement.
- 20. The tenderer/contractor will make his/her/their own arrangements to procure and use ISI Brand cement and steel required for the work.
- 21. It should be clearly understood that the rate quoted by the tenderer / contractor is inclusive of the cost of 43 grade ordinary portland cement / SRC and steel and other incidental charges such as conveyance, loading, unloading, stacking at site and testing charges etc..., complete.
- 22. The tenderer / contractor will produce test certificate obtained from any one of the Govt. institutions for cement and steel brought to site. As and when required by the Department the cement and steel brought to the site shall be tested by the Department from any one of the approved Govt. institutions and only when the test results confirm to the ISI specification they will be allowed to be used in the works
- 23. The tender shall be valid for a period of 90 days from the date of opening of tender.
- 24. Every tenderer is expected, before quoting his rates to inspect the site of proposed work. He should also inspect quarries and satisfy himself about the quality and availability of materials such as Bricks, Sand & HBS jelly etc., The best class of materials shall be allowed to use on the work. In every case the materials must comply with the relevant standard specifications. Samples of materials called for in standard specifications, or in this tender notice or as required by the Executive Engineer in any case shall be submitted for the Executive Engineer 's approval before the supply to the site of work is began. Accordingly the tenderers are requested to quote there own workable rates.

- 25. The Tamil Nadu Police Housing Corporation Limited will not however after acceptance of contract rate pay any extra charges for lead or for any other reasons in case the contractors is found later on to have misjudged the materials available. Attention of the contractor is direct to the General conditions of the contract regarding payment of seigniorages tolls etc. subject to price adjustment clause provided for in this tender schedule.
- 26. Tenderer's representative participating in tender opening should produce the authentication letter from the tenderer on the date and time of opening of tender.
- 27. Tenders from joint ventures will not be considered.
- 28. All xerox copies of the documents enclosed with tender should be got attested from the notary public/Gazatted officer.

#### 29. Insurance:

The contractor should insure the construction workers employed by them for an amount fixed by the respective department / State Government / Central Government / Honorable Court of Law with modifications and amendments if issued from time to time at the own cost of the contractor.

- 30. Condition for Engaging the migrated interstate workers in the Construction work site by the Contractors in the Construction work site:
  - a. The Contractor should take the labour insurance for the construction workers employed by them as per the statutory Government norms.
  - b. The contractor should have the labour license while engaging more than 20 Labours.
  - c. The contractor should also have all the details of labours engaged by them like Aadhar card, Photos etc., and the same should be handed over to the local Police Station to avoid the difficulties and problem facing the unpleasant issues in the site like group clash among the construction workers / life loss / any legal problem rising with the labours.
  - d. The contractor should engage the watch and ward during the night time in the construction work site without fail so as to maintain the safety of the labours.

# SPECIAL CONDITIONS FOR SENDING THE CEMENT CONCRETE CUBES FOR TESTING

The contractor should make arrangements for getting mould to the site for casting of cubes for testing of concrete strength.

1. Mould: The concrete mould' should be as per IS Specification (IS-516-1959) the details of which are as follows:

The mould shall be of metal, preferably steel or cast iron, and stout enough to prevent distortion. It shall be constructed in such a manner as to facilitate the removal of the moulded specimen without damage and shall be so machined that when it is assembled ready for use, the dimensions and internal faces shall be accurate within following limits.

The height of the mould and the distance between opposite faces shall be the specified size  $\pm 0.2$ mm. The angle between adjacent internal faces and top and bottom planes of the mould shall be  $90^{\circ} \pm 0.50^{\circ}$ . The interior faces of the mould shall be plane surface with a permissible variation of 0.03 mm. Each mould shall be provided with a metal base plate having a plane surface and to support the mould during the filling without leakage and it shall be preferably attached to the mould by springs for screws.

The interior surfaces of the mould shall be thinly coated with mould oil to prevent adhesion of the concrete.

2. Compacting: The concrete shall be filled into the mould in layers approximately 5 cm. deep. Each layer shall be compacted either by hand or by vibration as described below (as per ISI)

When compacting by hand, the standard tamping bar shall be used and the strokes of the bar shall be distributed in a uniform manner over the cross section of the mould as prescribed in I.S.I. and for cubical specimen in no case, shall be concrete be subjected to less than 35 strokes per layer for 15 cm cubes (as per I.S.I.)

When compacting by vibration each layer shall be vibrated by means of an electric or pneumatic hammer of vibrator (as per I.S.I.).

- The concrete cubes shall be cured for 28 days and send on 29th day. If the day falls on a holiday the cubes shall be sent on the next working day.
- 4. All the charges connected with the cube testing etc. shall be borne by the contractor.

# Quality Plan for Material, Testing (Revision -3) Laboratory Tests for Building Materials

	1	Procedure for C	) III	ulity Plan for Material	Testing	Doc.No Issue No Date of Issue Page	of -i
SE.No	Material to be Tested Wafer	Sampling Lah Test: Local Source - Once in Three months Out source - Once in a month		Name of test	Permissible Limits	Standards 18 456 - 2000 Clause 5.4	Record Reference ST/RG/01
			aj	water using Phenolphthalein as an	Not more than 5 ml (or 50 mg/Lit) of 0.02 normal NaOH		
			ь)	indicator (Acidity)  To Neutralize 100 ml of water using mixed indicator(Alkalinity)	Not more than 25 ml (or 250 mg/Lit) of 0.02 normal $\rm H_2SO_4$		
			cj	Solids: (i) Total Dissolved Solids	3000 mg/Lit		
			H	(ii) Sulphates (as SO.,)	400 mg/Lit		
				(iii) Chlorides (as Cl)	2000 mg/Lit for Concrete not containing embedded steel and 500 mg/Lit for Reinforced Concrete work.		
				(iv) Suspended Matter	2000 mg/Lit		
			4)	pH value	Not less than 6		
		Field Test:	'				
		(Using Litmus Paper) Local Source - Once in Fortnight Out Source - For each Load(Lorry Load)	a)	pH value	Not less than 6		Field Observation Register
2	Cement (43 Grade)	One test for Every 300 Tonnes of single Brand (Test to be done, if there is change in Brand)				IS 269-2015	ST/RG/01
	-		a)	Initial setting Time	Not less than 30 minutes		
			ь)	Final setting Time	Not more than 600 minutes		
			c)	Fineness of Cement			
				i) By Permeability Method	Not less than 225 m <sup>2</sup> /Kg		
					(or)		
				ii) By Standard Sieve Test	Retained not more than 10%		
			d)	Boundness of Cement i) By Le Chatelier Method	Expansion not more than 10 mm		
				(or)	0.80%		
1		:-	e)	ii) By Auto Clave Test Compressive Strength of	100000000		
				C.M (1:3) Cube i) 3 days (72 +/- 1 hr)	Not less than 23 Mpa (or) 230		
				ii) 7 days (168 + / - 2 hrs)	Kg/Cm <sup>2</sup> Not less than 33 Mpa (or) 330 Kg/Cm <sup>2</sup>		
				iii) 28 days (672 + / -4 hrs)	Not less than 43 Mpa (or) 430 Kg/Cm <sup>2</sup>		
3	Steel			-711 11-11-11-11-11-11-11-11-11-11-11	222		
		Each Load and Each Diameter (Min. 3 Samples)				IS 432 (Part-I) 1982	ST/RG/01
			100	Yield Stress	Min.250 N/mm <sup>2</sup> (Or) 25 Kg/mm <sup>2</sup>		
			1155	Elongation	Min 23.0%		
			c)	Ultimate Tensile Stress	Min 410 N/mm <sup>2</sup> (Or) 41 Kg/mm <sup>9</sup>		

		Procedure for •	) (I	ality Plan for Material	Testing	Doc.No Desic. No Date of Issue	490793950 31
N <sub>s</sub> (2	o Material to be Tested by High Strength Deformed Bars	Sampling Each Load and Each Diameter (Min		Name of test	Permissible Limits	Page Standards	Record Reference
	(Fc 415)	,				15 1786 - 2008	1511/RG/0
			0()	0.20% Proof Stress / Vield Stress	Mm_415 N/mm <sup>2</sup> (or) 41.50 Kg /mm <sup>2</sup>		
			ы	Elongation	Min_14_50%		
			e)	Tensile Stress	10% More than the actual Proof stress. But not less than 485 N/mm <sup>2</sup> (or) 48.50 Kg/mm <sup>2</sup>		
	C) High Strength Deformed Bars	Each Load and Each Diameter (Min. 3 Samples)	4	e:		IS 1786 = 2008	ST/RG/0
	(Fe 500)	=		-		70 7700 2000	2.77.07
			n)	0.20% Proof Stress / Yield Stress	Min.500 N/mm <sup>2</sup> (or) 50.0 Kg /mm <sup>2</sup>		
			b)	Elongation	Min.12.0%		
		2	c)	Tensile Stress	8% More than the actual 0.2 Percent Proof stress, But not less than 545 N/mm² (or) 54.50 Kg/ mm²		
4	Sand	Each Load		Clay, Fine silt and Fine Dust	Not more than 5% by Mass	IS 2116-1980	ST/RG/0
5	Coarse Aggregate	Every Quarry	α)	Either Crushing Value (Or) Impact Value		IS 383-1970	ST/RG/0
				i) Crushing Value	X		_
				Aggregatea used for concrete other than wearing surfaces.			
				Aggregates used for concrete for wearing surfaces(Such as Roads, Pavements).	1 1		
				(Or Alternatively) II) Impact Value			4
				Aggregates used for concrete other than wearing surfaces			
				Aggregates used for Concrete for wearing surfaces (Such as Roads, Pavements).	Not more than 30% by weight		
			b)	Abrasion Value			
				For Aggregates to be used in Concrete for wearing surfaces.	Not more than 30%	50 15	
	-			For Aggregates to be used in other concrete	Not more than 50%		
6	Bricks	Lot Size - For Every One Lakh Bricks - (Number of Samples 20.Nos)				IS 1077-1992	ST/RG/0
			a)	For Class 35 Compressive Strength	Not Less than 35 Kgf/cm <sup>2</sup> (or) 3.50		
-			-	140	N/mm <sup>2</sup>		
				Water Absorption Efflorescence	Not more than 20% by Weight Rating not more than Moderate		
			a)	For Class 50 Compressive Strength	Not Less than 50 Kgf/cm² (or)5.0 N/mm²		
			63	Water Absorption	N/mm Not more than 20% by Weight		
				Efflorencence	Rating not more than Moderate		

					9	
		Procedure f	or Quality Plan for Mat	erial Testing	Inn=No Issue.No Date of Issue	15(17), (14), (14) 14
SLNo	Material to be Tested	Sampling	Rame of test	Permissible Limits	Page Standards	Recurd Reference
7	Ms Ash Brick	Lot Size Funkvery One Lakh Dides (Namber of Samples			IS 12894-2002	
		20 Nos)				
			For Class 100			
			al Compressive Strength	Not Less than 100 Kgf/cm <sup>2</sup> (or) 10.0 N/mm <sup>2</sup>		
			b) Water Absorption	Not more than 20% by Weight		
			e) Efflorescence	Rating not more than Moderate		
8	Hydraulic	One test for area upto				
	pressed Tiles	1999 sq.m and one				
	5	additional test for every 1000 sq.m. and part thereof	1 1 -		IS 2690 = 1993	ST/RG/0
			a) Water Absorption	Shall not exceed 15%		
9	Vitrified Tiles		b) Flextural Strength	Shall not be less than 20 Kg / cm <sup>2</sup>		
2	VIIIIIII DES	One Test for an area upto 1999 sq.m and one additional test for every 1000sq.m. and part thereof.			IS 15622 - 2006	ST/RO/0:
			Deviation percent in Length & Width (2 or 4 sides)	±0.10		
			Deviation percent in Thickness	±4.00		
			Maximum Deviation percent in	±0.10		
			Rectangularity	±0.20		
			Surface Flatness (Warpage)	Average < 0.08 Individual max 1.0		
			Water absorption percent by mass	Average Co.06 millividual max 1.0		
				Average 47, Individual 44.min		
			Modulus of rupture in N/mm <sup>2</sup> Breaking Strength in, N	> 7.5mm thickness, 1500 (Min)		
			Scratch hardness of surface (Mobs)	6, Min		
			Bulk density in (g/cc)	2.20 Min		
			Impact Resistance	Required		
			Chemical Properties / Resistance	Required		
10	Electric Cable	One test for each Brand, each size	Conductor resistance at 20 <sup>u</sup> C		IS 664 – 1990	ST/RG/0
			For 1.5 Sq.mm cable For 2.5 Sq.mm cable	Max. allowable limit 12:10 Ohm / Km Max. allowable limit 7:40 Ohm / Km		
			For 4.0 Sq.mm cable	Max. allowable limit 4.95 Ohm / Km		
11	Wood	One sample for each work	Lab Test - Moisture Test	Not more than 12%	1S 287 1993	ST/RG/0
			Field Test - Visual observation	Free from Rotten, unsound knots (or) knots incluster	IS 3629 - 1960	
12	Cube test in Lab		Compressive strength of 150mm Cube		15 456- 2000	ST/RG/0
811		1 to 5 m <sup>3</sup> - 1 set	M20 (1:1.5:3)			
33		6 to 15 m <sup>2</sup> - 2 sets	7 days	Not less than 135 Kg / cm <sup>2</sup>		
		16 to 30 m <sup>3</sup> - 3 sets 31 to 50m <sup>3</sup> -4 sets	28 days M25 (1:1:2)	Not less than 200 Kg / cm <sup>2</sup>		
25		>50m²—4plus one for	7 days	Not less than 170 Kg / cm²		
		each add 50m <sup>5</sup>	28 days			
		(1 set =3 cubes)	28 days	Not less than 250 Kg / cm <sup>2</sup>		
		· · · · · · · · · · · · · · · · · · ·	7 days	Not less than 205 Kg / cm²		
			28 days	Not less than 300 Kg / cm <sup>2</sup>		
13	Slump test	Type of work	With vibration	Without vibration		ST/RG/0
	Slump test at site for all Reinforced concrete at	Mass concrete, large section, roads and pavements	10 to 25	50 to 75		
	regular intervals (Slump in mm)					

S1No. Material to lies   Frameding   France   Frameding	_			- 50			
Sign Material to be Considerion New Consequence Conseq	16 of 1	Issue, No Date of Issue	erial Testing	Quality Plan for Mat	Pracedure fo		
14   M Sand   10 to 10 to 17   100 to 17	Reference	- Car		Name of test	Sampling		SL.No
14.   No. State			40 to 115	State 50	substructures, think wails and other bency		
Pump			100 to 175	40 to 50	raich as walls, beams, columns with congested		
14.1 Test for Size and Grading of Aggregate  a) 10 mm Shall be 100% b) 4,75 mm Shall be between 90 & 100% c) 2,36 mm Shall be between 95 & 100% d) 1.18 mm Shall be between 75 & 100% d) 1.18 mm Shall be between 75 & 100% d) 1.18 mm Shall be between 75 & 100% d) 1.18 mm Shall be between 75 & 100% d) 1.18 mm Shall be between 75 & 100% d) 1.18 mm Shall be between 75 & 100% d) 1.18 mm Shall be between 75 & 100% d) 1.18 mm Shall be between 75 & 100% d) 1.18 mm Shall be between 75 & 100% d) 1.18 mm Shall be between 75 & 100% d) 1.18 mm Shall be between 75 & 100% d) 1.18 mm Shall be between 175 & 100% d) 1.18 mm Shall be between 175 & 100% d) 1.18 mm Shall be between 175 & 100% d) 1.18 mm Shall be between 175 & 100% d) 1.18 mm Shall be between 18 & 100% d) 1.18 mm Shall be between 19 & 100% d) 1.18 mm Shall be between 19 & 100% d) 1.18 mm Shall be between 19 & 100% d) 1.18 mm Shall be between 19 & 100% d) 1.18 mm Shall be between 19 & 100% d) 1.18 mm Shall be between 19 & 100% d) 1.18 mm Shall be between 19 & 100% d) 1.18 mm Shall be between 19 & 100% d) 1.18 mm Shall be between 10 mm Shall be	×			80 to 100			
10 mm   Shall be 100%		(3 <sup>el</sup> Revision)	*			M-Sand	14
b) 4.75 mm e) 2.26 mm Shall be between 90 & 100% d) 1.18 mm Shall be between 75 & 100% Shall be between 75 & 100% Shall be between 75 & 90% e) 660 micron Shall be between 35 & 59% Shall be between 8 & 30% Shall be between 9 & East No. 10% Shall be between 10 & 10 and 0.20% increase expansion of 10 and 0.20%	J-		-	IS Sieve Size in mm	Grading of Aggregate	Test for Size and	14.1
b) 4.75 mm c) 2.36 mm d) 1.18 mm Shall be between 90 & 100% d) 1.18 mm Shall be between 75 & 100% d) 1.18 mm Shall be between 75 & 90% d) 300 micron Shall be between 8 & 30% Shall be between 9 & 8 between 10 & 10% Shall be between 10 & 10% Shall be between 10 & 100% Sh			Shall be 100%	10 mm			
c   2.36 mm   Shall be between 75 & 100%     d   1.18 mm   Shall be between 75 & 100%     d   1.18 mm   Shall be between 55 & 00%     d   1.18 mm   Shall be between 55 & 00%     d   1.18 mm   Shall be between 55 & 00%     d   1.18 mm   Shall be between 58 & 30%     d   1.18 mm   Shall be between 8 & 30%     d   1.18 mm   Shall be between 8 & 30%     d   1.18 mm   Shall be between 8 & 30%     d   1.18 mm   Shall be between 8 & 30%     d   1.18 mm   Shall be between 8 & 30%     d   1.18 mm   Shall be between 8 & 30%     d   1.18 mm   Shall be between 8 & 30%     d   1.18 mm   Shall be between 8 & 30%     d   1.18 mm   Shall be between 8 & 30%     d   1.18 mm   Shall be between 8 & 30%     d   1.18 mm   Shall be between 8 & 30%     d   1.18 mm   Shall be between 8 & 30%     d   1.18 mm   Shall be between 8 & 30%     d   1.18 mm   Shall be between 8 & 30%     d   1.18 mm   Shall be between 8 & 30%     d   1.18 mm   Shall be between 8 & 30%     d   1.18 mm   Shall be between 8 & 30%     d   1.18 mm   Shall be between 8 & 30%     d   1.18 mm   Shall be between 8 & 10%     d   1.18 mm   Shall be between 8 & 10%     d   1.18 mm   Shall be between 1 & 10%     d   1.18 mm   Shall be between 1 & 10%     d   1.18 mm   Shall be between 1 & 10%     d   1.18 mm   Shall be between 1 & 10%     d   1.18 mm   Shall be between 1 & 10%     d   1.18 mm   Shall be between 1 & 10 mm   10%     d   1.18 mm   Shall be between 1 & 10 mm   10%     d   1.18 mm   Shall be between 1 & 10 mm   10%     d   1.18 mm   Shall be between 1 & 10 mm   10%     d   1.18 mm   Shall be between 1 & 10 mm   10%     d   1.18 mm   Shall be between 1 & 10 mm   10 mm   10%     d   1.18 mm   Shall be between 1 & 10 mm   10 mm   10%     d   1.18 mm   Shall be between 1 & 10 mm   10 mm   10%     d   1.18 mm   1.18 mm   10 mm   10 mm   10%     d   1.18 mm   10 mm   10 mm   10 mm   10 mm   10 mm   10%     d   1.18 mm   10			Shall be between 90 8; 100%		-		
c   600 micron   Shall be between 35 & 59%     d   d   Shall be between 36 & 30%     d   d   Shall be between 2.1 and 3.2     d   d   Shall be between 2.1 and 3.2     d   d   Shall be between 2.1 and 3.2     d   Shall be between 4.1 and 3.2     d   Shall be between 4.1 and 3.2     d   Shall be between 4.1 and 3.2     d   Shall be between 4.			Shall be between 75 & 100%				
14.2 Test for Specific Gravity  Test for Water absorption, %  Test for Water absorption, %  Test for Bulk density  14.3 Test for Bulk density  15. 2386(Part III)-1963  16. Test for Deleterious Materials  16. Coal and Lignite  17. Allow the more than 1%  18. 2386(Part III)-1963  18. 2386(Part III)-1963  19. Coal and Lignite  19. Coal and Lignite  19. Material finer than 75 µm IS slall not be more than 1%  19. Shall not be more than 10%  19. Shall not be more than 0.3%  19. Shall not be more than 0.4%  19. Shall not be more than 0.04%  19. Expansions of <0.10% - Indicates accelerated mortar bar after 16 days of easting percentage  19. Expansions of <0.10% - Indicates naccelerated mortar bar after 16 days of easting percentage  19. Expansions of the more of aggregate.  20. Expansions of the more than 0.20% includes both Innocous and deleterious			Shall be between 55 & 90%	1 18 mm			
14.2 Test for Specific Cravity  Test for Water absorption, %  14.4 Test for Bulk density    Bulk density in Kg/l-loose condition   Bulk density in Kg/l-loose condition   Bulk density in Kg/l-compacted condition   Bulk density in Kg/l-loose   Limit not specified     Cod and Lignite   Shall not be more than 1%   Shall not be more than 10%     Cod and Lignite   Shall not be more than 10%   Shall not be more than 0.3%   Shall not be more than 0.5%   Shall not be more than 0.04%   Code content   Percent   Code content			Shall be between 35 & 59%	600 micron			
Test for Specific Cravity Test for Water absorption, % Test for Bulk density    14.4   Test for Bulk density   Bulk density in Kg/l-loose condition   Bulk density in Kg/l-compacted condition   Limit not specified			Shall be between 8 & 30%	300 micron			
Test for Water absorption, %  Test for Bulk density  a Bulk density in Kg/I-loose condition  Bulk density in Kg/I-compacted condition  Bulk density in Kg/I-compacted condition  b Bulk density in Kg/I-compacted condition  Limit not specified  Shall not be more than 1%  Shall not be more than 1%  Shall not be more than 1%  Shall not be more than 10%  Shall not be more than 0.3%  Shall not be more than 0.4%  Test for Sulphate content as SQO, and a Shall not be more than 0.4%  Test for Alkuli Aggregate reactivity  Accid Chloride content Percent  Test for Alkuli Aggregate reactivity  The Average expansion of accelemted mortar bar after 16 days of easting percentage  The Average expansion of accelemted mortar bar after 16 days of easting percentage  The Average expansion of accelemted mortar bar after 16 days of easting percentage  The Average expansion of accelemted mortar bar after 16 days of easting percentage  The Average expansion of accelemted both Innocuous and deleterious			Shall be between 0 & 10%	150 micron	18		
14.4 Test for Bulk density  a)  Bulk density in Kg/l-loose condition  Bulk density in Kg/l-loose condition  14.5 Test for Deleterious Materials  a) Cool and Lignite  b) Clay lumps  c) Material finer than 75 µm IS sleve  d) Organic Impurities  c) Shall not be more than 10%  Shall pass the test  Limit not specified  Shall not be more than 10%  Shall not be more than 0.3%  Test for Acid Soluble Chloride content  Test for Acid Soluble Chloride content  Test for Acid Soluble Chloride content  Acid Chloride content Percent  Acid Chloride content Percent  The Average expansion of accelerated mortar bar after thay of casting pencentage  Test for Acid Soluble Chloride content percent  Acceleration Mortar bar Method  The Average expansion of accelerated mortar bar after thay of casting pencentage  Test for Acid Soluble Chloride content percent accelerated mortar bar after thay of casting pencentage  The Average expansion of acceleration Mortar bar Method includes bolt Innocuous and deleterious			Shall be between 2.1 and 3.2		pecific Gravity	Test for S	14.2
Bulk density in Kg/l-loose condition   Bulk density in Kg/l-loose condition   Bulk density in Kg/l-compacted condition   Limit not specified			Shall not be more than 5%		er absorption, %	Test for Wat	14.3
Bulk density in Kg/l-loose condition					Bulk density	Test for	14.4
14.5 Test for Deleterious Materials    A   Coal and Lignite   Shall not be more than 1%		110 1340	Limit not specified				
A   Coal and Lignite   Shall not be more than 1%   Shall not be more than 1%   Shall not be more than 1%   Shall not be more than 10%   Shall not be more than 0.3%   Shall not be more than 0.3%   Shall not be more than 0.3%   Shall not be more than 0.5%   Shall not be more than 0.5%   Shall not be more than 0.04%   Shall not be more t			Limit not specified				
b) Clay lumps c) Material finer than 75 µm is sieve d) Organic Impurities e) Silt content Shall not be more than 10% Shall not be more than 0.0%					terious Materials	Test for Dele	14.5
Material finer than 75 μm IS sieve   Shall not be more than 10%			Shall not be more than 1%	Coal and Lignite			
d) Organic Impurities  Shall pass the test  Limit not specified  14.6 Test for Soundness of Aggregate  % loss of weight of the material after 5 cycles when tested with Sodium sulphate solution.  14.7 Test for Total Alkali Content  Total alkali content as Na <sub>2</sub> O equivalent Percent  Test for Sulphate content  Test for Sulphate content  Test for Sulphate content  Test for Sulphate content as So <sub>3</sub> Acid Chloride content Percent  Acid Chloride content Percent  Acceleration Mortar bar Method  The Average expansion of accelerated mortar bar after that 9.20 includes both Innocuous behavior of aggregate.  Expansions between 0.10 and 0.20% includes both Innocuous and deleterious			Shall not be more than 1%	Clay lumps			
4) Organic Impunities e) Silt content    Content   Content   Content			Shall not be more than 10%				
14.6 Test for Soundness of Aggregate  % loss of weight of the material after 5 cycles when tested with Sodium sulphate solution.  Test for Total Alkali Content  Total alkali content as Na <sub>2</sub> O equivalent Percent  Test for Sulphate content  Test for Sulphate content  Test for Sulphate content as So <sub>3</sub> Acid Chloride content Percent  Accid Chloride content percent Acc			Shall pass the test				
We loss of weight of the material after 5 cycles when tested with Sodium sulphate solution.   Shall not be more than 10%			Limit not specified	Silt content			
after 5 cycles when tested with Sodium sulphate solution.  14.7 Test for Total Alkali Content  Total alkali content as Na <sub>2</sub> O equivalent Percent  Test for Sulphate content  Test for Sulphate content as So <sub>3</sub> Shall not be more than 0.3%  Shall not be more than 0.3%  Shall not be more than 0.4%  Shall not be more than 0.5%  So <sub>3</sub> Acid Chloride content Percent  Acceleration Mortar bar Method  The Average expansion of accelerated mortar bar after 16 tays of casting percentage  Text for Alkali Aggregate.  Expansions between 0.10 and 0.20% includes both Innocuous and deleterious						Test for Soun	14.6
Total alkali content as Na <sub>2</sub> O equivalent Percent  Test for Sulphate content  Test for Sulphate content as So.  Test for Acid Soluble Chloride content Percent  Acid Chloride content Percent  Acceleration Mortar bar Method  The Average expansion of accelerated mortar bar after 16 days of casting percentage  Total alkali content as Na <sub>2</sub> O Shall not be more than 0.3%  Shall not be more than 0.5%  Shall not be more than 0.04%  Shall not be more than 0.04%  Innocuous behavior of aggregate.  Expansions between 0.10 and 0.20% includes both Innocuous and deleterious			Shall not be more than 10%	ter 5 cycles when tested with			
requivalent Percent  Test for Sulphate content  Test for Sulphate content as SO3  Acid Chloride content Percent  Acid Chloride content Percent  Acceleration Mortar bar Method  The Average expansion of accelerated mortar bar after 16 days of casting percentage  Test for Sulphate content as Shall not be more than 0.5%  Shall not be more than 0.04%  Shall not be more than 0.04%  Innocuous behavior of aggregate.  Expansions between 0.10 and 0.20% includes both Innocuous and deleterious					d Alkali Content	Test for Tota	14.7
14.8 Test for Sulphate content  Test for Sulphate content as So.  Test for Acid Soluble Chloride content Percent  Acid Chloride content Percent  Acceleration Mortar bar Method  The Average expansion of accelerated mortar bar after 16 days of casting percentage  14.10 Expansions of <0.10% Indicates Innocuous behavior of aggregate.  2. Expansions between 0.10 and 0.20% includes both Innocuous and deleterious			Shall not be more than 0.3%				38.7
Test for Sulphate content as Shall not be more than 0.5%  SO <sub>3</sub> Acid Chloride content Percent  Acceleration Mortar bar Method  The Average expansion of accelerated mortar bar after 16 than 0.10% - Indicates accelerated mortar bar			Million of Wald Profits	uivalent Percent			
14.9 Test for Acid Soluble Chloride content  Acid Chloride content Percent  Acceleration Mortar bar Method  The Average expansion of accelerated mortar bar after 16 days of casting percentage  1. Expansions of <0.10% - Indicates Innocuous behavior of aggregate.  2. Expansions between 0.10 and 0.20% includes both Innocuous and deleterious	4			et for Sulphote content as		Test for Su	14.8
Content  Accidential Percent Shall not be more than 0.04%  It is expansions of <0.10% - Indicates accidented mortar bar after 16 Innocuous behavior of aggregate.  2. Expansions between 0.10 and 0.20% includes both Innocuous and deleterious			Shall not be more than 0.5%		5		
The Average expansion of accelerated mortar bar after 16 Innocuous behavior of aggregate.  days of casting percentage  2. Expansions between 0.10 and 0.20% includes both Innocuous and deleterious			Shall not be more than 0.04%	eld Chloride content Percent	ntent	co	
days of easting percentage  days of easting percentage  2. Expansions between 0.10 and 0.20% includes both Innocuous and deleterious				celeration Mortar bar Method	RELEGACE LEGISLIAITÀ	T GST 101 VTKNII V	4,10
aggregate  3. Expansion >0.20% indicative of Potentially  deleterlous aggregate			Innocuous behavior of aggregate.  2. Expansions between 0.10 and 0.20% includes both Innocuous and deleterious aggregate.  3. Expansion >0.20% indicative of Potentially	celerated mortar bar after 16	ε		
14.11 Test for Bulking of Sand percent Bulking of sand Percent Limit not specified 18: 2386(Part-				Bulking of sand Percent	g of Sand percent	Test for Bulkin	14.11

# CONDITIONS OF EMPLOYING TECHNICALLY QUALIFIED PERSON

Technical qualified man should be employed as follows

SINO.	Value ofContract	Qualification and No. of Technical Assistants to be employed
(1)	(2)	(3)
1.1	Սբա 1 եհհ	No TechnicalAssistantneed be employed. However, if the officerwho accepts
		the agreement, feels that the nature of work required a Technical Assistant conditions may be stipulated in the tendernotice that one diplom a holder in Civil
		Engineering ora retired JuniorEngineerm ay be employed.
1.2.	Rs. 1 Lakh to Rs. 3 Lakhs	O ne D p bm a ho Her n C ivilEng neering ornot less than one retired Jun br Engineer
1.3.	Rs. 3 Lakhs to Rs.10 Lakhs	One B.E., (Civil) or equivalent degree holder or not less than one retired sub- divisional officer (Assistant Executive Engineer or Assistant Divisional Engineer)
1.4.	Rs.10 Lakhs to Rs. 25 Lakhs	One B. E., (Civil) or equivalent degree holderwith three years experience in Civil Engineering works not less than one retired sub-divisional Officerplus one Diplom a holder in Civil Engineering.
1.5.	Rs. 25 Lakhs to Rs.50 Lakhs	One B.E., (Civil) or equivalent degree holder with three years experience or not less than one retired sub-divisional officer (retired Assistant
		Executive Engineer) plus two Diploma holders in Civil or two retired Junior Engineers.
		ALTERNATIVE
		One B. E., (Civil) or equivalent degree holder with three years experience or not less than one retired Sub-Divisional Officer and one more B.E., (Civil) or equivalent degree holder.
1.6.	Above Rs.50 Lakhs	To be examined in individual case depending on the nature of work and the technical skill involved and defined in the Tender Notice regarding the number of qualified technical person to be employed by the contractor.

- 2. A penalty of Rs.500/- p.m. for Diploma holder and Rs.1,000/- p.m. for Degree holder be levied in case of default on the part of contractors in following the norms laid down above.
- 3. The employment of Technical Assistant could be based only on the value of contract. Engineers with Mechanical Engineering Qualification and retired from Civil Engineering department are also suitable to supervise the Civil Engineering works because of their experience in Civil Engineering field.

\*\* I am / we are professionally qualified and my/our qualifications are given below.

NAME	QUALIFICATION	EXPERIENCE
/		

I/we will employ the following technical staff for supervision the work and will see that one of them is, always at site during working hours personally checking all items of work that paying extra attention to such works is required special attention (e.g.) reinforcement concrete work.

Name of member of technical staff proposed to be employed

**QUALIFICATION** 

**EXPERIENCE** 

In deciding the period of absence, the certificate from the Assistant Exe. Engineer in-charge of the work Counter signed by the Executive Engineer - incharge shall be taken as the conclusive evidence and I/we shall be bound by such a certificate.

\*\* Note

- 1. In case of contractor, who is professionally qualified is not in a position to remain always at the site of the work during working hours personally checking all items of work and paying extra attention to such works as may demand special attention. (e.g.) R.C. work etc., he should employ technically qualified men (as prescribed for the work)
- The Tenderers should score out the last clause if they are themselves professionally qualified and undertake to employ technical staff under them.

# TAMIL NADU POLICE HOUSING CORPORATION LTD.,

# SPECIAL CONDITION FOR ELECTRICAL WORKS

- 1. The work shall be carried out in accordance with the General specification for electrical works and the code of practice for electrical wiring installation I.S. 732-1963 & I.S. 3043-1964 and as amended upto date. All installation shall comply with the requirements of Indian Electricity Rules 1956 & Act and I.S. Code amended upto date.
- 2. Approval of the Engineer in-charge shall be taken well in advance for all materials and brand of materials to be used on work by the contractors, based on the approved brand of materials list enclosed in the tender. The choice of brand of materials from the approved list is at the discretion of the Engineer-in-charge and his decision will be final. The Contractor is bound to use the brand of materials selected by the Engineer-in-charge.
- 3. Bad workmanship is liable to be rejected in to.
- 4. The contractor shall supply on completion of work completed plan along with insulation polarity and earth tests reports before the installation is handed over to the Engineer in-charge in good condition in triplicate. The tests should be carried out in the presence of Engineer in-charge at contractors cost.
- 5. All repairs and patch work shall be neatly carried out to match the original finish and to the entire satisfaction of Engineer-in-charge.
- 6. The contractor shall make his own arrangement at his own cost for all general T&P and spl. T&P required on the job.
- 7. The contractor shall make his own arrangements for storage of materials and watch and ward at his own cost, till the installation (completed work) is handed over to the Department after obtaining service connection from Electricity Board and testing the line. Any loss and tampering of materials for which the payment was made by the Department will be made good by the contractor at his own cost.
- 8. Issue of the materials to the contractor wherever stipulated will be regulated to the needs from time to time depending upon the progress.
- 9. Materials stipulated for issue shall be taken over to the site of work and the safe custody till completion of the job is the responsibility of the contractor.
- 10. All the debris due to electrical works shall be removed from site by the contractor as soon as the work is completed.
- 11. Electrical works shall be progressed by the Contractor side by side with the progress of the building work burying of conduits for recessed portion shall be planned together with the building progress so that there is no hindrance to the buildings progress at any stage.
- 12. The internal E.I. shall be ordinarily carried out according to the drawing supplied with the schedule of work subject to change made by the Engineer-in-charge.
- 13. The wiring route shall be marked at site first and get approval from the Engineer-in-charge before commencement of actual work. The work must be carried out as directed by Engineer-in-charge.
- 14. PVC wiring shall be neatly painted with two coats for non-cracking paint/distemper suitable for painting PVC wire and of suitable colour to match the surroundings as per the direction of Engineer-in-charge.
- 15. In place where electrical conduit is required to pass through wall/RCC column beam etc., the conduit shall be laid during the execution of work in consultation with the Engineer-in-charge so as to avoid the need for cutting the structure at the later date.

- The T.W. materials such as fillets specials TW boxes and all materials shall be got approved from the Engineer-in-charge before use to ensure the quality of materials.
- 17. In the case of recessed conduit works, the MS boxes shall also be recessed and covered with 1/8" (3mm) hyleam/ Bakelite sheet. The thickness of MS sheet shall not be less than 3 mm thick.
- 18. Provision of fittings.
  - a. All switch Board shall be so placed that the bottom is normally 1.22 meter above floor level of such height as decided by the Engineer-in-charge.
  - b. All fittings shall be provided at 2.6 metre from the floor level or such height as decided by the Engineer in-charge.
  - c. The convenient 5/15 Amps. plug socket shall be 25cm. above the floor level or such height as decided by the Engineer in-charge.
  - d. Wiring shall run normally at 2.6 metre from the floor level or such height as decided by the Engineer in-charge.
- 19. The materials issued if any by the Department to the contractor, the cost will be recovered at the stores issue rate. If the contractor fails to return the surplus materials after completion of work, the cost will be recovered at double the stores issue rate or market rate whichever is higher.
- 20. Tools and plant General and Spl. as required on the work is to be arranged by the contractor at his own cost.
- 21. Brass tinned like/joint clips of 0.32 mm (30 gauge) thick upto 40mm length and 0.40 (28 gauge) thick above 40mm length and of width shall be used on the work.
- 22. Brass hinged brass hooks and eyes, single plank teak wood boards of 60mm minimum depth in case of open wiring and minimum depth of 100 mm in the case of concealed wiring and not less than 6.5 mm thickness shall be used to the works.
- 23. Fixing of wooden battens .
  - The Screws shall be used for fixing the wooden batten and accessories at an interval not exceeding 50cm. The thickness of batten shall be less than 10mm.
  - b. The clips are provided on the wooden batten with screws/pins and spaced at an interval of 15cm both in the case of horizontal and vertical run.
  - c. Round block shall not be less than 75mm dia and 40mm deep and fixed by means of 2 nos. of screws.
- 24. Piano type switches outlet of approved make wherever needed shall be used for recessed boards after getting the approval of Engineer in-charge
- 25. Only brass screws shall be used for fixing fittings switches plugs and sockets main boards and distribution board and T.W. accessories etc., required for the, wiring.
- 26. All conduit pipe shall be approved gauge (not less than 16 SWG : 14SWG) solid drawn of lap welded finished with galvanised stone enameled finished. The saddles used shall not be less than 24 guage upto 25mm dia pipes and not less than 20 gauge for inner dia pipes.
- 27. The main earthing shall not less than 8 SWG copper (4.06mm) in case of copper wire earthing or 6 SWG.GI wire (4.98mm) in case of G.I. wire earthing. Separate earthing shall be provided for all mountings of rain Boards, distribution boards, 5/15 ams. C.S. plug sockets with not less than 14 SWG of copper (2.03 mm)

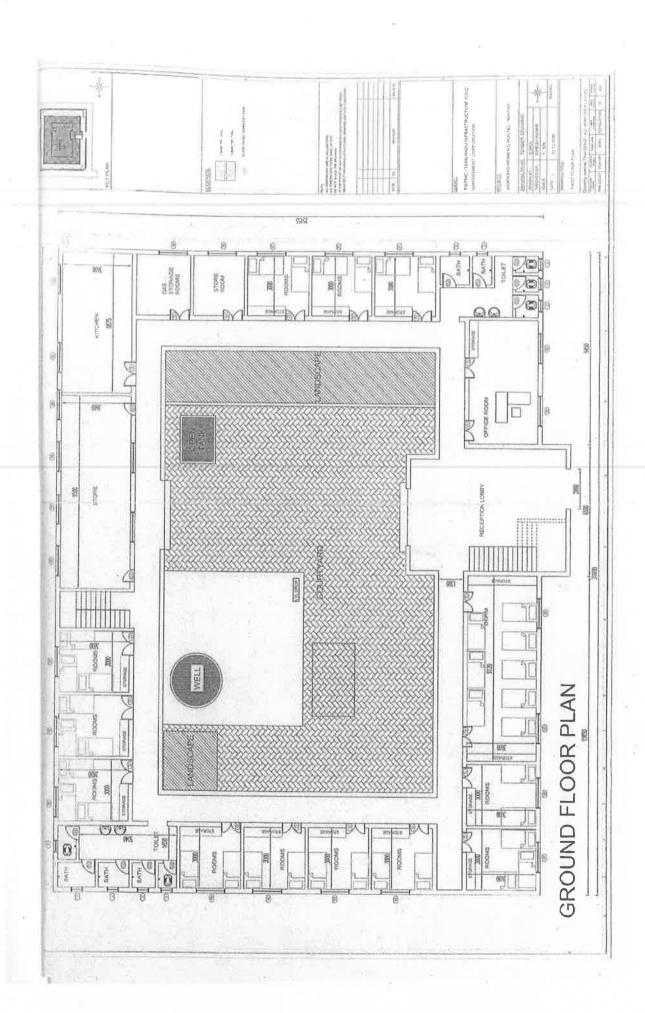
- 28. Earthing shall confirm to relevant I.S. Code 3043-1966, the G.I. Pipe earth electrode system is adopted G.I. pipe shall be of medium class 38/40mm dia. 3.75 metres long. The electrode/ shall be burried in the ground vertically with its top not less than 20 cm. below ground level. Normally an earth electrode shall provide 1.5 metres away from any building,, In case of providing twin earthing the distance between the earth pits shall be 10 feet. Alternate layers of charcoal or cock and seal of minimum 15 cm thick are to be provided from the bottom of earth pit upto 1 metre below ground level and the masonry work is to be carried out in brick with the cement mortar 1:4 above the last layer and the top is to be covered by Suitable cast iron frame and cover.
- 29. The staircase light point wiring must be done by looping or piece wire system and which must control phase or live wire only.
- 30. Looping in system is to be adopted for wiring. Normally the looping of neutral of light, fan, plug points etc. should be restricted to 3 points for a single wire from the switch board.
- 31. The wooden batten and specials shall not butt jointed and joints should be lap joined.
- 32. The wiring must be done using bend and corners wherever necessary sharp bending or cable must be avoided.
- 33. The lighting circuit shall not have more than 10 point or a load of 800 watts whichever is less.
- 34. Power wiring shall be kept separate and distinct from the lighting wiring.
- 35. The contractor should be present at the premises at the times of effecting service connection by the Electricity Board authority and afford all facility for testing and commissioning the installation.
- 36. The contractor should provide sufficient leads for connecting the main switches to meters and cut out provided by the Electricity Board at his own cost.
- 37. The apartment main switches and the main switches at the Electricity Board service connection boards should be numbered in paint for easily identification and the danger boards should be provided wherever necessary according to I.E Rules and Act regulations.
- 38. Looping of neutral and connection wires in the switch boards must be carried out through mechanical connectors and proper insulation shall be provided inside the switch board wherever necessary to avoid short circuiting the system.
- 39. The scaffolding and the shed required for the electrical installation works should be put up by the contractor at his own cost.
- 40. The run of main relates to the mains run from the main switch provided inside the apartments to the main switch provided for service connection by the Electricity Board authorities. The Distribution Box used shall be metallic enclosed type with fuse unit and neutral link. The earthing for the, main switches provided in the service connection Board should be properly interconnected and connected to the main earthing system.

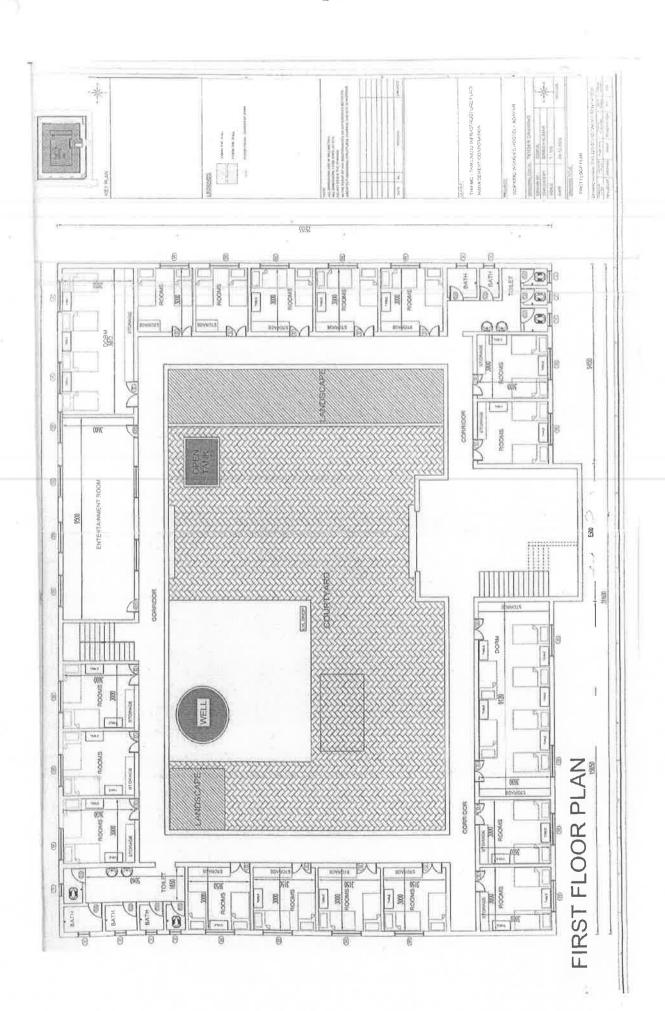
# SPECIAL CONDITIONS FOR GOODS AND SERVICE TAX (GST)

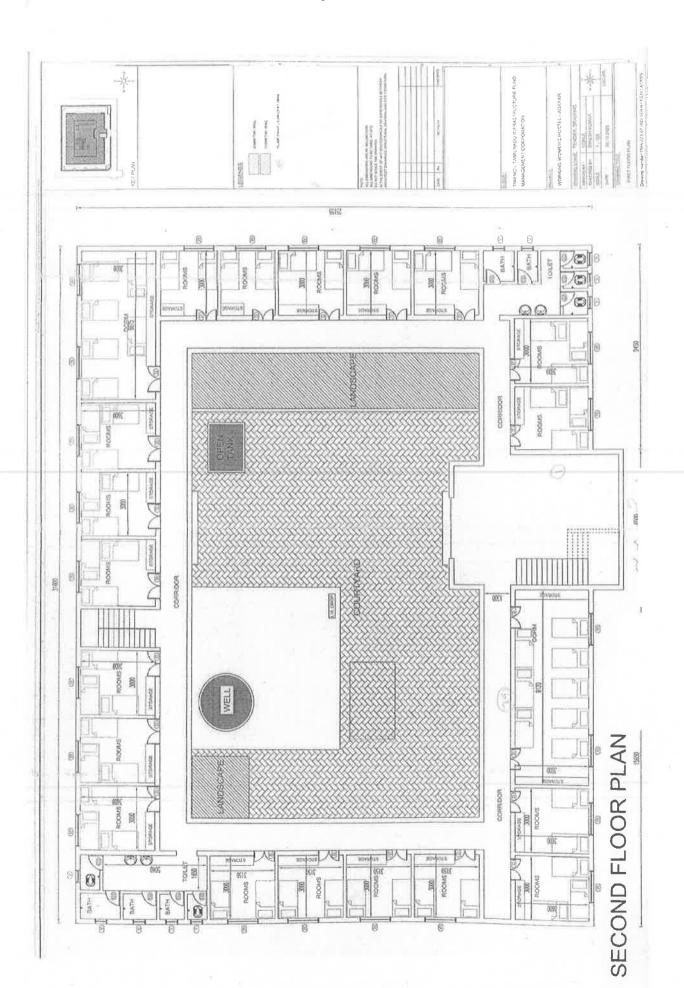
- 1. Cost of Tender schedule for sale, includes applicable GST.
- 2. The amount of EMD inclusive of GST (Basic Rate + GST)will be calculated as 1% of the contract value of work put to tender for upto Rs.20.00 Lakhs plus 0.5% of the value of work put to tender for above Rs.20.00 Lakhs (Including the GST amount).
- The tenderer shall quote the rates and prices (both in figures and words) for all the items of the works described in the Bill of Quantities excluding GST.
- 4. Government of India has notified vide Notification No.20/2017- Central Tax (Rate), dated 22<sup>nd</sup> August, 2017 and Notification No.24/2017- Central Tax (Rate), dated 21<sup>st</sup> September, 2017, the concessional rate of the Goods and Services Tax (GST) at 12% [CGST at 6% + SGST at 6%] is leviable for any Government contract, Whether Civil or Electrical, irrespective of the Goods and Services Tax (GST) rate applicable on purchase of goods used in the execution of Government Contract. And the GST amount will be calculated at 12% from the sum of total tendered value quoted by the tenderer for construction cost (excluding GST) specified in the BOQ, subject to GST rate applicable from time to time as recommended by the GST Council.
- 5. All duties, taxes, and other levies except GST, payable by the contractor under the contract, or for any other cause shall be included in the rates, prices and total Bid Price submitted by the Bidder.
- 6. As per Notification 202, dated 29.06.2017 and as per sub-section (2) of Section 7 of the Tamil Nadu Goods and Services Act, 2017, (Tamil Nadu Act 19 of 2017), activities or transactions undertaken by State Government shall be treated neither as supply of goods nor a supply of service.
- 7. As per Chapter IX (Section 41) of the Tamil Nadu Goods and Services Act, 2017, every registered persons may be entitled to take the credit of eligible input tax, as self-assessed, in his return and such amount shall be credited on a provisional basis to his electronic credit ledger.
- 8. As per PWD Revised SoR (2017-18), dated 21.10.2017, under General Note, 8 (ix), the Contractor is eligible to get refund of excess tax paid over or liable to pay tax for this Contract Work.
- 9. The total tender price will be the cumulative of value quoted for construction (Total Basic rate + GST) shall be substituted.
- 10. The security Deposit (with GST) of 2% (Two percentage) of the value of contract in one of the forms prescribed in TNPHC by taking into account of the amount of EMD already deposited with the tender, it would be sufficient to pay the balance amount to make up the 2% of the value of contract for the purpose of security deposit (Including of GST amount).
- 11. In addition to the aforesaid security Deposit, retention amount shall be deducted from the running account bills, a given equivalent to 5% (Fiver percentage) of the total value (Including the GST amount for all the running account Bill) of each bill as retention money.

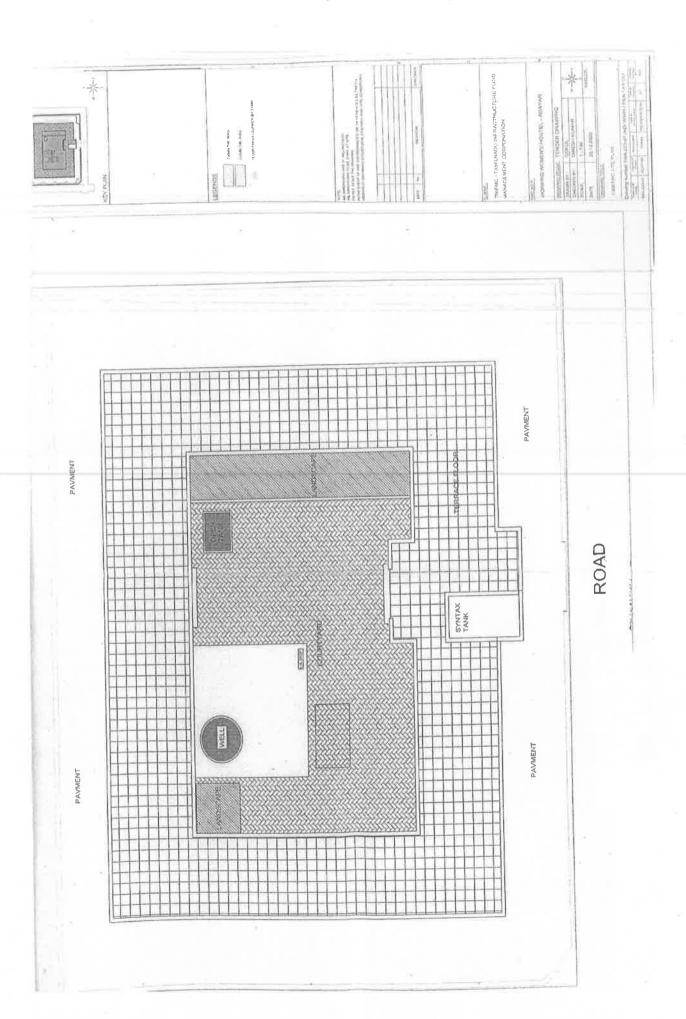
- 12. Out of the 5% retention amount (with GST), 2½ % (Two and half percent) of the total value of the work so far executed will be released to the contractor on payment of final bill.
- 13. The balance 2½% will be retained for a period as per tender schedule reckoned from the date of completion of the work, as all defects shall have been made good according to the true intent and meaning hereof, whichever shall happen last.
- 14. The retention money of 2½% including GST (Two and a Half Percent) of the total value of contract after deducting any amount due to the Department, shall be refunded to the Bidder without interest after the defects liabilities attached to the contract is over".
- 15. Negotiation of rates will be made only with the lowest tenderer for reducing the quoted rates.
- 16. The lowest tenderer will be identified who quotes lowest total tender price which including GST as per the clause SI.No.9. The Negotiation of rates will be made only with the lowest tenderer for reducing the quoted rates and the negotiation will be made for the rates quoted to the items in the construction part alone and not for GST amount. After negotiation with lowest tenderer, the GST amount will be recalculated at 12% of the sum of the Negotiated tender value (excluding GST) for Construction Cost specified in the BOQ, subject to GST rate applicable from time to time as recommended by the GST council.
- 17. For every Bill, 12% of GST will be paid to the contractor based on the value of work done for Construction by the contractor. After the payment including 12% of GST, the Contractor should pay the GST Amount to Government through his GST Registration No. Also the contractor needs to submit the Material purchase bill mentioning the name of the works in the package and GST No. to the Department.
- 18. At the time of payment for first running account bill, the contractor should produce the GST paid details on goods (Materials) to the department along with Input Tax Credit (ITC).
- 19. At the time of payment for next running account bills, the contractor should produce the GST paid details of Services upto previous bill payment (i.e.GST paid detail for the previous work bill) along with Input Tax Credit (ITC) availed at the time of payment of intermediate bill to the department".
- 20. The contractor should produce the GST paid details for all the materials used for Construction work and GST paid details of services for the upto previous payment (i.e., GST paid detail for the upto previous work bill) to the department along with Input Tax Credit (ITC) availed at the time of payment of final bill to the department.
- 21. The final bill, the Goods and Services Tax (GST) amount retained in previous payment has to be released to the contractor without interest.
- 22. After receipt of final work bill payment for construction, the contractor shall furnish to the department, with the complete GST paid details along with Input Tax Credit (ITC) details within 3 months matched with GSTN (Goods and Service Tax Net work).

- 23. The rates tendered in the priced Bill of Quantities shall, except in so far as it is otherwise provided under the Contract, including all Constructional plant, labour, supervision, materials, erection, maintenance, insurance, profit, taxes and duties (except GST), together with all general risks, liabilities and obligations set out in the Contract.
- 24. The Contractor should be required to indicate their GST registration number under the Goods and Services Tax (GST) Act 2017 in the tender form. The Central Goods and Services (CGST) Act 2017, the Integrated Goods and Services (IGST) Act 2017 and the Tamil Nadu Goods and Services (TNGST) Act 2017 have been enacted and enforced from 01.07.2017. Under the new tax regime, GST (comprising CGST, SGST and IGST) on works contracts for Government work was finally notified at 12 percent. As per the Tamil Nadu Goods and Services (TNGST) Act 2017, with effect from 01.07.2017.









# TENDER CODING SHEET (Rates to be filled up by the Tenderer in this coding sheet)

Name of work: Renovation of Existing Working Women's Hostel building at Adyar in Chennai City under Social Welfare Department

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
1	1.1	Earth work excavation for foundation in all soils and subsoils to the required depth. (Including Refilling) a) 0 to 2m depth.	1.52	1 Cum		10
	2				12	
2		Plain cement concrete 1:5:10 (One of cement, five of sand and ten of hard broken stone Jelly) for foundation	0.34	1 Cum		^,

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
3	3.2	Plain cement concrete 1:2:4 (One of cement, two of sand and four of hard broken stone Jelly) for foundation		1 Cum	W T	
	8					
*						
4		Brick work in CM 1:5 (One of cement and five of sand) using chamber burnt bricks of size 9"x4½"x3" (23x11.4x7.5 cm) in foundation and basement	0.59	1 Cum		
		¥				
5		Plastering with CM 1:5 (One of cement and five of sand) 12mm thick finished with neat cement	43.00	1 Sqm		

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
6	41	Painting the new Iron work and other similar works	15.00	1 Sqm		
						× -
					3	
					4	
		-				
7		Electrical arrangement Supplying and fixing of 300 mm dia sweep AC exhaust fan of approved ISI quality	7.00	1 No		
	-					
8		Annexure Providing and applying silicon sealent for expansion joint treatment for the vertical wall, roof trap side	36.00	1 Rmt		,
				5		
		*				×
						4

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
9	18.1	Providing Form work and centering for reinforced cement concrete works a. For Column footings, plinth beam, Grade beam, Raft beam,Raft slab etc.,	30 0 1	1 Sqm		
		-				
10		Providing Cup-board Shutter with frame using termite / water proof plywood of 19mm thick	249.50	1 Sqm		
		X				r
11		Supplying and fixing of Colour matt finish floor Tiles of size 305x305mm (12"x12") for flooring and other similar works	85.00	1 Sqm		

S. No	Item no.	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
12	29.9.5	Supplying and fixing of Colour matt finish wall tiles 12"x 18"	178.00	1 Sqm		
13		Supplying and fixing of 110mm dia PVC (SWR) pipe for Rain water down fall pipe Type A UPVC Specials	42.50	1 Rmt		
14		Labour charges for removing the tree/ green grasses in terrace floor/water tank slabs	5.00	1 Job		-
				(e)		

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
15	52.1.1	Supplying, laying, fixing and jointing the following PVC pipes as per ASTM D - 1785 of schedule 40 a) 32mm ASTM D schedule 40 threaded PVC pipe with necessary UPVC specials		1 Rmt		
16		b) 25mm ASTM D schedule 40 threaded PVC pipe with necessary UPVCspecials	65.00	1 Rmt		
		-				_
17		c) 20mm ASTM D schedule 40 threaded PVC pipe with necessary UPVC specials	67.00	1 Rmt		
		*				

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
18	54.1.2	Supplying and fixing of 15mm dia Polymer Engineering Tap (Long body)	17.00	1 No		
		1				
12						
19	54.2.2	Supplying and fixing of 15mm dia Polymer Engineering Tap (Short body)	21.00	1 No		
				c		
		- 3				
20	- 1	Supplying and fixing of Indian Water Closet white galzed (oriya type) of size 580 mm X 440 mm of approved make with ISI mark with P or S trap (in Ground floor)	5.00	1 No		
				4		

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
21	56.4.1	Supplying and fixing of Indian Water Closet white glazed (oriya type) of size 580 mm X 440 mm with P or S trap (Other than ground floor)	10.00	1 No		
22	-	Supplying and fixing the following dia PVC (SWR) pipe a) 110mm dia PVC SWR pipe including all required PVC	45.00	1 Rmt		
23		b) 75mm dia PVC SWR pipe including all required PVC specials	39.00	1 Rmt		

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
24	68.2.2	Wiring with 1.5 sqmm copper P.V.C. insulated unsheathed single core 1.1.k.v. grade cable with 5 amps. 5 pin plug socket point at convenient places PVC box (Fire	20.00	1 No		
		retardent box) (Open wiring)			2	
		-				W.
25	70.5.2	Supply and fixing of 4' long 18 W Crystal Glass LED tube Light	75.00	1 No		
		3				,,= ,
26		Supplying, laying and concealing of PVC pipe of 25mm dia with necessary specials and other materials	390.00	1 Rmt		

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
27	77.5.1	Run of main with 2 wires of 1.5 sq.mm. PVC insulated single core multi strand fire retardant flexible copper cable (Open wiring)		1 Rmt		
		-				
28	*	Run off main with 2 wires of 2.5 sq.mm. copper PVC insulated unsheathed single core 1.1 kv grade cable (Open wiring)	83.00	1 Rmt		
	-					
29		Supply and fixing of LED road way lighting luminaries suitable for fixing 30watts LED lamp street light fitting	2.00	1 No		
			c			-

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
30	96.7.2	Removing and relaying the existing rubber moulded hydraulic pressed paver block (Interlocking tiles) of 63mm thick		1 Sqm		
			-			/2:
31		Painting the old walls two coats with 1st class ready mixed plastic emulsion paint including thorough scrapping the surface		1 Sqm		
	٠					
32		Painting the old wood work with two coats of approved Ist class synthetic enamel paint including thorough scrapping	442.00	1 Sqm		
				9 .		

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
33	207.6	Painting the old iron work with two coats of ready mixed first class synthetic enamel paint of approved quality and brand including thorough scrapping the old paint		1 Sqm		
a)(			-			72
34		Supply, fabricating and erection of steel truss (weight basis) with suitable supporting angle	405.50	1 Kg	*	
		*				-
35		Supplying and fixing of following electrical fittings a) 6A Modular Switches 6A - 230V 1W 1 Module (higher end)	378.00	1 No		

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
36		b) 6A 5 pin Universal Socket (230V) 2 Module	178.00	1 No		
37		c) Combined Plate of 12 module cover plate (Plastic)	123.00	1 No	2	
		6				
38		d) Fan step regulator 100W 1 Module	123.00	1 No	×	
				-		
						*

Page 14

				76-		
S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
39	221.2	Removing the existing damaged iron window frame and shutter repairing and refixing the same in position size (1.00 x 1.65m = 2nos = 1 Job)		1 Job		
		-				
40		Dismantling the damaged floor finish and dadooing walls in cement mortar with Mosaic tiles/Glazed tiles/Cuddapah slabs	380.00	1 Sqm		
41		Supplying and fixing of Galvanium Roof sheet of 0.47mm thick	22.50	1 Sqm		

Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
344.5			1 No		
	1)		,		
	Supplying and fixing of Stain free nano Polish Vitrified Tiles of size 600x600x8mm	128.00	1 Sqm		
	position of 50 litres capacity industrial model reverse	3.00	1 Set		
	362.2.2	344.5 Supply and fixing of 5.5mm thick bewelled edge box type mirror of size 600 x 450mm  362.2.2 Supplying and fixing of Stain free nano Polish Vitrified Tiles of size 600x600x8mm  387 Supplying and erecting in position of 50 litres capacity	344.5 Supply and fixing of 5.5mm thick bewelled edge box type mirror of size 600 x 450mm  362.2.2 Supplying and fixing of Stain free nano Polish Vitrified Tiles of size 600x600x8mm  387 Supplying and erecting in position of 50 litres capacity industrial model reverse	344.5 Supply and fixing of 5.5mm thick bewelled edge box type mirror of size 600 x 450mm  362.2.2 Supplying and fixing of Stain free nano Polish Vitrified Tiles of size 600x600x8mm  387 Supplying and erecting in position of 50 litres capacity industrial model reverse	344.5 Supply and fixing of 5.5mm thick bewelled edge box type mirror of size 600 x 450mm  362.2.2 Supplying and fixing of Stain free nano Polish Vitrified Tiles of size 600x600x8mm  387 Supplying and erecting in position of 50 litres capacity industrial model reverse

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
45	387.2	Providing Polymer Coating (Water Proof Coating) for sunken portion of toilet	136.50	1 Sqm		
46		Increasing one metre height of the existing compound wall by providing MS angle in "Y" shape of size (50mm x 6mm thickness),	5.00	1 Rmt		
47		Supply and fixing of Prefabricated puf security cabin with toilet arrangements	1.00	1 No		
		of size 8' x 5' x 8 feet.		~		

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
48	452.1	Supplying and fixing of 1000W/230V 50 c/s AC supply Automatic electric water heater for 25 litres capacity (higher end)	12.00	1 No		
		- 14			E	-
						9
		28				
49		Supplying, laying, fixing and jointing the following GM gate value (heavy duty) a) 25mm GM gate value	8.00	1 No		
		1 00				
		-				
50		b) 32 mmGM gate value	4.00	1 No		
-		en e				
			-		±:	

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S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
51	619.2.3	Supplying and fixing of Angle Valve Conforming to I.S Specifications		1 No		
		,				
52	695	Supply & installation of Wall	2.00	1 No		
		Mountable, Electrical operated SANITARY NAPKIN PAD DISPOSAL MACHINE made of mild steel powder coated of size 530H x 250B x 250L (in mm)				
53		Supplying and fixing of screen cloth with aluminium curtain rods	169.00	1 Sqm		
-						

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
54	755.2	Providing and fixing of fly proof PVC mesh (Mosquito net) with necessary velcro arrangements		1 Sqm		
	la.			_		-
55	856	Supply and fixing of stored pressure ABC (Mono ammonium phospate) powder type fire extinguisher of 6kg capacity	6.00	1 No		
	×	**				7
56		Supply and installation of 2MP network bullet camera of 3.60mm fixed lens (2.80mm optional) smart IR upto 30m IR distance (Outdoor camera)	5.00	1 No	*	
				r		

	1	T	- 8.			
S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
57	868.2	Supply of 16 channel - 2 SATA (2nos hard disk) network video recoder for CCTV (higher end)	1.00	1 No		
		3			¥	
				=:		
58		Network Switch: Supply and installation of L2 PoE Switch, 24Port, 10/100/1000, 2SFP Ports with support for Auto VLANS Warranty: One year	1.00	1 No		
59	1	Supply of 2TB hard disk for the NVR for extended recording (hegher end)	1.00	1 No		
		Warranty: One year				

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
60	868.5	Supply of 4U Rack with Power manager tray rack standard: Conforms to DIN 41494 or equivalent standard Construction:	1.00	1 No		
61	868.6	Supply and delivery of LED type of TV of size 32 inch (80cm) Model : (LG-32LT 340C / equivalent)	2.00	1 No		
-						
62		Supply of weather proof camera junction box of size 4"x 4" for outdoor cameras	5.00	1 No		

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
63	868.9	Supply and installation of CAT 6 unarmoured Cable for LAN & CCTV	745.00	1 Rmt		
64		Supply of Cat6 I/O RJ45 Jack Housing: ABS+PC, UL 94V- 0, with optional colour contact bracket: PC, UL 94V-2	10.00	1 No		2
						74
65		Installation, commissioning and testing charges of whole CTTV system, Wifi acess and dish arrangements with proper connection etc all complete	1.00	1 Job		1

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
66	960.1	Supplying & installing of LENOVA V250 SLIM TOWER (10NNA 01 AIH)/equivalent with 4GB DDR4 RAm1 TB HDDI intel core-i3, 4GB, 1 TB,	1.00	1 No	(3)	).
		DOS)desktop				
67	0.00		10.00	1.21.		71
67	960.2	Supply of Indoor 802.11ac Wave 22 x 2:2 Wifi access point withwall mounting kit	12.00	1 No		
					= -	
68	~	Supply of 2U Rack with Power manager tray rack standard: Conforms to DIN 41494 / equivalent	1.00	1 No		
					,	8

			(6 °		1
Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
960.5	Supply, installation, testing & commissioning of 8-Port Fast Ethernet PoE Smart Managed Switch (D-Link DES-1210-08P / equivalent) warranty :one year	1.00	1 No		
				ara_	
960.6	Supply, delivery and installation of LED Television of size 43" (109.22 cm) make LG essential commercial TV multiple use (43LT340COTB)	1.00	1 No		
			\$ E		9.
	printer MF232W type - laser, functionally - all in one (print,	1.00	1 No		
	960.6	960.5 Supply, installation, testing & commissioning of 8-Port Fast Ethernet PoE Smart Managed Switch (D-Link DES-1210-08P / equivalent) warranty cone year  960.6 Supply, delivery and installation of LED Television of size 43" (109.22 cm) make LG essential commercial TV	Supply, installation, testing & commissioning of 8-Port Fast Ethernet PoE Smart Managed Switch (D-Link DES-1210-08P / equivalent) warranty one year   1.00	Supply, installation, testing & commissioning of 8-Port Fast Ethernet PoE Smart Managed Switch (D-Link DES-1210-08P / equivalent) warranty :one year   1.00   1 No	Supply, delivery and installation of LED Television of size 43" (109.22 cm) make LG essential commercial TV multiple use (43LT340COTB)   1.00   1 No   1 N

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S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
72	960.8	Supplying and fixing of DTH service (Tv dish 42 Box)	1.00	1 No		
					* *	
73	960.9	Supplying and fixing of Bio matric Warranty'. One year	1.00	1 No	E.1	
					-	
74		Supply and delivery of PHILIPS GC181/equivalent 1000W Dry Iron box (Black)Warranty: one year	10.00	1 No		

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S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
75	972.2.1	Supply and delivery of 5KVA static UPS without battery; In built LCD LED panel (3 Years warranty)	1.00	1 No		
		•			a	
76		Supply and delivery of Exide/equivalent inverter plus 100Ah SMF battery (Sealed maintenance free) of size 35.60 x 40.60 x 33cm (3years warranty)	6.00	1 No		
77		Battery Stand for 100 AH: Supplying and delivery of Standard Battery Stand for housing 100 AH SMF Batteries,	1.00	1 No		

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
78	972.5	Testing, commissioning and installation charges for UPS arrangements with proper connections etc		Job		,
			-			
			5 9		b T	
*:						a g
79	988.1	Supplying and delivery of Coir mattress of size 75" Length x 36" Width x 4" Height of approved make (Duroflex/equivalent)	R	1 No		
280			2. S			
80		Supply and delivery of foldable study table of size 0.60 x 0.40m made out of top	120.00	1 No	W.,	
					e a	= ~
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				0 ~		
S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
81	988.3	Supply and delivery of Plastic Chairs Nilkamal /equivalent	121.00	1 No		
	*	* * * * * * * * * * * * * * * * * * * *		*		
82		Supplying and fixing of 3 seater SOFA made upof teak wood on Parents room, with 40 density	1.00	1 No		± 27 1
	-					
83		Supply and delivery of Iron table stand with press holder, foldable and height adujtment rioning board	10.00	1 No		*_
		4		T	A COST NA	3
		5 A.F. F				6

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
84	988.7	Supply and delivery of pillow cover of size 16" x 24" and bed sheet (Single)		1 Set		
		× ,				
85		Supply and delivery of pillow of approved make Duroflex/equivalent	121.00	1 No		78
a l						2
	·,				Si .	-
86		Supply and delivery of steel junior table with one drawer and one cupboard with table top 18mm prelaminated particle board.	1.00	1 No		

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
87	989	Supplying and delivery of Garbage Bins (Plastic) of 5 like capacity		I No	Parks Sand	
88	989.1	Supplying of Garbage Bins(Plastic) for kitchen waste of 75 lits capacity with lid of Red & Green Colour box	2.00	1 No		
889		Supply and delivery of bath mat / floor mat of size 1.00 x 0.45m	55.00	1 No		

S. Vo	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
00	989.4	Supplying & fixing of Concrete Stone Bench	4.00	1 No	5	
4)						
91 9		Supply and delivery of First Aid box complete with all first aid medicines	1.00	1 No		
+					Total Amount Rs.	

Note: The items not furnished with Quantity are deemed to be deleted.

No of Correction Superintending Engineer/CC

