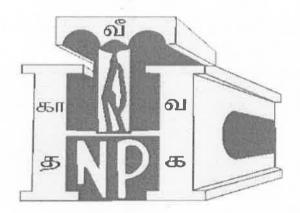


(ISO 9001 - 2015 CERTIFIED COMPANY)



REPAIRS / IMPROVEMENT / RENOVATION
WORK FOR THE EXISTING BUILDING AND
DIGITALIZATION OF THE EXISTING FIRE
RANGE AT TAMIL NADU COMMANDO
SCHOOL TRAINING CENTRE / FIRING
RANGE OTHIVAKKAM IN CHENGALPATTU
DISTRICT.

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.
- The tenderer / Contractor should strictly follow above instructions without fail.

ANNEXURE - [R]

TENDER DETAILS FOR REPAIRS / IMPROVEMENT / RENOVATION WORK FOR THE EXISTING BUILDING AND DIGITALIZATION OF THE EXISTING FIRE RANGE AT TAMIL NADU COMMANDO SCHOOL TRAINING CENTRE / FIRING RANGE OTHIVAKKAM IN CHENGALPATTU DISTRICT.

1. FILE NUMBER SE / CC / DB / 2442/ 2022

2. TENDER NOTICE NUMBER SE/CC - 17/ 2022 - 23 Dt:12.07,2022

3. NAME OF WORK AND Repairs / Improvement / Renovation work for the existing

VALUE OF PUT TO TENDER building and Digitalization of the existing Fire Range at Tamil

Nadu Commando School Training Centre / Firing Range

Othivakkam in Chengalpattu District.

Rs.165.41 Lakhs (with GST)

4. DATE OF SALE OF TENDER 18.07.2022 (12 Noon) To 26.07.2022 (5.30 PM)

5. DATE OF RECIEPT OF TENDER 28.07.2022 (upto 3.00 PM)

6.DATE OF OPENING OF TENDER 28.07.2022 (at 3.15 PM)

7.EMD AMOUNT (With GST) Rs.92,800/- (Rupees Ninety two thosuand and eight hundred

only)

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

The tender received without EMD will be summarily rejected).

8.COST OF TENDER DOCUMENTS : 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)

9. PERIOD OF COMPLETION OF WORK: 8 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) : 112 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, Income Tax, Sales tax Verification Certificate, GST Registration certificate, Performance certificate etc., shall be enclosed.

Superintending Engineer / C.C

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.

- 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.

3. 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 tenderwilliem ain 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 intimation 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 intimation 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 deposite 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 vide 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 earnestmoney deposits hall be for feited.

 If the contractor fails to carryout the contract, afterpaying 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 without any separate 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 agreement by the tenderer, if administratively considered necessary or expedient

- 6. The tenderer shall exam ine closely the general conditions of the contract of Tam il Nadu Building Practice and also general conditions of contract contained there in and sign the copy of the Tam il Nadu Building Practice and its addenda volume in token such study before submitting his tender unit rates 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 Tam il 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 aterials under the clause 溺aterials and W orkmanship in the General conditions to contract Materials 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.

^{**} To be struck out if such copies are not to be issued for sale.

- 9. The Tenderer's particular attention is drawn to sections and clauses in the General Conditions of contract dealing with
 - I. Test, inspection and rejection of defective materials and work
 - 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.101 Public Works (G2) Dept, Dt:10.06.2009.

Period of Contract - 8 Months

Period after date of commencement	Percentage of work completed (Based on Contract Lumpsum amount)
1st Month	15% of whole Work
2nd Month	30% of whole Work
3rd Month	45% of whole Work
4th Month	60% of whole Work
5th Month	70% of whole Work
6th Month	80% of whole Work
7th Month	90% of whole Work
8th 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 Superintending Engineer / 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.

- 17. 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. Contractor succeeded in the tenders are to get their names of registered in TNPHC Ltd in appropriate class prior to the execution of the agreement even though the contractors are registered in PWD.
- 29. Income Tax return Certificate (2021-22).
- 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.
- 31. 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.

- 32. 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
- 33. 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).
- 34. 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.
- 35. 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.
- 36. 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 format from the Superintending Engineer concerned of TNPHC Ltd, should be furnished.
- 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).
- 39. The tenderer should sign all the pages of the tender schedule without fail. Otherwise, the tender will be summarily rejected.
- 40. The copies of credentials, documents, should be got attested by Notary Public / Gazetted officer of state or Central Government.
- 41. EMD exemption is not entertained vide G.O Ms.No.270 Finance (salaries) department dated .19.09.2017.
- 42. 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.,
- 43. The tenderer should be registered with GST.
- 44. 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.
- 45. 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.
- 46. Government of India has notified vide Notification No.20/2017- Central Tax (Rate), dated 22nd August, 2017 and Notification No.24/2017- Central Tax (Rate), dated 21st 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.
- 47. 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.
- 46. 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 Engineer. Tamil Nadu Police Housing Corporation Limited with such variations by way of alterations, additions to, and omissions from the said works and method of payment as are provided for in the conditions of contract for the sum of Rupees. (in words and figures)
or such other sum as may be arrived at under the clause of the General conditions of contract relating to "Payment on lump-sum basis or by final measurement at unit prices".
I/We have also completed the priced list of items of Schedule "A" annexed (in words and figures) for which I/We agree to execute the work and receieve payments on detailed final measurement at Unit Prices.
I/We hereby distinctly and expressly declare and acknowledge that, before the submission of my/our tender I/We have carefully followed the intructions in the tender notice and have read the Tamil Nadu Building Practice and the Preliminary Specifications therein and that I/We have made such examination of the contract documents and the plans, specifications and quantities and of the location where the said work is to be done and such investigation of the work required to be done and in regard to the material required to be furnished as to enable me/us thoroughly to understand the intention of the same and the requirements, covenants, agreements, stipulations and restrictions contained in the contract, and in the said plans and specification and distinctly agree that I/ we will not hereafter make any claim or demand upon the Corporation based upon or arising out of any alleged misunderstanding or misconception, or mistake on my part of the said requirements, covenants, agreements, stipulations, restrictions and conditions.
*** I/We being a registered contractor enclose an income-tax verification / have/ already produced an income tax verification certificate in respect of (here particulars of the previous occasion on which the certificate was produced should be given.
*** I/We enclose
*** I/We hereby enclose the proof of authority vide the payment of Bid Securityexempting me/us from the payment of Bid Security.
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.

Qualification 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. Qualification Name of members of technical staff Proposed to be employed The last two clauses should be Scored out if the cost of the work involved in less than Rs.10,000/-Note: (a) The tenderer should score out the last clause or the penultimate according as they are themselves (b) professionally qualified or undertake to employ technical staff under them. RATE OF PROGRESS (Fill in from tender notice) Percentage of work to be Period after the Completed on the whole work Commencement of

TAMIL NADU POLICE HOUSING CORPORATION LIMITED

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

SCHEDULE 'A'

Name of Work: Repairs / Improvement / Renovation work for the existing building and Digitalization of the existing Fire Range at Tamil Nadu Commando School Training Centre / Firing Range Othivakkam in Chengalpattu District.

- 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: Repairs / Improvement Renovation works for existing buildings and Digitalization of the existing Fire Range at Tamil Nadu Commando School Training Centre / Firing Range at Othivakkam in

			ANNEXURE TO SCHEDULE	- A			
SI. No	Item No	QTY	DESCRIPTION OF WORK	TNBP NO.	IN FIG. AND IN	UNIT IN FIG. AND IN WORDS	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	& 24		. 3	1 1
			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.			1m ³ (One Cubic metre)	
2	1.5.		Earth work excavation for Open Foundation in all soils and sub-soils to the required depth as may be directed except in hard rock requiring blasting, inclusive of shoring, strutting and bailing out water wherever necessary. (Excluding refilling the sides of foundation) and depositing the earth in places shown			1m³ (One	
			clearing and levelling the site with an initial lead of 10 metres and lift as specified hereunder etc., complete in all respects complying with relevant Standard specifications (Excluding Refilling). a) 0 to 2m depth.			Cubic metre)	
3	1.6.		Earth work excavation for Open Foundation for drains in all soils and subsoils to the required depth as may be directed except in hard rock requiring blasting, inclusive of shoring, strutting and bailing out water wherever necessary. (Excluding refilling the sides of foundation) and depositing the earth in places shown clearing and leveling the site	20		1m³ (One	
			with an initial lead of 10 metres and lift as specified hereunder etc., complete in all respects complying with relevant standard specification (Excluding Refilling) (Drain having bed width upto 1.25 metre). a) 0 to 2m depth.			Cubic metre)	

SI. No	Item No		DESCRIPTION OF WORK	TNBP NO.	RATE IN FIG. AND IN WORDS	UNIT IN FIG. AND IN WORDS	AMOUNT
4	2.1		Supplying and filling in foundation and basement with filling sand in layers of 150 mm thickness well watered, rammed and consolidated complying with relevant Standard specification including cost of supplying filling sand.	24 &25	V	1m ³ (One Cubic metre)	
5	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.			1m ³ (One Cubic metre)	
6	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.			1m³ (One Cubic metre)	
7	9.2		Brick work in Cement Mortar 1:6 (One of cement and six of sand) using Chamber burnt bricks of size 9"x4½"X3" (23x11.4x7.5cm) for superstructure in the following floors including labour for fixing the doors, windows and ventilator frames in position, fixing of hold fasts, scaffoldings, curing etc., complete in all respect complying with relevant standard specifications and drawings. (a) In Ground Floor	31-C		1m³ (One Cubic metre)	
8		-	(c) In Second Floor	72.		1m ³ (One Cubic metre)	<u> </u>
9	10.2		Brick partition wall in Cement Mortar 1:4 (One of cement and four of sand) 114mm thick for super structure in the following floors using chamber burnt bricks of size 9"x4½"x3" (23x11.4x7.5cm) including labour for fixing the doors, windows and ventilator frames in position, fixing of hold fasts, scaffoldings, curing etc., complete in all respect complying with relevant standard specifications and drawings. (b) In Ground Floor			1m ² (One Square metre)	

	akkaiii Coii	ipairia					1 agc
SI. 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
10	13.1		Filling in foundation and basement and other similar works with Excavated earth in layers of 150mm thick well watered rammed and consolidated complying with relevant standard specification etc., all complete and as directed by the departmental officers.			1m³ (One Cubic metre)	
11	21.2		Supplying and fixing of Teak Wood wrought and put up for frames of doors, windows, ventilators, cupboard and any other similar joinery works with necessary plugs, rebates for shutters, plaster grooves on all faces etc., including labour charges for fixing hold fasts, complying with relevant standard specifications etc., in all respects. a) Teak wood over 2.00 metre and below 3 metre length	74		1m³ (One Cubic metre)	
12			b) Teak wood below 2.00 metre length			1m ³ (One Cubic metre)	
13	28		Plastering the top of flooring in CM 1:4 (One of cement and four of sand) 20mm thick including surface rendered smooth including providing proper slopes, thread lining, curing and 150mm wide skirting alround with the same cement mortar etc., complete in all respects.	31-C		1m ² (One Square metre)	
14	30		Finishing the top of flooring with cement concrete 1:3 (One of cement and three of blue granite chips of size 10mm and below) 20 mm thick Ellispattern Flooring (No Sand) and surface rendered smooth including 150mm wide skirting, providing proper slopes, thread lining, curing etc complete in all floors complying with relevant standard specifications.	39 -G		1m ² (One Square metre)	
15	31		Weathering Course with concrete broken brick jelly 20mm gauge in pure burnt lime stone slaked and screened (No Sand) over RCC Roof Slab with proportion of brick jelly to lime (fat lime) being 32: 12 1/2 by volume well beaten with wooden beaters for giving the required slope and thickness complying with relevant standard specification and as directed by the departmental officers.	30 & 41		1m³ (One Cubic metre)	

	annaill Coll	pania	(4				i age
SI. No	Item No	QTY	DESCRIPTION OF WORK	TNBP NO.	IN FIG. AND IN	UNIT IN FIG. AND IN WORDS	AMOUNT
1	2	3	4	5	6	7	8
16	32.1		Finishing top of roof with one course of Hydraulic Pressed Tiles of approved superior quality of size 23cmx 23cmx20mm thick laid over weathering course in CM 1:3 (One of cement and three of sand) 12mm thick mixed with Water proofing compound at 2% by weight of cement used and pointed neatly with the same cement mortar mixed with water proofing compound including curing etc., as per standard specifications. (The quality of tiles shall be got approved from the EE before use)	& 57	a	1m ² (One Square metre)	
17	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.	57		1m ² (One Square metre)	
18	35		Special ceiling plastering in cement mortar 1:3 (One of cement and three of sand) 10mm thick for bottom of roof, stair, waist, landing and sunshades in all floors finished with neat cement including hacking the areas, providing band cornice, scaffolding, curing etc., complete in all respects and complying with relevant standard specifications.	56 & 57	<	1m ² (One Square metre)	
19	37.1		White washing three coats using clean shell lime slaked including cost of lime, gum, blue, brushes, including scaffolding etc., complete in all respects.	63		1m ² (One Square metre)	
20	39	j	Supplying and fixing Mild Steel grills as per the design approved to verandah enclosure or gate including one coat of primer and labour for fixing in position etc. all complete			1 Kg. (One Kilogram	
21	40	1 3 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	Painting the new wood work with two coats of approved first class synthetic enamel ready mixed paint in addition to one coat of primer of approved quality and shade, the paint should be supplied by the contractor at his own cost (The quality and the shade of paint should be got approved by the Executive Engineer before use) complying with relevant standard specifications.	66 & 66A		1m ² (One Square metre)	

SI. No	Item No		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	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.	66A		1m ² (One Square metre)	
23	52		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 PVC/GI specials /GM specials like Elbow, Tee reducers, Plug, union, bend, coupler, nipple/ GM gate valve, check and wheel valve etc., wherever required above the ground level including the cost of teflon tape, 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. a) 32mm dia ASTM D schedule 40 threaded PVC pipe with necessary PVC/GI specials			1 RMT (One Running Metre)	÷.
24			b) 25mm dia ASTM D schedule 40 threaded PVC pipe with necessary PVC/GI specials			1 RMT (One Running Metre)	
25			c) 20mm dia ASTM D schedule 40 threaded PVC pipe with necessary PVC/GI specials			1 RMT (One Running Metre)	
26	53.3		Supplying and fixing of C.I. steps of approved quality and brand (not less than 5kg each) including cost of material labour charges for fixing etc., all complete and as directed by the departmental officers.			1 No. (One Number)	

			α				- 5 -
SI. No	Item No		DESCRIPTION OF WORK	TNBP NO.	IN FIG. AND IN WORDS	UNIT IN FIG. AND IN WORDS	AMOUNT
1	2	3	4	5	6	7	8
27	60		Supplying and fixing of PVC Nahani Trap not less than 75mm 4 way / 2 way (Superior variety) having minimum of water seal of 50mm confirm to relevant I.S. specifications with its latest amendments including resting on the bed of brick jelly concrete 1:5:10 (One of cement, five of sand and ten of 40 mm gauge brick jelly) etc., complete as directed by the departmental officers (The PVC Nahani Trap should be got approved from the EE before use)			1 No. (One Number)	
28	73.2		Electrial Arrangements: Supplying and fixing of 1 no three phase distribution board with 4 way per phase 30A / per way with neutral link on suitable wellvarnished teakwood plank including necessary interconnections and earth connections cost of all materials etc., all complete.			1 No. (One Number)	
29	74		Charges for assembling and fixing of ceiling fan of different sweep with necessary connections and fixing of fan regulator on the existing board etc., all complete (Excluding cost of fan)		5	1 No. (One Number)	
30	80	= 1	Supplying and fixing of 1 no of 375x300x20mm thick TW plank varnished with 1 no of 25 Amps 250 Volts fuse unit and 1 no copper earth plate of suitable size bolts and nuts on wall for EB service connections including cost of all materials etc., all complete (Single phase service connection)			1 No. (One Number)	
31	2.15		Annexure Supply and filling in foundation and basement with Stone dust in layers of 150mm thickness well watered, rammed and consolidated complying with relevant standard specification including cost of stone dust etc., all complete and as directed by departmental officer.			1m³ (One Cubic metre)	
32	3.8	I j t a	Plain cement concrete 1:4:8 (One of cement, Four of sand and eight of hard broken stone elly) for foundation using 40mm gauge hard broken stone jelly inclusive of shoring, strutting and bailing out water wherever necessary amming, curing etc., complete in all respects complying with relevant standard specifications and as directed by the Departmental officers.	28		1m³ (One Cubic metre)	122

	annairi Cori						
SI. 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
33	8.2.4.1		Providing and laying in position, Standardised Concrete Mix M-25 Grade in accordance with IS:456-2000 using 20mm and down graded hard broken granite stone jelly for the all RCC items of works with minimum cement content of 350 Kg/m³ and maximum water cement ratio of 0.55, including admixture (plasticiser/super plasticiser) in recommended proportions as per IS:9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability with about (5.0 cum) 7730Kg of 20mm machine crushed stone jelly and with about (3.3 cum) 5156 Kg of 10-12mm machine crushed stone jelly and with about (4.79 cum) 7670Kg of sand, (for making 10 cum) but excluding cost of reinforcement grill and fabricating charges, centering and shuttering and also including laying, vibrating with mechanical vibrators, finishing, curing etc., and providing fixtures like fan clamps in the RCC floor/roof slabs wherever necessary without claiming extra etc., complete complying with relevent standard specification and as directed by the departmental officers. The coarse and fine aggregates to be used should comply with requirements of IS standards. (No separate payment will be made by the Departmental for the excess usage of materials) a) In Foundation and basement			1m³ (One Cubic metre)	
34			b) In Ground Floor			1m ³ (One Cubic metre)	
35	14.2.II		Providing precast concrete slab for cupboard ward robes shelves, cover slab for chambers, Baffle walls side slabs of boxing around windows and other similar works in Standardised concrete mix M25 for the following thickness excluding the cost and fabrication of reinforcement grills but including precasting, moulding, curing, finishing and fixing in position complying with relevant standard specifications etc., complete in the following floors (Measurement will be taken including bearing in wall also) II. 40mm thick a. In Foundation and basement			1m ² (One Square metre)	

Sl. No	Item No	QTY	DESCRIPTION OF WORK	TNBP NO.	RATE IN FIG. AND IN WORDS	UNIT IN FIG. AND IN WORDS	AMOUNT
36	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 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 specification and as directed by the departmental officers. b).Plain surfaces such as Roof slab, floorslab, Beams, lintels, lofts, sillslab, staircase waist, portico slab and other similar works	30 (8)		1m ² (One Square metre)	
37			f.Curved surface			Im ² (One Square metre)	
38	21.5.1.3		Supplying and fixing of Double leaf Solid core flush door shutters using boiled water resistance (BWR) teak wood ply as per IS 303-1989, the cross band and face veneers are to be banded with phenol formaldehyde synthetic resin in hot press both sides and manufacturing the shutter by using quality timber of termite proof and seasoned to moisture content not more than 10%, hot pressed with hydraulic press at a temperature of 150° to the norms as per IS 2002-1983 and TW Ply on Both side with teak wook tipping around, 35mm thick including cost and fixing of Aluminium furniture fittings such as 6 mos 5" butt hinges, 4 Nos 6"x1/2" Tower bolt, 4 Nos 6" Handle with CP screws, 2 No of 10"x5/8" Aldrop, 2 No 40mm dia & 60mm ong rubber bush, 2 No of Door stopper with rubber bush, Brass screws and labour charges for wrought and putup and fixing in position of lush shutters with two cots of Varnish and as directed by the departmental officers. (The quality and brand of materials should be got approved from the Executive Engineer before use.) 1) 1.20 x 2.10m			1m ² (One Square metre)	

SI. No	tem 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
39 2	1.5.2.2		Providing and fixing factory made unplasticized polyvinyl chloride (UPVC) Door Frame of size 50X47mm with a wall thickness of 5mm, made out extruded 5mm rigid UPVC foam sheet, mitred at two corners and joined with 2 nos of 150mm long brackets of 15X15mm M.S square tube. The two vertical and horizontal door profiles are to be reinforced with 19X19mm M.S Square tube of 19 gauge with primer coat. The door frame shall be fixed to the wall using 65/100mm long M.S screw through the frame by using PVC fasteners. A minimum of 4 nos screws to be provided for each vertical member & minimum 2 nos for horizontal member etc., and providing and fixing 30mm thick factory made door shutter with unplasticized polyvinyl chloride (UPVC) solid panel foam sheet, structured with M.S. tube of 19 gauge thickness and size 19X19mm for styles & 15mmX15mm for top & bottom rails. Paneling of 5mm thick UPVC One Side Printed Lamination single sheet to be fitted in the M.S. frame welded / sealed to the styles and rails covered with 5mm thick 75mm wide UPVC sheet for top rail, lock rail and bottom rail on either side and 10mm (5mm X 2 Nos) thick, 20mm wide cross UPVC sheet as gap insert for top rail & bottom rail and joined together with PVC solvent cement adhesive. An additional 5mm thick UPVC strip of 20mm width is to be stuck on the interior side of the 'C' Channel using PVC solvent cement adhesive including cost and labour charges for fixing of 3 Nos 4" SS butt hinges and Aluminium furniture fittings such as 1 No 4" Tower bolt, 1 No 5" Aldrop, 2 Nos 6" flat 'D' type—Handle etc are included. The fitting provided shall bear ISI marks. (The quality and brand of door shutter and furniture fittings should be got approved from the Executive Engineer before use)			1m ² (One Square metre)	

Juliv	akkam Com	ipaind	20			14-	Page 1
SI. 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
40	23.2.1		Supply & fixing of 4mm thick plain Glass frosted panels with aluminium beadings of size 12mmx12mm with aluminium bolts and nuts for the shutters of the steel windows already supplied to suit all the size including cost of Labour charge for fixing glass paneles etc all complete and as directed by the departmental officers. (The quality of glass and aluminium beeding should be got approved from the Executive Engineer before use).		n A	1m ² (One Square metre)	
41	29.8		Supplying and fixing of Colour glazed tiles (Best approved 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).			1m ² (One Square metre)	
42	29.9		Supplying and fixing of colour Ceramic Tiles Anti skid without corrugated design for flooring and other similar works (Best approved quality, colour and shade 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 ² (One Square metre)	

Jtniva	akkam Com	ipaind	2)				Page 1
Sl. 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
43	31.5		Finishing the top of Terrace floor with one course of solar reflective water proof, heat proof and cool roof ceramic tiles of size 305mmx305mmx7mm thick of approved quality laid in cement mortor 1:3 (one part of cement and three parts of sand) 20mm thick over base concrete mixed with calcium based mineral powder (60 kg for 1000 sqft) (before laying tiles, the tiles should be dipped with salin based nano liquid) and top Grouting with cement mortar 1:3 (one part of cement and three parts of sand) mixed with white cement, silicon powder and polimer additives (20kg for 1000 sqft.) and joint pointed with zycosil oil (200gm for 1000 sqft.) after grouting acrylic salin based liquid including cost of base concrete 1:2:4 mix using 6-10mm chips -40mm thick etc., complete complying with			1m ² (One Square metre)	
	÷		standard specifications including cost of all materials, labour charges for lifting to open terrace, laying and finishing and other incidental charges etc., complete and as directed by the departmental officers. (The Brand and quality of tiles, should be got approved from the Executive Engineer before using)				
44	32.1.2		Pointing the Pressed Tile over the roof with cement mortar 1:3 (One of cement and three of sand) including cost of all materials and labour charges for pointing, curing etc., all complete and as directed by the departmental officers.			1m ² (One Square metre)	
45	37.3.1		White washing two coats for old wall using clean shell lime slaked including thorough scrapping the old paint using sand paper as required including cost of lime, gum, blue, brushes, etc., all complete as directed by the departmental officers.			1m ² (One Square metre)	
46	37.3.2		White washing one coat using clean shell lime slaked including cost of lime, gum, blue, brushes, including scaffolding and scrapping the painted surface etc., complete in all respects.			1m ² (One Square metre)	

		. - •	ol ol				9
SI. No	Item No	QTY	DESCRIPTION OF WORK	TNBP NO.	IN FIG.	UNIT IN FIG. AND IN WORDS	AMOUNT
1	2	3	4	5	6	7	8
47	38.4		Painting two coats using approved quality of best Cement paint over the priming coat on cement plastered / concrete wall surfaces, ceiling or other similar works including cost of cement paints, putty, brushes, watering, curing, etc., all complete and as directed by the departmental officers (paints and its shade shall be got approved from the Executive Engineer before using)	65 A		1m ² (One Square metre)	
48	38.8		Painting the walls with two coats using approved quality of best Oil Bound Distemper over one coat of water based cement primer including cost of distemper, primer, cleaning and scrapping the walls, rendering the walls smooth with necessary putty, brushes, scaffolding arrangements & labour charges etc., all complete and as directed by the departmental officers (The quality of paints and its shade shall be got approved from the Executive Engineer before using)			1m ² (One Square metre)	
49	38.8.2		Painting the old walls with two coats using approved quality of best Oil Bound Distemper over the plastered surface including cost of distemper, cleaning and scrapping the walls, rendering the walls smooth with necessary putty, brushes, scaffolding arrangements & labour charges etc., all complete and as directed by the departmental officers (The quality of paints and its shade shall be got approved from the Executive Engineer before using)			1m ² (One Square metre)	
50	43.1	1	Supplying, fabricating and placing in position of Mild steel Grills / Ribbed Tor Steels (without cement slurry) of all diameters for reinforcement for all floors including cost of binding wire, bending tying etc., all complete and as directed by the departmental officers.	30 & 86		1 MT (One Metric Tonne)	

Othiva	akkani Con	ipairiu	×.5				1 490 1
SI. No	Item No		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
51	44.6		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 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 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)	
52	52.1		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 PVC/GI specials /GM specials like Elbow, Tee reducers, Plug, union, bend, coupler, nipple/ GM gate valve, check and wheel valve etc., wherever required above the ground level including the cost of teflon tape, 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.				
			d) 50mm dia ASTM D schedule 40 threaded PVC pipe with necessary PVC/GI specials			1 RMT (One Running Metre)	
53	52.9	T. CO.	Supplying and delivery of 40mm dia MS clamp sets for the erection of submersible pumpset including cost of all materials, labour charges for fixing etc., all complete and as directed by the departmental officers. (The materials quality & brand should be got approved from the EE before use)			1 No (One Number)	
54	54,1.1		Supplying and fixing of half turn C.P Long body Tap of 15mm dia of best quality including cost of half turn CP tap with required specials and labour for fixing 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)	8

	akkam Con	ipairiu	24				Page
SI. 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
55	54.2.1		Supplying and fixing of half turn C.P short body Tap of 15mm dia of best quality including cost of half turn CP tap with required specials and labour for fixing 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).			I No. (One Number)	
56	57.1.1		Supplying and fixing EWC superior variety (white) 500mm with PVC SWR grade 'P' or 'S' trap including cost and fixing of double flapped coloured plastic sheet cover PVC flushing cistern in appropriate level as directed by the departmental officers at a maximum level of 5'6" and of approved brand of 10litres capacity including fittings such as CI brackets. PVC connection GM wheel valve, Hex nipple, etc., complete (The Quality and brand of EWC and plastic cover shall be got approved from the Executive Engineer before fixing)	102		1 No. (One Number)	
57	58.3	1	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)	
58			o) 75mm dia PVC SWR pipe including all required PVC specials etc., all complete.,			1 RMT (One Running Metre)	

Ottilve	akkam Com	ipairiu	25				rage i
SI. 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
59	64.1.1		Wiring with 1.5 sqmm PVC insulated single core multi strand fire retardant flexible copper cable with ISI mark conforming to IS: 694/1990, 1.1K.v. grade cable with continuous earth by means of 1.5sqmm PVC insulated single core multi strand fire retardant flexible copper cable with ISI mark conforming 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 TW Switch Box of required thickness and covered with 3 mm thick laminated hylem sheet controlled by 5Amps flush type switch including circuit mains cost of all materials, specials etc., all complete(Open wiring).			1 No. (One Number)	
60	65.1.1		a. Light point with ceiling rose 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 1.5 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 in Surface run of PVC rigid conduit pipe heavy duty with ISI mark with suitable size TW Switch Box (100 x 100 x 75mm) concealed and covered with 3mm thick laminated hylem sheet for Fan point controlled by 5 Amps flush type switch including circuit mains, cost of all materials, specials, etc., all complete (Open wiring)			1 No. (One Number)	
61	67.1		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 1.5 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 in fully concealed PVC rigid conduit pipe heavy duty with ISI mark with suitable size MS box of 16g thick concealed and covered with 3mm thick laminated hylem sheet for 5 amps 5 pin plug socket point at Switch Board Itself including circuit mains, cost of all materials, specials, etc., all complete			1 No. (One Number)	

	4.0		26			Air a	. ~9~ .
		NAME OF	2 (3 F) F)	TNBP	RATE	UNIT IN	
SI.		CO (TITAL)	DESCRIPTION OF WORK	NO.	IN FIG.	FIG.	
No	Item No	QTY	DESCRIPTION OF WORK	11-1-3-2	AND IN	AND IN	AMOUN
					WORDS		
1	2	3	4	5	6	7	8
		3	· · · · · · · · · · · · · · · · · · ·	3	0	/	0
62	68.2.1		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 1.5 sq.mm PVC				
			insulated single core multi strand fire				
			retardant flexible copper cable with ISI			1 No.	
			mark confirming to IS: 694/1990, 1.1.k.v.	*.		(One	
			grade cable in surface run of PVC rigid			Number)	
			conduit pipe heavy duty with ISI mark with			Number)	
			suitable size MS box of 1 No (each) 16g thick				
			concealed and covered with 3mm thick				
			laminated hylem sheet for 5 Amps 5 pin plug				
			socket point at convenient places including				
- 1			circuit mains, cost of all materials, specials,				
			etc., all complete (Open Wiring)				
63	70.5.2		Supply and fixing of 4' long 18 W Crystal				
	70.5.2						
			Glass LED tube Light with ISI mark				
			including cost of all materials 1 sqmm twincore			137	
			flex wire, TW round block and labour charges			1 No.	
			for fixing in position etc all complete and as			(One	
			directed by the departmental officers (The			Number)	
- 1			material should be got approved from the				
ı.			Executive Engineer before use)				
64	77.7.1		Run off main with 2 wires of 2.5 sq.mm.				
			PVC insulated single core multistrand fire				
			8				
			retardant flexible copper cable with ISI				
			mark confirming to IS: 694/1990,1.1 kv grade			1	
			cable with continuous earth by means of 1.5				
		5	sq.mm PVC insulated single core multi			1 Rmt	
		s	strand fire retardant flexible copper cable			(One	
			with ISI mark confirming to IS:694/1990,1.1.			Running	
						Metre)	
						Wiche)	
			9mm/20mm dia rigid PVC conduit pipe heavy				
			luty with ISI mark cost of all materials, specials				
		e	etc.,all complete and as directed by the				
		c	lepartmental officers. (Open Wiring)				
55	79.4.2	S	Supply and fixing of 100 Amps TPN switch				
			lisconnector fuse units in sheet steel enclosure				
			with HRC fuses double break including				
						1 No.	
		- 1	ecessary interconnection, cost of all materials			(One	
			to all assemblets as disported by the			(
			tc., all complete as directed by the			Number	
			epartmental officers. (The quality should be			Number)	
		d				Number)	

Othive	akkam Con	ipairiu	2				raye n
SI. No	Item No		DESCRIPTION OF WORK	TNBP NO.	RATE IN FIG. AND IN WORDS	UNIT IN FIG. AND IN WORDS	
1	2	3	4	5	6	7	8
66	79.9.2		Supplying and fixing 1 no of 100 Amps 500 volts grade porcelain fuse unit on suitable teakwood plank varnished to be fixed on the top of pole/EB street pole with necessary clamps including cost of all materials etc., all complete as directed by the departmental officers. (The quality should be got approved by the Executive Engineer before use).			1 No. (One Number)	-
67	82.3.2		Supplying and fixing of 48W LED Street Light with LED outdoor fittings (LIGHT EMITTING DIODE) (all types) in the existing street poles with a required 50mm dia GI pipes 'B' class, back lamp with bolts & nuts, 15Amps 500V fuse unit, TW plank for fixing fuse unit 150 x 100 x 20mm, 2.5Sqmm PVC insulated unshathed copper cable, including labour charges Labour charges for fixing the street light fitting with the required accessories in the E.B pole including connection and accessories, painting the GI pipes, MS clamps, screws etc., all complete, as directed by the departmental officers. (The Material quality & brand should be got approved by the Executive Engineer before use).	£	7)	1 No. (One Number)	
68	84.3.		Run of main with 2 wires of 4 sq.mm. PVC insulated single core multi strand fire retardant flexible copper cable with ISI mark confirming to IS: 694/1990,1.1 kv grade cable with continuous earth by means of 2.5 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 fully concealed 19mm/20mm dia rigid PVC conduit pipe heavy duty with ISI mark cost of all materials, specials etc., all complete.			1 Rmt (One Running Metre	
69	84.3.1		Run of main with 2 wires of 4 sq.mm. PVC insulated single core multi strand fire retardant flexible copper cable with ISI mark confirming to IS: 694/1990,1.1 kv grade cable with continuous earth by means of 2.5 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	

SI. No	Item No		-X-10	TNBP NO.		UNIT IN FIG. AND IN WORDS	AMOUNT
1	2	3	4	5	6	7	8
70	87.1		Supply and fixing of electro mechanically operated three phase earth leakage circuit breaker/residual current circuit breaker (ELCB/RCCB) combined with over load and short circuit protection having a rupturing capacity of 6 KA with 30 milli amps fixed setting sensitivity and rates for 25 A insuitable sheet steel enclosure confirming to IS 12640/1988. Including cost of ELCB/RCCB on fully concealed suitable MS box with necessary inter connections and earth connections using copper cable including cost of all materials etc., all complete.			1 No (One Number)	
71	93.1		Plastering with CM 1:3 (one of cement and three of sand) 12 mm thick mixed with water proofing compound (CICO) at the rate of 2 kg / 10 sq.m including curing etc., all complete complying with relevant standard specification.	56 & 57		1m ² (One Square metre)	
72	156.1		Supply and erection of 125Amps capacity Floor mounting panel board (cubical type) with bus bar chamber made up of 16 SWG MS sheet for 3 phase 4 wire system with 25mmx3mm tin coated copper flat for phases and neutral: cable chamber, switch chamber and with 2 mos.25mmx3mm tinned copper flat for the earth bus on the rear side of the panel board: necessary interconnections by copper flat of suitable sizes: suitable PVC colour sleeves for the interconnecting copper flats / rigid copper wire: earth connections to all switches / bus bar by GI flat of 25mm 3mm size from the earth bus: hylam sheet separation between bus bar and switches: 1 set Led pilot lamps with 1 sqmm PVC copper cable, switches, fuse units, suitable — angle iron frame size of 40mmx40mmx6mm with painting in two coats of suitable colour over one coat of red oxide and with numbering; superscription of cables sizes, capacity of switches of switches etc and incorporation the following: 1 No.300A fuse unit with 100A fuse neutral ink (MR) (300 cut outs) Outgoings: 12 Nos. of 63A Porcelain Fuse Unit (500V) with 32A Porcelain Fuse Unit (500V), 1 No. Dummy provision, 4 Nos of 32 A 10KA TPN			1 No. (One Number)	

SI.	Item No	QTY	DESCRIPTION OF WORK	TNBP NO.	RATE IN FIG. AND IN WORDS	UNIT IN FIG. AND IN WORDS	AMOUN
1	2	3	MCB & 32 A 10KA DPN MCB I set LED pilot lamps with fuse units, switches and interconnections; Interconnection to the bus bar by 25 mm x 3 mm TC copper for phases and neutral from 2 Nos 300A fuse unit with 5 Nos of 63A fuse neutral link (MR) the bus; interconnection by No.8 SWG copper for the phases and neutral from the 63A TPN/DP SDF to the bus; 6 mm thick hylem sheet separation between bus bar chamber and switches chamber; insulators for the support for the bus; superscribing on the panel board the size, capacity of cable, switches, location, etc.6 Sq.mm. single core PVC copper cables for connection between fuse units and meter and between meter and 32A TPN MCB with provision for locking and sealing the bus bar compartment by TNEB, cost of all materials, transportation charges and erection charges, etc all complete complying with relevant standard specifications and as directed by the departmental officers.		6	7	8
73	171.2.5		Supply and fixing of horizontal type 6 Way TPDB 63A / Way with Fuse & Neutral Link in sheet steel enclosure single door of single door type with metal door with IP43 protection with 63 Amps 30 MA - RCCB / ELCB (FOUR POLE) as incoming and 18 Nos. Single Pole 6A to 32A, 10KA MCB 240 V / 415V 50HZ - AC (Higher End) (as outgoing in flush with wall and making good of the TW Board 40 cm x 30cm x 6.3 cm (MR) with earth connection. The MCB DB and MCB's should be with the ISI mark (like standard make) etc.,all complete and as directed by the departmental officers.			1 No. (One Number)	

SI. No	Item No	-	DESCRIPTION OF WORK	TNBP NO.	RATE IN FIG. AND IN WORDS		AMOUNT
1	2	3	4	5	6	7	8
74	171.2.8		Supply and delivery of clear water vertical wet type submersible pump with out pannel board conforming to IS 8034/2002 and as amended thereafter and BEE 3 Star Rated capable of discharging noted LPM against head of water column due to all causes. The pump shall be with stainless steel shaft and dynamically balanced bronze or Cast SS impeller, brass screws and CI FG 200 grade pump bowl/diffuser with ISI mark. The pump shall be directly coupled to a continuos rated two pole suitable wet type vertical squirrel cage induction motor suitable for operation in AC single phase 230 V+/- 10 %,50 HZ +/-5 % etc. complete complying with relevant standard specifications and as directed by the departmental officers. (The quality and brand should be got approved from the EE before use) Duty-20LPM X 150m			I No. (One Number)	
75	171.2.9		Supply and delivery of Open well Submersible pump set conforming to IS 14220 /2002 with out panel board and as amended thereafter and BEE 3 Star Rated capable of discharging the following duties due to all causes. The pump shall be with stainless steel shaft and dynamically balanced bronze mixed type impeller, CI FG 200 grade casing and brass screws and rotor shall be of copper rod as per IS 613/1984 with ISI mark. The pump suitable for installation in sump with 1.1KV grade 3 core suitable copper flat submersible cable to a ength of 15m with necessary cable joints. The non-return valve located at the top of the pump in the discharge outlet connection is to be designed with minimum friction. The pump should be directly coupled to 2880-RPM, three ohase, 50 Hz (±5), 415V+6% & 415V-15% equirrel cage induction motor suitable for DOL apto 5 HP, Fully Automatic Air break Star Delta up to 20 HP and Auto Transformer starter for above 20 HP starting and for continuous operation.n etc,all complete and as directed by the departmental officiers. (The brand of pumpset should got approved by the Executive Engineer before erection) 175 LPM X 150 m			1 No. (One Number)	

SI. 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
76			b) 200 LPM X 40 m			1 No. (One Number)	
77	175.1.2		Supply and fixing of horizontal type 4 Way TPDB 63A / Way with Fuse & Neutral Link in sheet steel enclosure single door of single door type with metal door with IP43 protection with 63 Amps 30 MA - RCCB / ELCB (FOUR POLE) as incoming and 12 Nos. 6A to 32A 10KA (Higher end) SP MCB as outgoing in flush with wall and making good of the TW Board 40 cm x 30cm x 6.3 cm (MR) with earth connection. The MCB 240 V / 415V 50HZ - AC DB and MCB's should be with the ISI mark (like standard make) etc., complete and as directed by the departmental officers.		*	1 No. (One Number)	
78	207.3.1		Painting the false ceilling / walls with two coats of 1 st class ready mixed plastic emulsion paint of best approved quality colour and shade including priming coat, including 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 from the Executive engineer before use.)			1m ² (One Square –metre)	
779	207.3.5		Painting the old walls two coats with 1 st 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.)			1m ² (One Square metre)	

Othiv	akkam Con	ipairiu					Page 2
Sl. 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
80	207.4		Painting the old wood work with two coats of approved I st 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 ² (One Square metre)	
81	207.6	•	Painting the old iron work with two coat of approved I st 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 ² (One Square metre)	
82	213		Supply and delivery at site and fixing of SFRC manhole cover with frame with locking arrangement of clear opening heavy duty (35 M.T Capacity) to with stand any type of impact load if any, confirming to I.S.I specifications and as directed by the departmental officers a) 0.60 x 0.60 m		16	1 No. (One Number)	
83	213.1	1 1 2 5	Dismantling the damaged brick works of cement mortar in all floors without affecting the adjacent structures including the cost of required tools and plants and scaffolding, if necessary and clearing the debris away from the site etc., all complete and as directed by the departmental officers for the following neights.under 3m			1m³ (One Cubic metre)	

Othin	rakkam Com	ipaind	33				Page 2
Sl. 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
84	216.3	9	Supply, fabricating and erection of MS square pipe of following size with thickness of approved quality as per standard specification with necessary bolts, fasteners and welding arrangements for joints and providing anticorrosive coating by cleaning the rebars using the rust remover etc., including cost of materials, hire charges for required tools and plants, making charges, gas cutting, labour charges for necessary machineries, iron works for trusses and cost. of lifting charges in all floors, power supply etc., all complete and as directed by the departmental officers. a) Vertical & Horizontal square pipe 100 x 60 x 6 mm thick hallow section b) Horizontal -internal Member square pipe 75 x 75 x 4.90 mm thick hallow section c) inner support 49.5x 49.5 x 4.50 mm thick hallow section d) base plate 300 x 300mm			1 kg (One Kilogram)	
85	217		Dismantling the damaged Pressed tiles laid over cement mortar and Weathering Course lime concrete without affecting the adjacent structures in all floors 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 ² (One Square metre)	
86	219.5		Supply and fixing of Dimmer Type Electronic 300W / 450W Square Type Fan Regulator of approved make (ISI) and quality suitable for Ceiling fan 230 V/50Hz including cost labour charges for fixing and giving connections etc. all complete and as directed by the departmental officers (The electronic fan regulator should be got approved from the Executive Engineer before supply made)			1 No. (One Number)	
87	219.5.1		Supply and fixing of Stepped Electronic 300W / 450W Square Type Fan Regulator of approved make (ISI) and quality suitable for Ceiling fan 230 V/50Hz including cost labour charges for fixing and giving connections etc. all complete and as directed by the departmental officers (The electronic fan regulator should be got approved from the Executive Engineer before supply made)			1 No. (One Number)	

Othiv	akkam Corr	ipairiu	04				- Page 2
SI. No	Item No	QTY	- 110/2 - 110/3	TNBP NO.	RATE IN FIG. AND IN WORDS	UNIT IN FIG. AND IN WORDS	AMOUNT
1	2	3	4	5	6	7	8
88	242.2.2		Dismantling the damaged Floor finish and dadooing walls in cement mortar with Mosaic Tiles / Glazed Tiles / Cuddapah Slabs without affecting the adjacent structures in all floors 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 ² (One Square metre)	
89	343.2.2		Supply and fixing of Galvanium Roof sheet of 0.47mm thick over MS Purlin 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 ² (One Square metre)	
90	359.3.1		Supply and laying superior variety Concrete Designer tiles for flooring in CM 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 White/colour cement, finishing, curing etc complete and as directed by the departmental officers. (The brand and quality of tiles should be got approved from EE before use)			1m ² (One Square metre)	
91	361.5		Supplying and fixing of Ivory colour Vitrified Tiles of size 595x595x10mm for flooring and other similar works 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. (The brand and quality of tiles should be got approved from EE perfore use)			1m ² (One Square metre)	-

O LI II V GI LI LGI	III COIII	ipaind	35				raye 2
SI. No	m 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
92 360	6.3.1		Manufacturing, Supplying and Fixing of Stainless Steel Hand rails for staircase using 50mm dia 304L Grade Stainless Steel pipe of 1.60mm thick at required locations to a height of 900mm from finished floor level welded to 38mm dia Stainless Steel pipe post of 1.00mm, thick as vertical at 900mm centre with 2 Nos. of 25mm dia intermediate horizontal stainless steel pipe of 1.60mm thick in between. The vertical pipe has to be welded to the 100 X 100 X 6mm MS base plate encased in the base concrete. The rate is inclusive of the charges for cutting, bending, welding, grinding, polishing, conveyance, electrical charges, etc., all complete and as directed by the departmental officers.			1m ² (One Square metre)	
93 36	57.1		Providing wooden (Melamine Door) Polish for new wood by removing using blade scrapping the exisiting dirt from the wooden surface using sand paper with M50 and repeat M80 paper to get a smooth surface. Leave it atleast 4hrs for drying sand paper and prepare surface by M100 and clear the surface. Apply one coat of sanding by brush and leave it for two hrs. For drying prepare the surface by M100 sand paper and apply one coat of ash sealer mixed with approved quality thinner after drying apply one coat of sanding sealer and attend the surface to get thoroughly dried smoother surface with no.250 water emery wood cleaner fill the holes and dots by putty and packing to get the surface clean apply surface by water emery no.250 apply first coat of melamen sealer with the thinner for preparing the surface and apply second coat of the same by dring. After drying prepare the surface with water emery no.320 and apply two coats of melamen matt mixed with glazing and thinner 106 prepare the surface water no.400 and apply two coats of same and finally smoother etc., all complete including cost of all materials and labour etc., and as directed by the departmental officers (The quality and shade of the polish should be got approved from the EE			1m² (One Square metre)	

	annam oon		06				1 age 2
SI. No		100	DESCRIPTION OF WORK	TNBP NO.	RATE IN FIG. AND IN WORDS	UNIT IN FIG. AND IN WORDS	AMOUNT
94	467.1	3	Clearing the Jungle Clerance available in the site and removing the same and disposing off as directed by the departmental officers. The cost include uprooting roots if any, all tools and plants required etc. all complete as per relevant standard specifications and as directed by the departmental officers.		6	1m ² (One Square metre)	8
95	503.1		Supply and laying of required dia of Nylon rope of best approved quality etc., all complete in all respects and as directed by the departmental officer			1 Rmt (One Running Metre)	
96	504.1		Supplying, laying and jointing the following dia of UPVC Pipe (Un-Plasticized Polyvinyl Chloride) UPVC used for residential and home applications, water pressure in residential areas do not normally exceed the maximum tolerance. (Schedule-40) etc. all complete complying with relevant standard specifications and as directed by the departmental officers. b) 40mm dia			1 RMT (One Running Metre)	
97	540.1.3		Supply and fixing of MS stand for fixing outdoor unit of approved make complete including labour charges, cost of materials, hire charges for tools and plants etc., all complete and as directed by the departmental officers. (The quality and brand should be got approved from EE before use)			1 No. (One Number)	
98	540.1.6.1	in in it is a second of the interest of the in	Supply, delivery and installation of Hi - wall split Air Conditioner with pre coil (5 star rated) with cordless remote of approved make with termitically sealed compressor on refrigeration R-22 wall mounting confirming to is 1391-for operation on 230v, 50 cycles/sec single phase/three phase AC supply with neat finishing etc., all complete and as directed by the departmental officers. (The quality and orand should be got approved from the EE pefore use) a) For 2.00 Tr Hi wall (5 star) mounting split type			1 No. (One Number)	
99			o) For 1.50 Tr Hi wall (5star) mounting split ype			1 No. (One Number)	

	akkam Con	pania	51				1 agc 2
Sl. 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
100	540.1.9.1		Supply and installation of following KVA capacity Automatic Voltage Stabilizer with time delay relay (V-Gurad / Equivalent) of approved quality and ISI make working in low voltage 140 V to 270 V A/c 50Hz including cost of material, conveyance, labour for fixing, hire charges for tools and plants etc., all complete as directed by the departmental officers. (The quality and brand should be got approved from the EE before use) a) 5 KVA capacity Automatic Voltage Stabilizer			1 No. (One Number)	
101	608.1		Supplying, delivery and laying of following dia UPVC pipe schedule 40 of approved ISI quality including earth work excavation, cutting, threading, and jointing, conveying, lowering the UPVC pipes with UPVC special in the trench, refilling the earth after laying, barricading, pumping, de-watering watch and ward etc., all complete and as directed by the departmental officers. Pipe below G.L a) 32 mm dia UPVC pipes			1 RMT (One Running Metre)	
102			b) 100 mm dia UPVC pipes			1 RMT (One Running Metre)	 -
103	609.6		Supply and delivery of 150mm dia of PVC casing pipes (6Kg/cm²) as per IS 12818/2010 of approved quality for bore wells with average wall thickness of 8.0mm and inner / outer threaded ends with slots in standard length of 1m to 8m both in horizontal and vertical including cutting charges, transporting charges to site of work etc., all complete and as directed by the departmental officers (The pipes and specials quality and brand should be got approved by the EE before laying)			1 Rmt (One Running Met re)	

	arraili Coli	ipaina	08				raye zo
SI. 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
104	609.6.1		Supply and delivery of 150mm dia of Ribbed screen PVC casing pipes (6Kg/cm²) as per IS 12818/2010 of approved quality for bore wells with average wall thickness of 8.0mm and inner / outer threaded ends with slots in standard length of 1m to 8m both in horizontal and vertical including cutting charges transporting charges to site of work etc., all complete and as directed by the departmental officers (The pipes and specials quality and brand should be got approved by the EE before laying)			1 Rmt (One Running Metre)	er (a)
105	609.6.3		Labour charges for inserting of Following PVC Casing pipes assembly (With slots or without slots) in the drilled hole including jointing the pipes with PVC couplers with cement paste etc., complete, supply and packing the annular space with pebbles of size and quality as approved etc., all complete complying with relevant standard specifications and as directed by the departmental officers. (The quality and brand should be got approved from the Executive Engineer before using.) a. 150mm dia casing pipes assembly			1 Rmt (One Running Met re)	
106	610:2		Supplying and fixing of a 6A-230V Switch 1W-1 Moduler (Higher end) switch for light & fancetc., all complete and as directed by the departmental officers and as per relevant standard specifications. (The materials should be got approved from the EE / before use).			1 No. (One Number)	
107	610.3	(2 2 1 1	Supply and fixing of COMBINED PLATES (PLASTIC) for light & fan etc., all complete and as directed by the departmental officers and as per relevant standard specifications. (The materials should be got approved from the EE / pefore use). 1) 8 Module Cover Plate (H)			1 No. (One Number)	
108		ŀ	o) 12 Module Cover Plate			1 No. (One Number)	

SI. No	Item No	QTY	DESCRIPTION OF WORK	TNBP NO.	RATE IN FIG. AND IN	UNIT IN FIG. AND IN	AMOUN
1	2	3	4	5	WORDS 6	WORDS 7	8
109	610.4	3	Supply and fixing of SOCKET - 230V 6/16A Socket - 3 Module (Higher end)- for light & fan etc., all complete and as directed by the departmental officers and as per relevant standard specifications. (The materials should be got approved from the EE / before use).			1 No. (One Number)	
110	615.2.1		Labour charges for the erection of Submersible pumpset in borewell / openwell including fixing and jointing Submersible cable with proper clamps up to the starter to required depth and also fixing of riser pipes to the required depth valves erection clamps, pressure gauges upto the exterior wall of pump room and erection of panel board consisting of TPICN switches starter, voltmeter, Ammeter, three pilot (indicating) lamps capacitor single phasing preventor, water level guard and laying and jointing the cable and twin earthing as per IE rules etc., complete and testing the pumpset and trail run for 10 days etc., all complete and as directed by the departmental officers.		*	1 No. (One Number)	
111	615.3.1		Supply and delivery of THREE PHASE PANEL BOARD- D.O.L. WITH TWO LEVEL GUARD AND AUTO START conforming to IS to IS13947, IEC 60947-1 suitable KW rating for operation in AC/three Phase/50HZ(± 5%) and 415 V(±10%) including Ammeter, Voltmeter, Thermal Overload relay, 16 amps 2 pole Magnetic Contactor with under Voltage protection, Indication lamp, starting capacitor, running capacitor and On/Off Push button switches, 5 way connector, wiring with 1 sq. mm/1.5 sq. mm copper PVC insulated cable, powder coated vermin proof box including the capacitor (the cost of capacitor is to be taken separately). standard specifications and as directed by the departmental officers (The brand and quality of the cable shall be got approved by the Executive Engineer before use).			1 No. (One Number)	

SI.	AKKAIII OOII	l l	7,00	TNBP NO.	RATE IN FIG.	UNIT IN FIG.	
No	Item No		DESCRIPTION OF WORK	a 1-16-142	AND IN	AND IN WORDS	AMOUNT
1	2	3	4	5	6	7	8
112	615.3.5		Supply and delivery of direct online starter with Single Phasing preventor with analog Ammeter and voltmeter conforming to is 13947, iec 60947-1 with auto restart facility for Pump houses where Panel boards are available suitable KW rating for operationin AC/threePhase/ 50HZ (+/-5%) and415V(+/-10%) including Ammeter, Over load relay,				
			under Voltage release with no Voltcoil, AirBreak contactors suitable for next Standard higher KW rating, dry running preventor and On/Off Push button switches, including the capacitor (the cost of capacitor is to be taken separately) etc., complete complying with relevant standard specifications and as directed by the departmental officers (The brand and quality of the cable shall be got approved by the Executive Engineer before use). upto 5 HP			l No. (One Number)	
113	616.4.1		Supplying, laying and jointing the following dia HDPE Pipe 10kg/cm ² of best approved quality with ISI mark suitable for Submersible pump in borewell including cost of pipe, specials like elbow, tee, reducer, plug, bend, coupler nipple clamps etc., all complete complying with relavent standard specification and as directed by the departmental officer (The brand and quality of materials should be got approved from the EE before use) a) 40mm dia HDPE Pipe 10kg/em ²			1 Rmt (One Running Metre)	
114	707.2.1		Supply and laying of PVC insulated and sheathed 3 core 4 sq.mm flat type copper cable confirming to IS 694/1990, cable for submersible motor etc., all complete and as directed by the departmental officers. (The materials should be got approved from the EE pefore use)			1 Rmt (One Running Metre)	
115	741.1.1	i i c	Supply and fixing of 20A Double pole plug and sockets in sheet steel enclosure with 32 Amps DP MCB in flush with wall, with earth connection (for AC plug) of approved brand including cost of materials and labour charges etc., all complete as directed by the departmental officers. (The brand and quality should be got approved by the Executive Engineer before use).			1 No. (One Number)	

Sl. No	Item No		DESCRIPTION OF WORK	TNBP NO.	IN FIG. AND IN WORDS	UNIT IN FIG. AND IN WORDS	AMOUNT
1	2	3	4	5	6	7	8
116	753		Construction of Inspection chamber with brickjelly cement concrete 1:8:16 (One of cement, eight of sand and sixteen of broken brick jelly 40mm gauge) 15cm, thick for foundation and 23cm thick brick mansonry in cm 1:5 using chamber burnt bricks of size 9"x4½"x3" (23x11.4x7.5cm) and plastering with cm 1:3 (one of cement and three of sand) 5cm thick precast cover slab using R.C.C 1:2:4 (One of cement, two of sand and four of broken brick jelly 20mm gauge) (excluding the cost and fabrication of reinforcement grills but including benching channelling fixing the cover slab in position curing, finishing etc., complete in all respects. b. Inspection Chamber size 60 x 60 x 75 cm			1 No. (One Number)	
117	778.2.3		Providing and fixing in position of plain 10mm thick Hiluxboard/equivalent false ceiling using G.I perimeter channel of size 0.55mm thick (having one flange of 20mm thick another flanger of 30mm and web of 27mm) along with perimeter of ceiling, screws, fixed brick wall / partition / RCC work with the help of nylon sleeves and screws at 610mm centre to centre. Then suspending G.I intermediate channels of 45mm (0.90mm_thick with two flanges of 15mm each) from the soffits at 1220mm centre to centre with ceiling angle of width 25x10x0.55mm thick fixed to soffits with G.I cleat and steel expansion fasteners ceiling section of size 0.55mm thick having knurled web of 51.50mm and two flanges of 26mm each with lips of 10.50mm are fixed to the intermediate channel with the help of connecting clips in direction perpendicular fixed to the intermediate channel at 457mm center 10mm thick tapered edge Hiluxboard/equivalent (confirming to IS 2035-1982) screw fixed to ceiling section with 25 mm dry wall screws @ 230 mm centers screw fixing is done mechanically either with screw driver or drilling machine with suitable attachment etc all complete and as directed by the Departmental Officer.			1m ² (One Square metre)	

	altitalii ooli	1	$+\sim$				1 age 32
SI. 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
118	799.1		Drilling of borewell including transportation from one place to another place within Tamilnadu in alluvial soil sedimentary strata of clay and sand stone, shale, pebbles, boulders etc., By first taking a pilot bore of 140 mm/150mm dia and then enlarging to required dia by direct or reverse rotatry mud circulation method using rotary rig, fuel, labour, drilling, bentonite mud and water required for drilling at the site shown by the departmental officers including construction of mud pit (only Calyx drills are to be used). a) Upto 76m depth ending below Ground level			I Rmt (One Running Met re)	
119			b). From 76m upto 91m depth			1 Rmt (One Running Metre)	
120			c). From 91m upto 107m depth			1 Rmt (One Running Metre)	
121			d). From 107m upto 122m depth			1 Rmt (One Running Metre)	
122			e). From 122m upto 150m depth			1 Rmt (One Running Metra)	
123	799.3		Charges for developing the bore well with air compressor of 300 CFM capacity (Minimun 8 Hours) including cost of transportation and fuel for compressor and as directed by the departmental officers and conducting yield test 'V' Notch Method etc., all complete complying with relevant standard specifications.			1 Hour. (One Hour)	
124	799.3.1	a c	Supply and fixing of 160mm dia PVC end cap as per IS 10124/1982 Part-II for borewell top cover including cost of all materials and labour charges for fixing etc., all complete and as lirected by the departmental officers.			1 No. (One Number)	h ¹

SI. No	Item No	QTY 3	DESCRIPTION OF WORK	TNBP NO.	RATE IN FIG. AND IN WORDS	UNIT IN FIG. AND IN WORDS	AMOUNT
125	955.2		Supply and fixing of Programmable 5 lane target system using necessary mild steel section module with AC 3 phase motor 1/4 HP 415 Volt with gear box 25:1 assembling in bearing and shaft assembled in the box. SMPS 24V DC/1.5A, 2 Relay modules, 9 Amps contactor with mechanical interlocking, military connector, limit switches, push button switches, selector switches, indicators on — off switch 3 pole 6 Amps manual operating is available and the selector switch is also available. Color: Navy blue (powder coated) testing and etc., all complete and as directed by the departmental officers and as per relevant standard specifications. (The materials should be got approved from the EE / before use).	44		1 No. (One Number)	
126	955.3		6 Core Wire connecting Control Unit for target unit only(requirement) Supply of 6 Core Flexible type inflammable this cable is connected from machine to time controller box approximately 55m Per Unit for the communication purpose Using carbon, Pistol, Revolver Range. etc., all complete and as directed by the departmental officers and as per relevant standard specifications. (The materials should be got approved from the EE / before use).			1 Set (One Set)	
127	955.4		6 Core Wire connecting Control Unit for target unit only(requirement) Supply of 6 Core Flexible type inflammable this cable is connected from machine to time controller box approximately 300m Per Unit for the communication purpose Using Long Range. etc., all complete and as directed by the departmental officers and as per relevant standard specifications. (The materials should be got approved from the EE / before use).			1 Set (One Set)	

Othive	akkani Con	ipairia	74				raye 3
Sl. No	Item No	71	DESCRIPTION OF WORK	TNBP NO.	RATE IN FIG. AND IN WORDS		AMOUNT
1	2	3	4	5	6	7	8
128			Supply and fixing of Snap Shooting Target upto 300yards Programmable Turning Target using necessary mild steel section module with AC 3 phase motor 1/4 HP 415 Volt with gear box 25:1 assembling in bearing and shaft assembled in the box. SMPS 24V DC/1.5A, 2 Relay modules, 9 Amps contactor with mechanical interlocking, military connector, limit switches, push button switches, selector switches, indicators on – off switch 3 pole 6 Amps manual operating is available and the selector switch is also available. Color: Navy blue (powder coated) testing and etc., all complete and as directed by the departmental officers and as per relevant standard specifications. (The materials should be got approved from the EE / before use).			1 No. (One Number)	ů.
129	955.6		Supply of 6 Pin Connecter: 6 Pin it's the lock pin for the 6 core wire for easy to connect the 6 core wire connection for plug and play purpose with soldering or connecting and including cost of materilas and labour charges for fixing etc., all complete and as directed by the departmental officers and as per relevant standard specifications. (The materials should be got approved from the EE / before use).			1 No. (One Number)	
130	955.7	11 13 13 14 14 14 14 14 14 14 14 14 14 14 14 14	Assembling Charges: Testing the Short Range target system and Long Range Target System Commissioning for 5 lane target system inside the range with full assembling of 5 lane target system and long range 300Yards target system 4x4 snap target system with fully alignment setup with in working condition for regular use etc., all complete and as directed by the departmental officers and as per relevant standard specifications.			1 Job (One Job)	
131	955.8	1 1 1 1 1 1 1 1 1	Supply and fixing of 4x4 Target 300yards Target frame Maintanance: Bearing assembling for both side, outer dia pipe changing, greasing, welding and assembling, stopper blocking, lifting rod connecting, strengthening frame support, etc., all complete and as directed by the departmental officers and as per relevant standard specifications. (The materials should be got approved from the EE / before use).			1 No. (One Number)	

Remarks

TAMIL NADU POLICE HOUSING CORPORATION LTD.,

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

SCHEDULE 'B'

Repairs / Improvement / Renovation work for the existing buildings and Digitalization of the existing Fire Range at Tamil Nadu Commando School Training Centre / Firing Range Othivakkam in Chengalpattu District. 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.

(ii) All drawings can be seen in Division Office

CONTRACTOR

NO. OF CORRECTIONS

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.
- 2. 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.
- 3. 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.
- The arrangements for MS rods for reinforcement for each RCC work shall be in accordance with the working drawings supplied.
- 7. 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.
- 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.
- 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 (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 Deed (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 format from the Superintending Engineer concerned of TNPHC Ltd, should be furnished.
- 53. The contractor should submit the TDS certificate issued by the Income Tax Department for the private work experience.
- 54. The Private experience should be supported along with TDS statement (i.e., Form 16A & Form 26AS).
- 53. The tenderer should sign all the pages of the tender schedule without fail. Otherwise, the tender will be summarily rejected.
- 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% GSTTAX 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 work
 - 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).
- 5. 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 22nd August, 2017 and Notification No.24/2017- Central Tax (Rate), dated 21st 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.
- 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 ± 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.).

- 3. 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.

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

		Procedure for	Qu	ality Plan for Material	Testing	Doc, No Issue No Date of Issue Page	of 4
St. N	Material to be	Sampling		Name of test	Permissible Limits	Standards	Record
1	Tested Water	Lab Test:	ļ.				Reference
		Local Source Once in Three months Out source - Once in a month				1S 456- 2000 Clause 5:1	ST/RG/0
			a)		Not more than 5 ml (or 50 mg/Lit) of 0.02 normal NaOH	*/	
		-,	ь		Not more than 25 ml (or 250 mg/Lit) of 0.02 normal $\rm H_2SO_4$		
			C	Solids: (i) Total Dissolved Solids	3000 mg/Lit		
				(ii) Sulphates (as SO ₄)	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		
			d)	pH value	Not less than 6		
		Field Test:	H				
		(Using Litmus Paper) Local Source - Once in Fortnight Out Source - For each Load(Lorry Load)	a)	pH value	Not less than 6		Pield Observatio Register
2	Cement (43 Grade)	One test for Every 300 Tonnes of single Brand (Fest to be done, if there is change in Brand)				IS 269-2015	ST/RG/01
			a)	Initial setting Time	Not less than 30 minutes		
		-	1b)	Final setting Time	Not more than 600 minutes		
			cl	Fineness of Cement		A	-
				i) By Permeability Method	Not less than 225 m ² /Kg		
				i by Fermeatamy invenous			
				ii) By Standard Sieve Test	(or) Retained not more than 10%		ES VO
- 1							
				Soundness of Cement ij By Le Chatelier Method	Expansion not more than 10 mm		
				(or) ii) By Auto Clave Test	0.80%		
			e)	Compressive Strength of C.M (1:3) Cube			
				i) 3 days (72 +/- 1 hr)	Not less than 23 Mpa (or) 230 Kg/Cm ²		
				ii) 7 days (168 + / - 2 hrs)	Not less than 33 Mpa (or) 330 Kg/Cm ²		
				iii) 28 days (672 + / -4 hrs)	Not less than 43 Mpa (or) 430 Kg/Cm ²		
3	Stael						
	(Grade I -	Each Load and Each Diameter (Min. 3 Samples)				IS 432 (Part-I) 1982	ST/RG/01
			a)	Yield Stress	Min.250 N/mm ² (Or) 25 Kg/mm ²		
			-	Elongation	Min.23.0%		
			c)	Ultimate Tensile Stress	Min 410 N/mm ² (Or) 41 Kg/mm ²		

				57			
		- Procedure for	Qu	uality Plan for Materia	Testing	Doc.No Issue No Doc. of Frago	or join
SLIV	To Material to be Tested b) High Strength Deformed Ears	Sampling Each Load and Eac Diameter (Min.	3	Name of test	Permissible Limits	Page Standards	ot t Record Referen
	(Fe 415)					IS 1786 2008	ST/RG/O
			и	0.20% Proof Stress / Vield Stress	Min_415 N/mm ² (or) 41,50 Kg/mm ²		
		-	b	Elongation Tensile Stress	Min 14 50% 10% More than the actual Proof stress, But not less than 485 N/mm ² [or] 48.50 Kg/ mm ²		
	C) High Strength Deformed Bars (Fe 500)		3	2.0	(61) 48.50 Kg/ mm	IS 1786 2008	ST/RG/0
	(#2 555)		a	0.20% Proof Stress /	Min.500 N/mm ² (or) 50.0 Kg /mm ²		
			Ľ	Yield Stress			
			c	Elongation Tensile Stress	Min.12.0% 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/
5	Coarse Aggregate	Every Quarry	a)	Either Crushing Value (Or) Impact Value		IS 383-1970	ST/RG/
				Crushing Value Aggregates used for			
				concrete other than wearing surfaces.			
				Aggregates used for concrete for wearing surfaces(Such as Roads, Pavements).	Not make then 20%		
				(Or Alternatively)			
				ii) Impact Value Aggregates used for concrete other than wearing surfaces	1		
				Aggregates used for Concrete for wearing surfaces (Such as Roads, Pavements)			
			b)	Abrasion Value			
				For Aggregates to be used in Concrete for wearing surfaces.			
				For Aggregates to be used in other concrete	Not more than 50%		
6	Bricks L	ot Bize - For Every Une akh Bricks - (Number of Jamples 20.Nos)			-	IS 1077-1992	ST/RG/0
			a)	For Class 35 Compressive Strength	Not Less than 35 Kgf/cm² (or) 3.50 N/mm²		
			ы	Water Absorption	Not more than 20% by Weight		
			c)	Efflorescence For Class 50	Rating not more than Moderate		
			. 1		Not Less than 50 Kgf/cm² (or)5.0		
			a)	Compressive Strength	N/mui ²		

68

			n ≥			
		Procedure f	for Quality Plan for Mat	erial Testing	Doc No Issue No Dute of Losue	13 /c)(/t)
S)N	Material to be Tested	Sampling	Name of test	Permissible Limits	Standards	tel i Record Reference
7	Pis Ash Brick	Lot Size - For Every One Labor Tricks (Number of Samples			ts 1289d 2002	ST/RG/C
		20,Nos)				
			For Class 100			
			Compressive Strength	Not Less than 100 Kgf/cm² (or) 10.0 N/mm²		
-	1		b) Water Absorption	Not more than 20% by Weight		
			c) Efforescence	Rating not more than Moderate		
8	Hydraudic pressed Tiles	One test for area until				
	**	additional test for every 1000 sq.m. and part thereof			IS 2690= 1993	ST/RG/0
			a) Water Absorption	Shall not exceed 15%		
	VIII (8) 14 mm.		b) Flextural Strength	Shall not be less than 20 Kg / cm²		
9	Vitrified Tiles	One Test for an area				
		upto 1999 sq.m and one additional test for every 1000sq.m. and part thereof.			IS 15622 - 2006	ST/RG/0
			Deviation percent in Length & Width (2 or 4 sides)	±0.10		
			Deviation percent in Thickness	14.00		
			Maximum Deviation percent in Rectangularity	.t0,10		
			Surface Flatness (Warpage)	±0,20		
			Water absorption percent by	Average <_0.08 Individual max 1.0		
			mass	Average 47 Individual 44 min		
			Modulus of rupture in N/mm ²	Average 47, Individual 44.min		
			Breaking Strength in, N Scratch hardness of surface	> 7.5mm thickness, 1500 (Min) 6, Min		
			(Mohs) Bulk density in (g/cc)	2.20 Min		
			Impact Resistance	Required		
			Chemical Properties / Resistance	Required		
10	Electric Cable	One test for each			IS 664 - 1990	ST/RG/G
		Brand, each size	Conductor resistance at 20° C		10 004 - 1930	DI) RU)
			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 Max, allowable limit 4.95 Ohm / Km		
11	Wood	One sample for each	For 4.0 Sq.mm cable Lab Test - Moisture Test	Not more than 12%	IS 287 1993	ST/RG/
		work	Field Test - Visual observation	Free from Rotten, unsound knots (or) knots	IS 3629 - 1960	0./10/0
12	Cube test in Lab		Compressive strength of	incluster	IS 456- 2000	ST/RG/C
		1 to 5 m ³ -4 set	150mm Cube M20 (1:1.5:3)			
		6 to 15 m ³ - 2 sets	7 фуз	Not less than 135 Kg / cm²		
		16 to 30 m ² - 3 sets	28 days	Not less than 200 Kg / cm²		
		31 to 50m²-4 meta >50m²-4plus one for	M25 (1:1:2)		-	
		each add 50m ³	7 days	Not less than 170 Kg. / cm²		
		(1 set =3 cubes)	28 days	Not less than 250 kg / cm²		
			M30 7 days	Not less than 205 Kg / cm²		
			28 days	Not less than 300 kg / cm ²		
13	Slump test	Type of work	With vibration	Without vibration		ST/RG/C
	Slump test at site for all Reinforced concrete at regular intervals (Slump in mm)	Mass concrete, large section, roads and pavements	10 to 25	50 to 75		

-	_	٠.,	1
τ		- 6	и
œ	٦,	-	-1

				79			
		Procedure !	for	Quality Plan for Ma	terial Testing	Issue No	ocząjyr st
						Date of Issue	- ":
			1			Page	01.1
SL.No	Material to be Tested	Sampling		Name of test	Permissible Limits	Standards	Reference
		PCC foreidation		*			
		substructures, thin	- 1				
		walls and other heav sections	1	26 to 50	40 to 115		
		This vertical section					
		such as walls beams, columns with	21				
		congested	1	40 to 50	100 to 175		
		reinforcement					
		11/1	1				
		When using concrete Pump		80 to 100			
14	M-Sand					IS: 383-2016	
	-				1)	(3 rd Revision)	
			١.	w.		For Zone-II	
14.1	Test for Size and	Grading of Aggregate		IS Sieve Size in mm		IS: 2386(Part-1)-	
					Shall be 100%	1963	
	-			10 mm	Shall be between 90 & 100%		
				4.75 mm			
			1 -	2.36 mm	Shall be between 75 & 100%		
			1	1.18 mm	Shill be between 55 & 90%		
				600 micron	Shall be between 35 & 59%		
			1	300 micron	Shall be between 8 & 30%		
14.2	Peat for O	maisa Cranitu	g)	150 micron	Shall be between 0 & 10%		
1.4.2	Test for S	secific Gravity			Shall be between 2.1 and 3.2		
14.3	Test for Wate	er absorption, %			Shall not be more than 5%		
14.4	4.4 Test for Bulk density		1			IS: 2386(Part-	
	rest to tour deliate					1(1)-1963	
			n)	Bulk density in Kg/l-loose	Limit not specified		
				condition Bulk density in Kg/l-			
			b)	compacted condition	Limit not specified		
14.5	Test for Delet	erious Materials					
			al	Coal and Lignite	Shall not be more than 1%		
-			-	Clay lumps	Shall not be more than 1%		
			101	Material liner than 75 µm IS			
			c)	sieve	Shall not be more than 10%		
			d)	Organic Impurities	Shall pass the test		
0			e)	Silt content	Limit not specified		
4.6	Test for Sound	ness of Aggregate					
			96 1	loss of weight of the material			
					Shall not be more than 10%		
			Soc	lium sulphate solution.			
4.7	Test for Total	Alkali Content					
			Tot	al alkali content as Na ₂ O	Ob all and have a grant at a second		- 8
				ivalent Percent	Shall not be more than 0.3%		
4.8	Test for Sul	phate content					
				t for Sulphate content as	Shall not be more than 0.5%		
4.9	Test for Acid S	olubie Chloride	SO				
100		tent	Acid	I Chloride content Percent	Shall not be more than 0.04%		
4.10	Test for Alkali Ag	gregale reactivity	Acc	eleration Mortar bar Method			-
71				Average expansion of elerated mortar bar after 16	1. Expansions of <0.10% - Indicates		
				s of casting percentage	Innocuous behavior of aggregate, 2. Expansions between 0.10 and 0.20%		
	14				includes both Innocuous and deleterious		
					aggregate.		
					3. Expansion >0.20% indicative of Potentially deleterious aggregate		
1.11	Test for Bulking	of Sand percent		12-11-1-11		IS: 2386(Part-	
	-			Bulking of sand Percent	Limit not specified	III)-1963	

CONDITIONS OF EMPLOYING TECHNICALLY QUALIFIED PERSON

Technical qualified man should be employed as follows

SI.NO,	Value of Contract	Qualification and No. of Technical Assistants to be employed
(1)	(2)	(3)
1.1	Upto 1 lakh	No Technical Assistant need be employed. However, if the officer who accepts the agreement, feels that the nature of work required a Technical Assistant conditions may be stipulated in the tender notice that one diploma holder in Civil Engineering or a retired Junior Engineer may be employed.
1.2.	Rs. 1 Lakh to Rs. 3 Lakhs	One Diploma holder in Civil Engineering or not less than one retired Junior 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 holder with three years experience in Civil Engineering works not less than one retired sub-divisional Officer plus one Diploma 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.
		(oran) or equivalent degree notation
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

61

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 :
- 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.
- 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.

- 16. 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.
- 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 ...
 - a. 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)

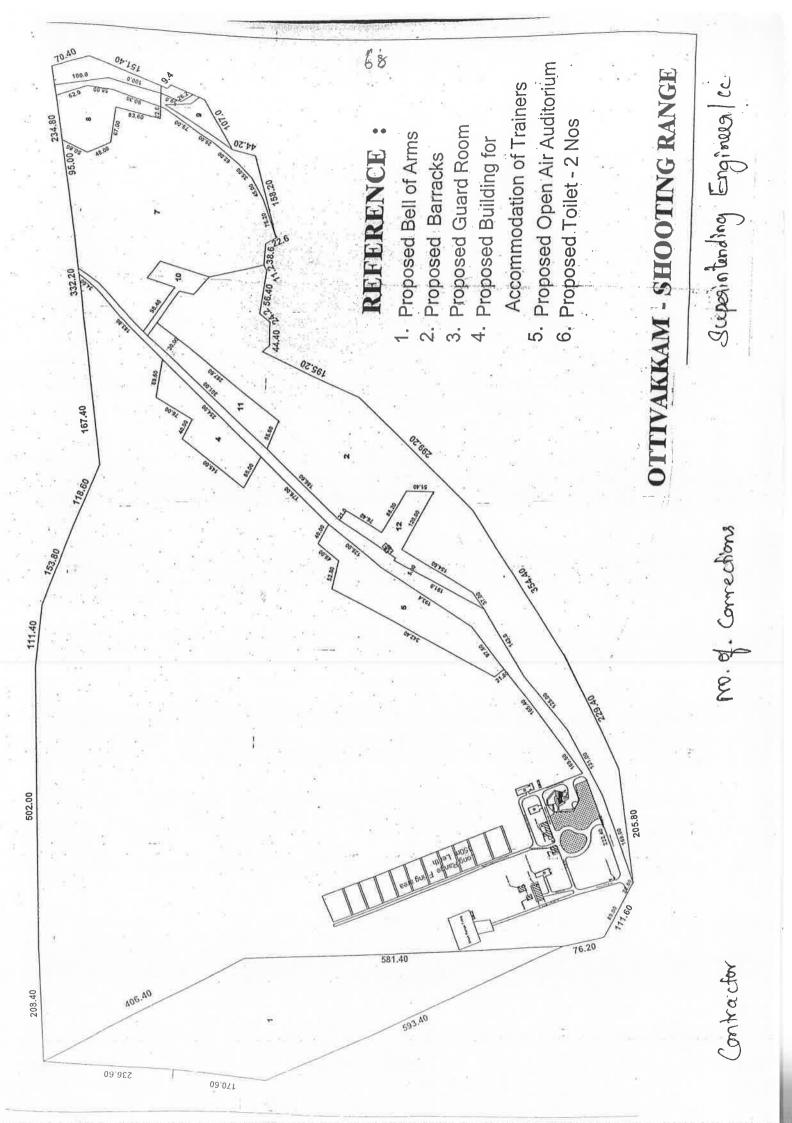
- 28. Earthing shall confirm to relevant I.S. Code 3043-1966, the G.I. Pipe earth electrode system is adopted G.I. pipe shall be of medium class 38/40mm dia. 3.75 metres long. The electrode/ shall be burried in the ground vertically with its top not less than 20 cm. below ground level. Normally an earth 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).
- 3. 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 22nd August, 2017 and Notification No.24/2017- Central Tax (Rate), dated 21st 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.
- 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: Repairs / Improvement Renovation works for existing buildings and Digitalization of the existing Fire Range at Tamil Nadu Commando School Training Centre / Firing Range at Othivakkam in Chengalpattu District

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 (Including Refilling) a).0 to 2m	32.95	1 Cum		
2	1.5	Earth work excavation for Open foundation (excluding refilling) a. 0 to 2 m	44.50	1 Cum		Y
	2		==			

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
3	1.6	Earth work excavation for Open foundation for drains (excluding refilling) a. 0 to 2 m		1 Cum		ET II
4	2.1	Supplying and filling in foundation and basement with filling sand	471.50	1 Cum		
5		P.C.C.1:5:10 for Foundation & Basement	38.95	1 Cum		
	. =					

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
6	6.2	Brick work in CM 1:5 (One of cement and five of sand) using chamber burnt bricks of size 9"x41/2"x3" (23x11.4x7.5cm) in foundation and basement		1 Cum		
					N N N N N N N N N N N N N N N N N N N	o l
7	9.2	Brick work in Cement Mortar 1:6 (One of cement and six of sand) using Chamber burnt bricks of size 9"x4½"X3" (23x11.4x7.5cm) for super structure in the following floors a. In Ground floor	2.05	1 Cum		
8		c) Second Floor	0.50	1 Cum		
		æ xo				

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
9	10.2	Brick partition work in C.M. 1:4 using chamber Burnt bricks of size 23 x 11.4 x 7.5 cm (9" x 4 1/2"x 3") 114 mm tk (B.P.) b. In Ground floor		1 Sqm		
	V				Sec. 150	
10	13.1	Filling in foundation and basement and other similar works with Excavated earth in layers of 150mm thick	18.20	1 Cum		
	-		-			
1	21.2	Providing Teak Wood Wrought and Put up a) Teak wood over 2.00 metre and below 3 metre length	0.084	1 Cum		

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
12		b) Teak wood below 2.00 metre length	0.036	1 Cum		
		8			*	
13	28 -	Plastering the top of flooring in CM 1:4 (One of cement and four of sand) 20mm thick	159.65	1 Sqm		
14		Finishing the top of flooring with cement concrete 1:3 (One of cement and three of blue granite chips of size 10mm and below) 20 mm thick Ellispattern Flooring (No Sand)	87.75	1 Sqm		
						-

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
15	31	Weathering Course with concrete broken brick jelly 20mm gauge in pure burnt lime stone slaked and screened (No Sand) over RCC Roof Slab		1 Cum		
16	32.1	Finishing top of roof with one course of Hydraulic pressed tiles over a bed of CM (1:3) 12mm thick, mixed with water proof compound	13.80	1 Sqm		
7		Plastering with CM 1:5, 12mm thick	1063.90	1 Sqm		
		×.				

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
18	35	Plastering in CM 1:3 - 10mm thick	41.30	1 Sqm		
					× ×	
19	37.1	White washing three coats using clean shell lime slaked	10.10	1 Sqm		
20		Supplying and fixing Mild Steel grills as per the design approved to verandah enclosure or gate	132.50	1 Kg		
					2	

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
21	40	Painting Two coats over the new wood work with synthetic Enamel Paint		1 Sqm		
			b			a l
22	41	Painting Two coats over the new Iron works with sythetic enamuel paint.		1 Sqm		
23	52	Supplying, laying, fixing and jointing the following PVC pipes as per ASTM D - 1785 of		1 Rmt		
		schedule 40 a) 32mm dia ASTM D schedule 40 threaded PVC pipe with necessary PVC/GI specials				
24		b. 25 mm dia ASTM D schedule 40 threaded PVC pipe with necessary PVC/GI specials	260.00	1 Rmt	_	
						23

-11

S.	Item	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in	AMOUNT
No	no	5			Figures and in Words	
25	a a	c 20mm mm dia ASTM D schedule 40 threaded PVC pipe with necessary PVC/GI specials		1 Rmt		
		1				
				N.		w
						3
26	53.3	Supplying and fixing of C.I. steps of approved quality and brand (not less than 5kg each)	14.00	1 No		
			21			
			00.00	137		
27	60	Supply and Fixing PVC 4 way Nahani Trap	83.00	1 No		
		- 22				
						-
					4	

S. No	Item. no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
28	73.2	Electrical Arrangement Supplying and fixing of 1 No three phase distribution board with 4 way/ phase and 30 A/way		1 No		
		-				
29	74	Charges for assembling and fixing of ceiling fan (Excluding cost of fan)	8.00	1 No		
				3		
30	80	Supplying and fixing 1 No of 375 x 300 x 20 mm thick TW plank varnished	8.00	1 No		<i>y</i>
					* ************************************	

S. No		DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
31	2.15	Annexure Supply and filling in foundation and basement with Stone dust	38.90	1 Cum		
		di .				
32	3.8	P.C.C. 1:4:8 for flooring	6.20	1 Cum		
			4			
33		Standardised concrete Mix M25 Grade Concrete a. In Foundation and basement	14.85	1 Cum		
-						

Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
	b. In Ground floor	2.25	1 Cum		
			6		
	40 mm thick using standardised concrete mix M25		1 Sqm		
18.1	Providing Form work and	18 25	1 Sam		
	centering for reinforced cement concrete works b.Plain surfaces such as Roof slab,floorslab,Beams,lintels,lofts sill slab,staircase,portico slab	16.23	ТЭЧШ		
	4.2.II	b. In Ground floor 4.2.II Providing Precast cupboard slab 40 mm thick using standardised concrete mix M25 a. In Foundation & basement	b. In Ground floor 2.25 4.2.II Providing Precast cupboard slab 40 mm thick using standardised concrete mix M25 a. In Foundation & basement 18.1 Providing Form work and centering for reinforced cement concrete works b.Plain surfaces such as Roof slab,floorslab,Beams,lintels,lofts sill slab,staircase,portico slab	b. In Ground floor 2.25 1 Cum 4.2.II Providing Precast cupboard slab 40 mm thick using standardised concrete mix M25 a. In Foundation & basement 18.25 a. In Foundation & basement 18.25 1 Sqm centering for reinforced cement concrete works b.Plain surfaces such as Roof slab, floorslab, Beams, lintels, lofts sill slab, staircase, portico slab	b. In Ground floor 2.25 1 Cum 4.2.II Providing Precast cupboard slab 40 mm thick using standardised concrete mix M25 a. In Foundation & basement 18.1 Providing Form work and centering for reinforced cement concrete works b.Plain surfaces such as Roof slab,floorslab,Beams,lintels,lofts ,sill slab,staircase,portico slab

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
37		f.Curved surface	97.85	1 Sqm		
				2		
38	21.5.1.	Supplying and fixing of Double leaf Solid core flush door shutters shutter size 1200x2100 mm	5.10	1 Sqm		
		- * ^				
9	21.5.23	Supply and Fixing Soild UPVC door Shutter with frame	107.10	1 Sqm		
		HT-0.5				

Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
23.2.1			1 Sqm		
		al 3.85			
29.8	Supplying and fixing of Colour glazed tiles in C.M(1:2)	320.40	1 Sqm		
		219.80	1 Sqm		
					_
	29.8 29.9	23.2.1 Supply & fixing of 4mm thick plain Glass frosted panels for steel window and ventilaters. 29.8 Supplying and fixing of Colour glazed tiles in C.M(1:2)	23.2.1 Supply & fixing of 4mm thick plain Glass frosted panels for steel window and ventilaters. 29.8 Supplying and fixing of Colour glazed tiles in C.M(1:2) 29.9 Supplying and fixing of colour 219.80	23.2.1 Supply & fixing of 4mm thick plain Glass frosted panels for steel window and ventilaters. 29.8 Supplying and fixing of Colour glazed tiles in C.M(1:2) 29.9 Supplying and fixing of colour 219.80 1 Sqm	23.2.1 Supply & fixing of 4mm thick plain Glass frosted panels for steel window and ventilaters. 29.8 Supplying and fixing of Colour glazed tiles in C.M(1:2) 29.9 Supplying and fixing of colour 219.80 1 Sqm

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
43	31.5	Finishing the top of Terrace floor with one course of solar reflective water proof, heat proof and cool roof ceramic tiles of size 305mmx305mmx7mm thick with base concrete		1 Sqm		
					*	
		8				
44	32.1.2	Pointing the Pressed Tile over the roof with cement mortar 1:3 including water proof compound		1 Sqm		
45		White washing two coats for old wall using clean shell lime slaked	653.00	1 Sqm		
			-			1.22

8A

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
46	37.3.2	White washing one coat using clean shell lime slaked	1170.00	1 Sqm		
47		Painting two coats using approved quality of best Cement paint	274.70	1 Sqm	,	
				*		
48		Two coats of OBD over one coat white cement for inner walls	35.50	1 Sqm		9.

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
49	38.8.2	Painting the old walls with two coats using approved quality of best Oil Bound Distemper including thorough scrapping		1 Sqm		
			3		¥	
50	43.1	Supplying, fabricating and placing in position of Mild steel Grills / Ribbed Tor Steels (without cement slurry)		1 MT		
51		Supplying and fixing of PVC SWR 110 mm dia with ISI mark type- A for Rain water down fall pipe	90.00	1 Rmt		
		trains.				

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
52	52.1	Supplying, laying, fixing and jointing the following PVC pipes as per ASTM D - 1785 of schedule 40 d) 50mm dia ASTM D schedule 40 threaded PVC pipe with necessary PVC/GI specials		1 Rmt		8
53	52.9	Supplying and delivery of 40mm dia MS clamp sets for erection of submersible pumpset in wells	2.00	1 No		
54	54.1.1	Supplying and fixing of half turn C.P Long body Tap of 15mm dia	112.00	1 No		
				E.		

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
55	54.2.1	Supplying and fixing of half turn C.P short body Tap of 15mm dia		1 No		
			ATX E+:			8
56	57.1.1	Supplying and fixing EWC superior variety (white) 500mm with PVC SWR grade 'P' or 'S' trap		1 No		
57	4 1	Supply and fixing of PVC Soil Pipes and specials of following dia a) 110mm pipe	123.00	1 Rmt		
		a) 110mm pipe				
						V=
						*

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
58		a) 75mm pipe	117.60	1 Rmt		
		3				
59	64.1.1	Wiring with 1.5 sqmm PVC insulated single core multi strand fire retardant flexible copper cable with ISI mark confirming IS: 694:1990. (Open wiring) a. Light point with ceiling rose	8.00	1 No		
560		Wiring with 1.5 sqmm PVC insulated single core multi strand fire retardant flexible copper cable with ISI mark confirming IS: 694:1990 for Fan point. (Open wiring)	8.00	1 No		

S. No	ltem no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
61	67.1	Winng with 1.5 sqmm copper PVC insulated unsheathed single core for 5 Amps 5 pin plug socket point at switch board itself, (Open wiring)	1.00	1 No		
62	68.2.1	Wiring with 1.5 sqmm copper PVC insulated unsheathed single core 1.1 KV grade cable (Open wiring)	16.00	1 No		
63	70.5.2	Supply and fixing of 4' long 18 W Crystal Glass LED tube Light	8.00	1 No		

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
64	77.7.1	Run off mains with 2 wires of 2.5 Sqmm copper PVC insulated unsheathed single core . (Open wiring)		1 Rmt		
	۸		2			
65	79.4.2	Supply and fixing of 100 Amps TPN sheet double break switch with HRC fuse	2.00	1 No	=	
				1-5		
66		Supplying and fixing 1 no of 100 Amps 500 Volts grade porcelain fuse unit	6.00	1 No		

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
67	82.3.2	Supplying and fixing of 48W LED Street Light with LED outdoor fittings (LIGHT EMITTING DIODE) (all types) in the existing street poles	9.00	1 No		
					14c) 17c	
68	84.3	Run of main with 2 wires of 4 Sqmm PVC insulated single core multi strand fire retardant flexible copper cable	50.00	1 Rmt		
	-					
59		Run off mains with 2 wires of 4 Sqmm copper PVC insulated single core (Open wiring)	92.00	1 Rmt		
						ye.

Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
87.1	Supply and fixing of Three phase ELCB/RCCB	1.00	1 No		
93.1	Plastering with CM 1:3 (one of cement and three of sand) 12 mm thick mixed with water proofing compound	96.00	1 Sqm		
				, — 	
	For existing Admin building Supply and erection of 125Amps capacity Floor mounting panel board (cubical type)	1.00	1 No		
	93.1 93.1	93.1 Plastering with CM 1:3 (one of cement and three of sand) 12 mm thick mixed with water proofing compound 156.1 For existing Admin building Supply and erection of 125Amps capacity Floor	93.1 Plastering with CM 1:3 (one of cement and three of sand) 12 mm thick mixed with water proofing compound 156.1 For existing Admin building Supply and erection of 125Amps capacity Floor mounting panel board (cubical	93.1 Plastering with CM 1:3 (one of cement and three of sand) 12 mm thick mixed with water proofing compound 156.1 For existing Admin building Supply and erection of 125Amps capacity Floor mounting panel board (cubical	93.1 Plastering with CM 1:3 (one of cement and three of sand) 12 mm thick mixed with water proofing compound 156.1 For existing Admin building Supply and erection of 125Amps capacity Floor mounting panel board (cubical

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
73	171.2.5	Supply and fixing of horizontal type 6 Way TPDB 63A / Way with Fuse & Neutral Link in sheet steel enclosure single door	2.00	1 No		
74	171.2.8	Supply and delivery of clear water vertical wet type submersible pump with out pannel board conforming to IS 8034/2002(Single Phase) Duty 20 LPM X 150 m	2.00	1 No		
75		Supply and delivery of openwell submersible motor Pumpset with ISI mark IS 8034 without Panel Board of 7.5 H.P capacity (three phase) a) 75 LPM X 150 m	1.00	1 No		

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
76		b) 200 LPM X 40 m	2.00	1 No		
77	171.5.2	Supply and fixing of horizontal type 4 Way TPDB 63A / Way with Fuse & Neutral Link in sheet steel enclosure single door		1 No		
78		Painting the false ceilling / walls with two coats of 1st class ready mixed plastic emulsion paint	1266.45	1 Sqm		

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
79	207.3.5	Plastic Emulsion PAINT two coat for old wall including thorough scrapping	2780.10	1 Sqm		
					9	¥
80		Painting the old wood work with two coats of approved Ist class synthetic enamel paint including thorough scrapping	200.50	1 Sqm		
81		Painting Two coats over the old fron work with synthetic Enamel Paint including thorough scrapping	429.90	1 Sqm		
			1			

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
82	213	Supply and delivery at site and fixing of SFRC manhole cover with frame with locking arrangement of clear opening heavy duty (35 M.T Capacity) 60 x 60 cm	3	1 No		
			4	2		
83	213.1	Dismantling the damaged brick works of cement mortar	8.30	1 Cum		
		-				
84	216.3	Supply, fabricating and erection of MS square pipe IS Specification with Required steel section used for fabrication of truss works.	1907.40	1 Kg		144
					Sec	

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
85	217	Dismantling the damaged Pressed tiles laid over cement mortar and Weathering Course lime concrete		1 Sqm		c.
				4		
86	219.5	Supply and fixing of Dimmer Type Electronic 300W / 450W Square Type Fan Regulator	40.00	1 No		24
-						- :4
37 2		Supply and fixing Stepped Electronic 300W / 450W Square Type Fan Regulator.	132.00	1 No		C
		=				
		-	4			

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
88	242.2.2	Dismantling Floor finish and dadooing walls in cement mortar with Mosaic Tiles / Glazed Tiles / Cuddapah Slabs.	189.60	1 Sqm		
	i.					151
89	343.2.2	Supply and fixing of Galvanium Roof sheet of 0.47mm thick over MS Purlin	85.70	1 Sqm		
06		Supply and laying superior variety Concrete Designer tiles for flooring in CM 1:3 (One of Cement and three of sand) 20mm thick,	163.95	1 Sqm		
					-	

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
91	361.5	Supplying and fixing of Ivory colour Vitrified Tiles of size 595x595x10mm for flooring and other similar works in cement mortar 1:3		1 Sqm		
			=			
92	366.3.1	Manufacturing, Supplying and Fixing of Stainless Steel Hand	35.50	1 Sqm		
		rails for staircase				
			13			
					,	
93		Providing wooden (Melamine Door) Polish for new wood	10.75	1 Sqm		
		ē		Total P		

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
94	467.1	Clearing the Jungle Clerance available in the site and removing the same and disposing		1 Sqm	2	
		-			2	
	*	- B.U.		9		
		-				
95	503.1	Supply and laying of required dia of Nylon rope	300.00	1 Rmt		
		*				
6		Supplying, laying and jointing the following dia of UPVC Pipe	6.00	1 Rmt		
		b) 40mm dia	41			
						B 44

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
97	540.1.3	Supply and fixing of MS stand for fixing outdoor unit.	2.00	1 No		
		14.				g+
98		Supply , delivery and installation of Hi - wall split Air Conditioner with cpper coil (5 star rated) a) For 2.00 Tr Hi wall (5 star) mounting split type	1.00	1 No		
99		b) For 1.50 Tr Hi wall (5star)	1.00	1 No		
		mounting split type				
,						

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
100	540.1.9	Supply and installation of 5 KVA capacity Automatic Voltage Stabilizer with time delay relay.		1 No ≓		
			30°			,
101		Supplying, delivery and laying of following dia UPVC pipe schedule 40 (below GL) a).32 mm dia UPVC pipes		1 Rmt		
102		b) 100mm dia UPVC pipes	25.00	1 Rmt		
						5 P

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
103	609.6	Supply and delivery of 150mm dia of PVC casing pipes (6Kg/cm ²) as per IS 12818/2010 of approved quality for bore wells		1 Rmt	× 1	
104	609.6.1	Supply and delivery of 150mm dia of Ribbed screen PVC casing pipes (6Kg/cm ²) as per IS 12818/2010 of approved quality for bore wells		1 Rmt		
105		Labour charges for inserting of Following PVC Casing pipes assembly (With slots or without slots) (i) 150mm dia casing pipes assembly	300.00	1 Rmt		
			-			

				4		
S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
106	610.2	Supplying and fixing of a 6A-230V Switch 1W - 1 Moduler (Higher end) switch for light & fan		1 No		
107	610.3	S upply and fixing of	26.00	1 No	=	
107	010.3	Supply and fixing of COMBINED PLATES (PLASTIC) a) 8 Module Cover Plate (H)		1 NO		
108		b) 12 Module Cover Plate	56.00	1 No		1
	_					
		a				

	loh								
S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT			
109	610.4	Supply and fixing of SOCKET - 230V 6/16A Socket - 3 Module (Higher end)- for light & fan	82.00	1 No					
7									
1110	615.2.1	Labour charges for the erection of submersible pumpset in Borewell/open well up to 5 HP	5.00	1 No					
111		Supply and delivery of three phase panel board- D.O.L. with two level guard and auto start for 3 HP	3.00	1 No					

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
112	615.3.5	Supply and delivery of MS Fabricated DOL panel control board (Single Phase) upto 5 HP		1 No		
113	616.4.1	Supplying and delivery of the following dia HDPE pipes a). 40 mm dia HDPE 10 Kg/cm ² pipe	300.00	1 Rmt	×	
14 ′		Supply and laying of PVC insulated and sheathed 3 core 4 sq.mm flat type copper cable	325.00	1 Rmt		

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
115	741.1.1	Supply and fixing of 20A DP plug and socket (AC Plug)	2.00	1 No		
			£	=	2	- a
116	753	Construction of Inspection chamber in size 60x60x75cm brick work and precast slab	2.00	1 No		
17		Providing and fixing in position of plain 10mm thick Hiluxboard /equivalent false ceiling	53.10	1 Sqm		
		~ 				-
		.)				

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
118	799.1	Drilling of Borewell anywhere inculding transportation from one place to another place a) Upto 76m depth ending below Ground level		1 Rmt		
				Ī		
119		b). From 76m upto 91m depth	30.00	1 Rmt		
			-,			
20		c). From 91m upto 107m depth	32.00	1 Rmt		
-					*	
	, FI					

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
121		d). From 107m upto 122m depth	30.00	1 Rmt		
		E 187				v
122		e). From 122m upto 150m depth	56.00	1 Rmt		
-						
		<				
					-	
23	799.3	Charges for developing the bore well with air compressor of 300 CFM capacity(Minimun 8 Hours)	16.00	1 Hrs		
	James :	4				
						-

(10

			·	(0		
S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
124	799.3.1	Supply and fixing of PVC 160mm dia top end cap	4.00	1 No		
125	955.2	Supply and fixing of	10.00	1 No		
	8	Programmable 5 lane target system				
					7"	
126		6 Core Wire connecting Control Unit for target unit only(requirement) Supply of 6 Core Flexible type inflammable this cable is connected from machine to time	10.00	1 Set	H = 11	e a
		connected from machine to time controller box approximately 55m Per Unit			-	**

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
127	955.4	6 Core Wire connecting Control Unit for target unit only(requirement) Supply of 6 Core Flexible type inflammable this cable is connected from machine to time controller box approximately 300m Per Unit		1 Set		
128	955.5	Supply and fixing of Snap Shooting Target upto 300yards Programmable Turning Target	18.00	1 No		
					-	
129		Supply of 6 Pin Connecter: 6 Pin it's the lock pin for the 6 core wire for easy to connect the 6 core wire connection for plug	28.00	1 No		
			-5			

S. No	Item no	DESCRIPTION	QTY	UNIT	Rate exclusive of GST in Figures and in Words	AMOUNT
130	955.7	Assembling Charges: Testing the Short Range target system and Long Range Target System Commissioning for 5 lane target system inside the range with full assembling	3.00	1 Job		
		an an				
31		Supply and fixing of 4x4 Target 300yards Target frame Maintanance : Bearing assembling for both side, outer dia pipe	18.00	1 No		
					Total Amount Rs.	

(Rupees -----Only

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