# Tamilnadu Polymer Industries Park Limited (Joint venture of TIDCO & SIPCOT)

III Floor, 19-A, Rukmini Lakshmipathy Road, Egmore, Chennai - 600 008

# TENDER DOCUMENT TENDER REFERENCE NO – 04 / A COVER-I

BOOKLET-1
PRE-QUALIFICATION TENDER
BOOKLET-2
PRE-QUALIFICATION SCHEDULE
BOOKLET-3

(OTHER TERMS & CONDITIONS OF THE TENDER INCLUDING TYPICAL DRAWINGS)

REQUEST FOR PROPOSAL FOR SELECTION OF CONTRACTOR FOR CONSTRUCTION OF PREFABRICATED PUF INSULATED STRUCTURE FOR ADMINISTRATIVE BUILDING, TRAINING CENTRE & ADMINISTRATIVE BLOCK, TECHNOLOGY CENTRE AT TAMILNADU POLYMER INDUSTRIES PARK, PUZHUDIVAKKAM AND VOYALUR VILLAGES, PONNERI TALUK, THIRUVALLUR DISTRICT, TAMILNADU

Date of Release of Tender	11.12.2020
Last Date for Submission of Bid	28.12.2020, till 3:00 PM
Date of Opening of Bid	28.12.2020, at 3:30 PM
Cost of Bid Document:	Rs.11,800/- (Including GST)

# TAMILNADU POLYMER INDUSTRIES PARK LIMITED

S No	Contents of the RFP	Page No
1	Introduction	
1.1	Background	3
1.2	Contents of the RFP	4
1.3	Schedule of Bidding Process	4
2	Booklet – 1 (Pre – Qualification Tender)	
	Notice Inviting Tender	5
	Important information to the tenderers for filling-up of the Tender	7
	Schedule	
	Letter of Application	17
	Rate of Progress	19
	Declaration Form	20
3	Booklet – 2 (Pre – Qualification Schedule)	
	PQ Evaluation conditions	21
	Additional Tender Conditions	24
	Special Conditions for Pre-Qualification Tender	25
	Special Conditions for Goods and Service Tax (GST)	26
	Basic requirement for eligibility	27
	Schedule – I – Structure and Organization of Tenderer	29
	Schedule – II – Financial capability of the Tenderer	30
	Schedule – III – Technical Competence	31
	Schedule – IV – Manpower	32
	Schedule – V – Machinery	33
	Schedule – VI – A Experience	34
	Schedule – VI – B Experience (In Progress)	35
	Annexure – A – Affidavit	36
	Annexure – B – CA Certificate	38
	Annexure – C – Experience Certificate	39
	Annexure – D - Specimen of the Banker Certificate	40
	Annexure – E - Specimen of labour force certificate	41

# TAMILNADU POLYMER INDUSTRIES PARK LIMITED

	Annexure – F - Letter of Consent	42
	Annexure – G - Form of Certificate of Sales Tax Verification	43
	Annexure – H – Checklist to Supplement the Tender	45
4	<b>Booklet – 3 (Other Terms &amp; Conditions of the Tender Including</b>	
	Drawing)	
	Schedule 'A'	
	Financial Bid – COVER - II	46
	Schedule 'B'	47
	Administrative Building	
	Plan	48
	Plan of pedestal layout, Plinth Beam	49-50
	Footing and Plinth Beam cross sectional view	51-52
	Elevation View	53
	Training Center and Administrative Block	
	Plan	54
	Plan of pedestal layout, Plinth Beam	55-56
	Pedestal detail	57
	Footing cross sectional view	58-59
	Elevation View	60
	Technology Center	
	Plan	61
	Plan of pedestal layout, Plinth Beam	62-63
	Footing and Plinth Beam cross sectional view	64
	Elevation View	65
	Schedule 'C'	
	Additional Specifications/Conditions	48
	Schedule 'D'	
	General Conditions	55
	Additional Conditions	57
	Price Adjustment Clause	59
	Special Conditions for sending the Cement Concrete Cubes for Testing	61
	Additional Specification for quality of material and tests to be	62
ī		

# TAMILNADU POLYMER INDUSTRIES PARK LIMITED

conducted	
Conditions of Employing Technically Qualified Persons	66
Special Condition for Electrical Works	68
Specification of Items to be used on the Fire Protection System	71

### **IMPORTANT NOTICE**

This tender procedure is governed by the Tamil Nadu Transparency in Tenders Act, 1998 and the Tamil Nadu Transparency in Tender Rules, 2000 as amended from time to time. In case of any conflict between the terms and conditions in the tender document and the Tamil Nadu Transparency in Tenders Act, 1998 and The Tamil Nadu Transparency in Tender Rules, 2000, the Act and Rules shall prevail.

#### Disclaimer

The information contained in this Request for Proposal (RFP) has been prepared solely to assist prospective Bidders in making their decision of whether or not to submit their financial bid. Tamilnadu Polymer Industries Park Limited (TPIPL) does not purport this information to be all-inclusive or to contain all the information that a prospective Bidder may need to consider in order to submit the proposal. The designs, drawings, technical data, cost and any other information provided in this RFP is indicative and neither TPIPL nor its employees, officers nor its consultants will make or will be deemed to have made any current or future representation, promise or warranty, express or implied as to the accuracy, reliability or completeness of the information contained herein or in any document or information, whether written or oral, made available to a Bidder, whether or not the aforesaid parties know or should have known of any errors or omissions or were responsible for its inclusion in or omission from this tender document.

Neither TPIPL nor its employees or consultants make any claim or give any assurance as to the accuracy or completeness of the information provided in this RFP. Interested parties are advised to carry out their own investigations and analysis of any information contained or referred to herein or made available at any stage in the bidding process in relation to the scope of work.

This RFP is provided for information purpose only and upon the understanding that such parties will use it only for the purpose set forth above. It does not purport to be all-inclusive or contain all the information about the work in relation to which it is being issued.

The information and statements made in this RFP have been made in good faith. Interested parties should rely on their own judgments in participating in the said work. Any liability is accordingly expressly disclaimed even if any loss or damage is caused by any act or omission on part of the aforesaid, whether negligent or otherwise.

TPIPL makes no representation or warranty and shall incur no liability under any law, statute, rules or regulations as to the accuracy, reliability or completeness of this document.

TPIPL reserves the right to modify, suspend, change or supplement this RFP. Any change to the RFP will be notified to all the Bidders. No part of this RFP and no part of any subsequent correspondence by TPIPL, its employees, officers or its consultants shall be taken neither as providing legal, financial or other advice nor as establishing a contract or contractual obligation. Contractual obligations would arise only if and when definitive agreements have been approved and executed by the appropriate parties having TPIPL to enter into and approve such agreements.

TPIPL reserves the right to reject all or any of the Bids submitted in response to this tender document at any stage without assigning any reasons whatsoever.

All Bidders are responsible for all costs incurred by them when evaluating and responding to this document and any negotiation costs incurred by the recipient thereafter. TPIPL may in its sole discretion proceed in the manner it deems appropriate which may include deviation from its expected evaluation process, the waiver of any requirements, and the request for additional information. Unsuccessful bidders will have no claim whatsoever against TPIPL nor its employees, officers nor its consultants.

#### 1 Introduction

#### 1.1 Background

- 1.1.1 Government of Tamil Nadu has granted Tamilnadu Industrial Development Corporation Limited (TIDCO) and State Industries Promotion Corporation of Tamilnadu Limited (SIPCOT) as a joint venture for the formation of Special Purpose Vehicle (SPV) in the name of "Tamilnadu Polymer Industries Park Limited (TPIPL)" for setting up of the Polymer Industries Park under centrally sponsored "Scheme for setting up of Plastic Parks" by Department of Chemicals and Petrochemicals (DC&PC), Government of India. TPIPL has identified land in Voyalur and Puzhudivakkam Villages, Ponneri Taluk, Thiruvallur District close to Ennore Port which is in possession of TIDCO for the establishment of the park.
- 1.12 TPIPL has proposed to Construct "Prefabricated PUF Insulated Structure for Administrative Building, Training Centre & Administrative Block, Technology Centre At Tamilnadu Polymer Industries Park at Puzhdivakkam and Voyalur Villages, Ponneri Taluk, Thiruvallur District, Tamil Nadu"
- 1.13 Accordingly, TPIPL has decided to carry out the bidding process for the selection of a contractor to whom the work may be awarded.
- 1.14 The statements and explanations contained in this RFP are intended to provide a better understanding to the Bidders about the subject matter of this RFP and should not be construed or interpreted as limiting in any way or manner the scope of services and obligations of the Contractor set forth in the Agreement or TPIPL's rights to amend, alter, change, supplement or clarify the scope of work, the work to be awarded pursuant to this RFP or the terms thereof or herein contained. Consequently, any omissions, conflicts or contradictions in the Bidding Documents including this RFP are to be noted, interpreted and applied appropriately to give effect to this intent, and no claims on that account shall be entertained by TPIPL.
- 1.15 TPIPL shall receive Bids pursuant to this RFP in accordance with the terms set forth in this RFP and other documents to be provided by TPIPL pursuant to this RFP (collectively the "Bidding Documents"), and all Bids shall be prepared and submitted in accordance with such terms on or before the Bid due date specified in Clause 1.3.

#### 1.2 Contents of the RFP

This RFP comprises the Disclaimer set forth hereinabove, the contents as listed below, and will additionally include any addenda issued in accordance with Clause 52.

#### **Invitation for Bids**

- 1. Introduction
- 2. Booklet 1 ( Pre Qualification Tender)
- 3. Booklet 2 ( Pre Qualification Schedule)
- 4. Booklet 3 (Other Terms & Conditions of the Tender Including Drawing)

#### 1.3 Schedule of the bidding process

TPIPL shall attempt to adhere to the following bid schedule:

Activity	Duration*
Downloading of RFP	From 11.12.2020 (During Office Hours)
Submission date Bid (Bid Due Date)	28.12.2020, till 03:00 PM
Date of opening of Bid	28.12.2020, 03:30 PM
Evaluation of Bids	
Issue of LoA	Dates will be informed later
Execution of the Agreement	

<sup>\*</sup>In case, any of the above dates are revised, it shall be informed to bidders through notification/addendum in the website <a href="http://www.tidco.com/">http://www.tnpolymerpark.com</a>. If any of the above dates falls on holiday, the next working day will be taken for consideration.

#### BOOKLET -1 NOTICE INVITING TENDER

Tender No: 04 / A

Sealed Tenders (wax sealed) are invited in "<u>Two Cover System</u>" (Cover 1 should contain two sub covers namely A & B. Sub cover – A should contain the EMD & Sub cover – B should contain the Technical Bid and Cover - 2 should contain the Financial bid) by Tamil Nadu Polymer Industries Park Limited (TPIPL), Chennai from interested bidders for "Construction of Prefabricated PUF Insulated Structure for Administrative Building, Training Centre & Administrative Block, Technology Centre At Tamilnadu Polymer Industries Park at Puzhudivakkam and Voyalur Villages, Ponneri Taluk, Thiruvallur District, Tamil Nadu"

1	Time for Completion	: 06 months
2	Issue/Downloading of tender	: From 11.12.2020 (During Office Hours)
3	Last date and time for submission of tender	:28.12.2020, till 3:00 PM
4	Date of Opening of Bid	:28.12.2020 3.30 PM
5	Earnest Money Deposit	: Rs.6,03,000/- (Rupees Six Lakhs Three Thousand only) by way of Demand Draft (DD)/Irrevocable Bank Guarantee in favour of "Tamilnadu Polymer Industries Park Limited" payable at Chennai
6	Validity of tender	: 90 days from the date fixed for receiving the tender

#### Minimum Qualifying Criteria:-

The Firm/Company with minimum 5 years of experience in the construction of building works /related works to Pre-fabricated PUF insulated structure (hereinafter referred to as the "Bidder"), shall fulfill following Minimum Qualifying Criteria:

#### 1 Technical Eligibility:

The bidder should have satisfactorily executed and completed building works related to Pre-fabricated PUF insulated structure. The completed value of works including taxes/GST shall be more than 50% of the value of the Tender in a single contract during last five years.

#### 2 Financial Eligibility:

The bidder shall have an average annual turnover of 200% of estimated value of tender in the last five consecutive financial years. The working capital available should be at least 5% of the balance work on hand of all the works under execution (including taxes) by the bidder plus tender value of this work (including applicable taxes).

#### **TPIPL Bid Documents Cost/Fees:**

The Bid Documents can be downloaded from <a href="http://www.tenders.tn.gov.in/">http://www.tenders.tn.gov.in/</a> or through <a href="http://www.tidco.com/">http://www.tnpolymerpark.com</a> from "Tenders" at free of cost. For the downloaded tender document, the bidder need not enclose the tender document cost but should give a declaration as per the prescribed format for not having tampered the Tender document downloaded.

The Bid Documents may also be purchased at the office of Tamilnadu Polymer Industries Park Limited, III Floor, 19-A, Rukmini Lakshmipathy Road, Egmore, Chennai - 600 008 on payment of Rs.11,800/- (including GST) (non-refundable) through a Demand Draft in favour of "Tamilnadu Polymer Industries Park Limited" payable at Chennai.

#### **Note:**

- a) Tender documents are to be downloaded from <a href="www.tidco.com">www.tnpolymerpark.com</a> and <a href="http://www.tenders.tn.gov.in">http://www.tenders.tn.gov.in</a> by the Bidder. The Bidder is responsible to download all the Addendums/ Amendments / Errata/ Replies to the queries of the Bidder, etc., if any, issued by TPIPL, from above web site before submission of the tender. Any shortfall in the submission of the said Addendums/ Amendments / Errata/ Replies to the queries of the Bidder, etc. along with the downloaded documents while submitting the tender will not be considered. Incomplete tender documents observed in the technical bid shall be rejected outright.
- b) The Bidder should go through the RFP documents, tendering process and refer the procedure stipulated for bidding.
- c) The tenders shall be submitted in **Two cover system** i.e. Technical Bid and Financial bid" (Cover 1 should contain two sub covers A & B. Sub cover A should contain the EMD & Sub cover B should contain the Technical Bid and Cover -2 should contain the Financial bid) strictly in accordance with the instructions to the Bidder and terms and conditions given in the RFP documents. The Bidder should submit bound hard copy of Technical bid including blank RFP document (without indication of quoted cost) and the Financial bid as per the format at the Appendix-II, duly signed and affixed with the company's seal on each page in **TWO SEPARATE wax sealed covers i.e Technical Bid (Cover-1) and Financial Bid (Cover-2) should be submitted in a common cover. All the covers including common cover should be wax sealed and super scribed properly and dropped in the Tender box before opening of the tender, to The Managing Director, Tamilnadu Polymer Industries Park Limited, III Floor, 19-A, Rukmini Lakshmipathy Road, Egmore, Chennai 600 008.**

S No	Covers	Sub Covers	Contents
1	Cover – 1	Sub Cover – A	EMD
		Sub Cover – B	Technical Bid
2	Cover – 2		Financial Bid

- d) If the submitted hard copy of the Technical bid shows any indication of quoted price directly or indirectly, the bid shall be rejected outright.
- e) The completed tender shall be submitted in physical form till 03:00 PM on 28.12.2020. The Technical bid shall be opened on the same day at 03:30 PM.

Managing Director (TPIPL)

# IMPORTANT INFORMATION TO THE TENDERERS FOR FILLING UP OF THE TENDER SCHEDULE

- 1. This tender in two cover system i.e., Technical Bid Cover I and Price Bid Cover II.
- 2. Rates should be quoted in the enclosed tender Schedule A without fail.
- 3. This tender schedule includes (i) Cover I Technical Bid Booklet-1 Tender Notice including the instructions to the bidder, Booklet-2 Instructions to Prequalification of tenderers and Booklet-3 Other terms & Conditions of the tender including drawings and Cover II Price Bid i.e., Detailed item wised tender Schedule 'A' (BoQ). The contractors are requested to read the detailed specification and quote the rates clearly in the tender schedule (BoQ).
- 4. The tenders invited are only for item rates. Any lump sum deductions or increase or rebate offered either in the tender or in the covering letter or at any portion of the tender will be ignored and only the rates offered in the tender Schedule A i.e. BoQ available in the Booklet alone will be taken as valid rates and taken up for tender comparison. Rates or Lump sum amounts for items not called for shall not be included in the tender. Any alteration made by tenderer in the contract form, the conditions to Contract, the drawings, specification, or quantities accompanying the same will not be recognized and if any such alterations are made, the tender will be void.
- 5. The tenderer / contractor will make his/her/their own arrangements to procure and use ISI Brand Cement and ISI Brand steel required for the work.

- 6. 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.
- 7. 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 TPIPL the cement and steel brought to the site shall be tested by TPIPL from any one of the approved Govt. institutions at the contractor's cost and only when the test results confirm to the ISI specification they will be allowed to be used in the works.
- 8. The tenderer / Contractor should strictly follow above instructions without fail.
- 9. The tenderers or their authorized agents should be present at the time of opening of tenders.
- 10. In case 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/Gazetted Officer) proper contractor registration certificate.
- 11. In case 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 along with the registration certificate obtained from Registrar of Firms. (Copies should be duly attested by Notary Public/Gazetted Officer).
- 12. In case 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 and Board Resolution shall accompany the tender. The Memorandum and Articles of Association of the company and profile of the company with company incorporation certificate copies with seal (duly attested by Notary Public/Gazetted officer) shall be submitted along with his/her/their tender.
- 13. In case 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 (Duly attested by the Notary Public/Gazetted Officer) along with the tender. The sole proprietor alone should sign in the tender document.
- 14. Each tenderer must also send a certificate of the latest Income-tax return acknowledgement in the form prescribed thereof. All tenders received without documents/certificates as

- aforementioned will be summarily rejected.
- 15. Each tenderer must pay Earnest Money Deposit (without GST) of a sum of Rs.6,03,000 (Rupees Six Lakhs Three Thousand only) by way of Demand Draft (DD) / Bank Guarantee in favor of Tamilnadu Polymer Industries Park Limited, payable at Chennai any one of the Nationalized Bank/Scheduled Bank. In the event of the Bidder withdrawing his Bid before the expiry of 90 days from the last date of submission of the Bid, the Bid shall be cancelled and the amount payable by an EMD shall become forthwith payable to TPIPL and decision of TPIPL shall be final in that behalf. The Rejected/Unsuccessful tenderers' EMD amount will be discharged/returned without any interest within 60 days after concluding the Contract Agreement with the successful Bidder. The EMD in respect of Successful Bidder may be forfeited, if the successful bidder fails to enter into a contract or furnish the necessary Performance Security within 15 days from the date of Letter of Award. The EMD of the Successful Bidder will be released after furnishing of the necessary Performance Security. In case of Bank Guarantee, the Bank Guarantee shall be valid for a period of twelve months.
- 16. The tender will remain valid for a period of 90 days from the tender opening date. The validity period can be extended further if the tenderer gives his consent in writing, specifying the period of extension.
- 17. The tenderer whose tender is under consideration shall attend the office before the end of the period specified by written intimation to him. He shall forthwith, upon and intimation being given to him of acceptance of his tender by the officer authorized, make security deposit (with applicable GST) of 2% of the value of Contract. The security deposit and the deductions made at 5% of the value of each bill towards withheld amount of General condition to the contract, shall be retained as security for the due fulfillment of contract. Such deposit shall not bear any interest.
- 18. The Security Deposit shall be released only after the expiry of six months from the date of issuing successful completion certificate for the said work.
- 19. On receipt of written communication of acceptance of tender, if the tenderer fails to pay the requisite security deposit (with applicable GST) within the period specified in the written communication or backs out from the tender or withdraws his tender, the earnest money deposit (without GST) shall be forfeited. If the contractor fails to carry-out the contract, after paying the requisite deposits, then he will be liable for the excess expenditure, if any incurred

to complete the work as contemplated in the General conditions of the contract.

- 20. 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 agreement between TPIPL and the tenderer for execution of the work. Hence for this purpose, the tender documents i.e., tender notice, tender offered by the contractor, General conditions to the Contract, special conditions to the contract, negotiation, correspondences, written communication of acceptance of tender, etc., shall constitute a part of the Contract agreement and that will be the foundation of the rights of both the parties. 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.
- 21. The tenderer shall examine closely the general conditions of the contract of Tamil Nadu Building Practice and also general conditions of contract contained therein and sign the copy of the Tamil 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.
- 22. The tenderer's attention is directed to the requirements for materials under the clause "Materials and Workmanship" in the General conditions of contract. Materials confirming to the Indian Standard Specifications shall be used on the work and the tenderer shall quote his rates accordingly.
- 23. Every tenderer is expected, before quoting his rates, to inspect the proposed site of work. He should also conduct soil investigations (with prior permission from TPIPL), 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 TPIPL in any case shall be submitted for the TPIPL's approval before the supply to the site of work is begun. Accordingly the tenderers are requested to quote their own workable rates.
- 24. The TPIPL will not however after acceptance of contract rate pay any extra charges for lead or for any other reasons in case the contractor is found later on to have misjudged the materials

available. Attention of the contractor is drawn to the General conditions to the contract regarding payment of seigniorages, tolls etc., subject to price adjustment clause provided for in this tender schedule.

- 25. The Tenderer's particular attention is drawn to sections and clauses in the General Conditions to contract dealing with:
  - i. Test, inspection and rejection of defective materials and work
  - ii. Carriage
  - iii. Construction plant
  - iv. Water and Lighting
  - v. Cleaning up during progress and for delivery
  - vi. Accidents
  - vii. Delays and
  - viii. Particulars of Payment
- 26. The contractor should closely peruse all the specification clauses which govern the rate his tendering.
- 27. A schedule of quantities accompanies this tender notice, it shall be definitely understood that the concerned Officer/Engineer 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 TPIPL as set forth in the conditions to 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 in two decimal only.
- 28. The tenderer should work out his own rates without reference being made to the TPIPL current schedule of rates or to the estimated rates which are not open for inspection to tenderers.
- 29. 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 Concerned 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.

#### Period of Contract - 6 Months

Period after date of commencement	Total percentage of work to be completed based on contract amount	Approximate quantity of cement	Approximate quantity of Steel
1 <sup>st</sup> Quarter (3 Months)	50%	130 MT	25.30 MT
2 <sup>nd</sup> Quarter (6 Months)	100%	130 MT	25.30 MT

**NOTE:** The periods to be entered in column for the purpose of defining of the rate of progress may be fixed by the concerned Engineers of TPIPL to suit each case.

- 31. No parts of the contract shall be sublet without written permission of the concerned Engineers of TPIPL, nor shall transfer/authorize others to receive payment on the contractor's behalf.
- 32. If further necessary information is required the concerned Engineer of TPIPL will furnish, details but it must be clearly understood that tenders must be received in order, and according to instructions.
- 33. The concerned Engineer of TPIPL or other sanctioning authority reserves the right to reject any tender or all the tenders without assigning any reasons thereof.
- 34. 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 tenderer is one who has undertaken to employ technical staff under them, should ensure 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. Re-inforced concrete works etc.
- 35. 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 profiteering will render himself liable to be debarred permanently from tendering or for such period as the tender accepting authority may decide.
- 36. 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.

- 37. 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.
  - (d) Methods that will be adopted to speed up the work to ensure completion within or less than the time fixed for completion.
- 38. TPIPL, reserves to itself the right of allotting the different sub-works to different contractors or one and the same contractor as it may be decided after the receipt of tenders.
- 39. 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.
- 40. The cost of materials if supplied by the TPIPL will be recovered from the bills or any other amounts due from the contractors.
- 41. The EMD amount should be the exact amount and no excess or less amount should be submitted. If short, the tender status will be shown as invalid.
- 42. Retention Money Deposit (RMD) (with applicable GST) at 5% shall be recovered from each bill based on the value of work done by the contractors 50% of RMD (i.e., 2.5 %) received from the bills would be paid to the contractor along with final RA bill. The balance 50% (i.e., 2.5 %) of the total value of work will be retained on the final bill of the work for the period of eighteen months reckoned from the date of completion of work in order to enable the concerned to watch the effect of all seasons of the work. The contractor should furnish an indemnity bond for further period of four years as per GO. Ms. No. 283/ PWD (G2) Dept. Dated 21.05.1999. 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 TPIPL officers and no extra payment to be made for the rectification of such work.
- 43. 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.

- 44. No tenderer is permitted to withdraw his / her / their tender at any stage. If any tenderer withdraws his / her / their offer within the tender validity period his / her / their EMD / SD (with applicable GST) shall be forfeited and his / her / their name(s) will be recommended for blacklisting.
- 45. 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, Income Tax, Solvency, Sales Tax verification etc.
- 46. The tenderer should be registered with GST.
- 47. 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.
- 48. The payment shall be released against RA bills with applicable taxes/deductions, within 30 days after completion of construction/erection duly certified by concerned authority of TPIPL.

#### 49. Clarification:

Bidders requiring any clarification on the RFP may notify TPIPL through e-mail in accordance with Clause 54. They should send in their queries on or before the date mentioned in the Schedule of Bidding Process specified in Clause 1.3. TPIPL shall endeavor to respond to the queries within the period specified therein. TPIPL will forward all the queries and its responses thereto, to all Bidders without identifying the source of queries.

TPIPL shall endeavor to respond to the questions raised or clarifications sought by the Bidders. However, TPIPL reserves the right not to respond to any question or provide any clarification, in its sole discretion, and nothing in this Clause shall be taken or read as compelling or requiring TPIPL to respond to any question or to provide any clarification.

TPIPL may also on its own motion, if deemed necessary, issue interpretations and clarifications to all Bidders. All clarifications and interpretations issued by TPIPL shall be deemed to be part of the Bidding Documents. Verbal clarifications and information given by TPIPL or its employees or representatives shall not in any way or manner be binding on TPIPL.

#### 51 Pre-bid Meeting

Pre-bid meeting shall be convened at the designated date, time and place specified in Clause 1.3. During the course of Pre-Bid meeting(s), the Bidders will be free to seek clarifications and make

suggestions for consideration of TPIPL.

TPIPL shall endeavor to provide clarifications and such further information as it may, in its sole discretion, consider appropriate for facilitating a fair, transparent and competitive Bidding Process.

The Bidder is requested to submit any question online on Email id: <a href="mailto:tnpolymerpark@gmail.com">tnpolymerpark@gmail.com</a> to The Managing Director, Tamilnadu Polymer Industries Park Limited, III Floor, 19-A, Rukmini Lakshmipathy Road, Egmore, Chennai - 600 008 before the pre-bid meeting. Any queries received after pre-bid meeting will not be accepted.

Minutes of the meeting including copies of the questions raised and responses given will be furnished expeditiously on <a href="www.tidco.com/www.tnpolymerpark.com">www.tnpolymerpark.com</a>. Any modifications of the RFP documents, which may become necessary as a result of the pre-bid meeting, shall be made by TPIPL exclusively through the issuance of an addendum and not through the minutes of the pre-bid meeting and shall be hosted on <a href="www.tidco.com/www.tidco.com/www.tnpolymerpark.com">www.tnpolymerpark.com</a>. The responsibility of downloading from <a href="www.tidco.com/www.tnpolymerpark.com">www.tnpolymerpark.com</a> fully lies with the Bidder.

#### 52. Amendment of RFP

At any time prior to the Bid Due Date, TPIPL may, for any reason, whether at its own initiative or in response to clarifications requested by a Bidder, modify the RFP by the issuance of Addenda. Any Addendum issued hereunder will be in writing and shall be uploaded to the website.

In order to afford the Bidders a reasonable time for taking an Addendum into account, or for any other reason, TPIPL may, in its sole discretion, extend the Bid Due Date.

#### 53. Preparation and Submission of Bid

Format and signing of Bid

The Bidder shall provide all the information sought under this RFP. TPIPL will evaluate only those Bids that are received in the required formats and complete in all respects. The completed Bids shall be submitted by 03:00 PM on 28.12.2020 at TPIPL Office, III Floor, 19-A, Rukmini Lakshmipathy Road, Egmore, Chennai – 600008.

Bidders are particularly advised to fill in the details asked for, strictly in the prescribed forms.

Bidders are liable to be rejected if relevant details are not furnished as per enclosed formats and also which do not meet the pre-qualification requirement as specified in the tender notice. The

Bidder may furnish along with his Bid any additional information that in his opinion will highlight his capability to perform.

The Bidder should note the following procedure carefully:-

- a. The Bidder should quote his basic cost offer only in Financial Bid.
- b. Bidder should not indicate his cost offer anywhere directly or indirectly in Technical Bid.
- c. The Bidder should quote for the work as per Technical scheme, design and Scope of Work as specified in RFP documents.
- d. The Bidders should ensure that RFP documents are downloaded online at <a href="www.tidco.com">www.tidco.com</a> / <a href="www.tnpolymerpark.com">www.tnpolymerpark.com</a> before the expiry of the specified time limit.
- e. No delay on account of any cause will be entertained for the late receipt of Bid.

#### **54.** Contact Details

Contact Person	Mr. T.Madhavan
Designation	General Manager – Projects
Phone No	044-28554479 – 28554480
Email id	tnpolymerpark@gmail.com
Address in Details	Tamilnadu Polymer Industries Park Limited, III Floor, 19-A,
	Rukmini Lakshmipathy Road, Egmore, Chennai - 600008.

#### LETTER OF APPLICATION

Dated	
Daicu	

To
The Managing Director,
Tamilnadu Polymer Industries Park Limited
III Floor, 19-A, Rukmini Lakshmipathi Road,
Egmore, Chennai, Tamilnadu 600008.

Sir,

Sub: Construction of Prefabricated PUF Insulated Structure for Administrative Building, Training Centre & Administrative Block, Technology Centre at Tamilnadu Polymer Industries Park, Puzhudivakkam and Voyalur Villages, Ponneri Taluk, Thiruvallur District, Tamil Nadu

Ref: Tender No: 04

I/We have also completed the priced list of items of **BoQ** i.e. (in words and figures) for which I/We agree to execute the work and receive 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 instructions 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 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 enclose the sum of	(Rupees
) in the form of	as
prescribed in the Tender Notice towards Bid Security (Earnest Money Deposit) (with	hout GST),
which will not carry any interest.	
*** I/We hereby enclose the proof of authority vide the payment of Bio	d Security
exempting 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 applic	ation when
intimation is sent to me / us of rejection. The EMD shall be returned within 60	days after
concluding the Contract Agreement with the successful bidder. If my/our tender is ac	cepted, the
Earnest Money Deposit (without 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 Concerned Office	r 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 give	en to me/us
by the Concerned Officer of acceptance of my/our tender. If I/We fail to make the	ne Security
Deposit/Additional Security Deposit (with applicable GST) or to enter into the required	agreement
as defined in the tender notice, then I/We agree to the forfeiture of Earnest Mon	ey Deposit
(without GST). Any notice required to be served to me/us here under shall be sufficient	ntly served
on me/us if delivered to me/us personally or forwarded to me/us by post (registered of	or ordinary)
or left at my/our address given herein such notice shall if sent 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 TPIPL,
shall be the foundation of the rights of both the parties.	
Yours faithfully,	
Date: (Signature, name and designation of the Authorised	signatory)

Place:

#### **RATE OF PROGRESS**

(Fill in from Tender Notice)

Period after the	Percentage of work to be
Commencement of	Completed on the whole work

#### **DECLARATION FORM**

-	$\overline{}$				
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a)	I/Wehaving
	our office atdo hereby
	declare that I/We have carefully read all the conditions of the tender vide ref.
	nofor Construction of Prefabricated PUF Insulated structure for
	Administrative building, Training Centre & Administrative block and Technology Centre
	at Tamilnadu Polymer Industries Park Project, at Puzhudivakkam and Voyalur Villages,
	Ponneri Taluk, Thiruvallur District, and complete the contract as per the tender conditions.

b) I/We have downloaded the tender document from the internet site <a href="www.tenders.tn.gov.in">www.tenders.tn.gov.in</a> / <a href="www.tidco.com">www.tenders.tn.gov.in</a> / <a href="www.tenders.tn.gov.in">www.tenders.tn.gov.in</a> / <a href

### BOOKLET – 2 PREOUALIFCIATION SCHEDULE

#### **Prequalification Evaluation conditions:-**

- 1. The contractors those who have carried out such type of similar works are most preferable.
- 2. All the Pages should be furnished by the tenderer. In the event of even single page is not furnished by the tenderer the tender will be summarily rejected.
- 3. The performance Certificate in having satisfactorily executed and completed building works/related works i.e. PRE-FABRICATED PUF INSULATED STRUCTURE. (The completed value including taxes/GST shall be more than 50% of the value of the contract put to tender in a single contract) directly issued by the concerned organization during past five years. (i.e. the works executed under sub-contract will not be considered for this purpose). The evidence for the same should be produced from an officer not less than the rank of the Superintending Engineer or equivalent rank (i.e. agreement executing authority) of the Government or Government undertakings, responsible person of the Private organizations. Otherwise the tender will be summarily rejected, as per the TT Act Rule 28 of 2000.

Credentials of the tenderer(s) for the works executed by him / them in the past 5 years supported by certificates issued by the authority not lower than the rank of Superintending Engineer. The date of completion of the works stated in the experience certificate should be within the past 5 years prior to the date of tender. The Specimen of the experience certificate is given in the document for Government works and Private works (Annexure-C).

- 4. The working capital available should be at least 5% of the balance work on hand of all the works under execution including taxes/GST by the contractor plus put to tender value of this work including taxes/GST.
- 5. The performance certificate in respect of private works should be supported with the Annexure 'B'
- 6. The performance certificate should cover the works completed during the last five consecutive financial years.
- 7. Affidavit should be furnished in 100 Rupees Stamp Paper as per Annexure- A.

- 8. If any tenderer participates in more than one tender, he/she/they should substantiate his/her/their financial status and capability regarding management of labour and materials for all the works that he/she/they participates in, supported with sufficient financial documents and experience certificates. The tender will be processed taking these aspects into account while preparing PQ Evaluation Statement.
- 9. No tenderer is permitted to withdraw his/her/their tender at any stage. If any tenderer withdraws his/her/their offer within the tender validity period his/her/their EMD/SD shall be forfeited and his/her/their name(s) will be noted for black listing.
- 10. The Provisional Balance sheet should be certified by the auditors stating that "the balance sheet is prepared based on the accounts maintained by the contractor and the same is audited by me". Otherwise the Provisional Balance sheet will not be considered for PQ evaluation. Further, the Chartered Accountant's membership Number should be clearly mentioned in their seal. If a tenderer produces unaudited / subject to audit / Projected balance sheet the same will not be considered for processing of their PQ tender.
- 11. The performance, quality of work, character and integrity of the aspiring tenderers should be satisfactory. Also the contractor should have executed building/related works i.e., PRE-FABRICATED PUF INSULATED STRUCTURE within the agreement period or extension of time granted.
- 12. The balance sheet, Tools & Plants, Machinery Certificate / Fixed assets (included the tools & Plants, Machinery) issued by the Chartered Accountant and Banker's Certificate for cash at Bank, un-utilized OD should be on the same date. The value given in the balance sheet for tools & plants and the Tools & Plant/ Machinery certificate issued by the Chartered Accountant should be tallied. Otherwise respective marks for Tools & Plants, machineries will not be considered. The amount furnished as bank balances in the Balance sheet should be tallied with the amount mentioned in the Banker certificate. Otherwise such tenders will be decided by the TPIPL as per the merit of the case.
- 13. Revenue solvency issued by the Tahsildar with upto date Encumbrance Certificate should be submitted. 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 and rejected. 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 will be considered.

- 14. The amount received by the tenderer from the end users, in case of experience certificate for Private works has been enclosed by the tenderer, should cover in the certificate issued by IT department indicating the head wise income and tax payable in addition to the Annexure-B enclosed in the pre-qualification tender schedule. Necessary Form 16 A and Form 26 AS should be enclosed along with the tender.
- 15. Current Income tax certificate (2019-2020) & GST verification certificate should be furnished. The total Annual turnover amount, Tax paid and other details should be covered in the verification certificate. Otherwise the verification certificate will not be considered and such tender shall be rejected summarily.
- 16. The tenderer should furnish the Experience certificate with the details of Name of Work, Name of contractor, Date of Commencement of Work, Due date of Completion, Actual date of completion, Actual completion cost, fine imposed if any and reason for delayed completion of work with extension of time details.
- 17. The bidder shall have an average annual turnover of 200% of estimated value i.e., put to tender in the last five consecutive financial years. The annual Turnover (Including taxes / GST) will be calculated as per the balance sheet and profit and loss account of the last five years, which should be furnished by the tenderer along with tender.
- 18. Tenderer's representative participating in tender opening should produce the authentication letter from the tenderer on the date and time of opening of tender.
- 19. Tenders from joint ventures will not be considered.
- 20. All photo copies of the documents enclosed with tender should obtain attestation from the Notary Public/Gazetted Officer.
- 21. Telegraphic tenders will not be accepted.
- 22. The tenderers are not permitted to produce/submit any documents after opening/during opening of tender.
- 23. The contractors who fulfill the Pre-Qualification criteria alone are eligible for opening of the Price Bid tender and the remaining tenders will be rejected.

#### **ADDITIONAL TENDER CONDITIONS**

#### The tenderer should furnish the following particulars along with the tender:-

- 1. Details of work completed / in progress in Govt. departments / Private organisations (name of work, Value, timely completion etc.)
- 2. Labour, tools and plants and financial soundness
- 3. Performance of the tenderer with reference to quality, rate of progress and co-operation with the concerned authority, issued by the authority not lower than the rank of Superintending Engineer and responsible person.
- 4. Credentials of the tenderer for the works executed by him / them in the past 5 years supported by certificates issued by the authority not lower than the rank of Superintending Engineer and responsible person. The date of completion of the works stated in the experience certificate should be within the past 5 years prior to the date of tender.
- 5. The tender shall be valid for a period of 90 days from the last date of receipt of tender.
- 6. The bank balance and O.D. facilities furnished by the tenderer should be supported with authenticated certificate issued by the respective bank in addition to the Chartered Accountant's balance sheet.
- 8. The working capital available (cash at Bank + unutilised bank credit (OD) + sundry debtors Sundry Creditor) (Excluding Deposits & Advances) should be at least 5% of the balance work on hand of all the works under execution by the contractor plus the value of the work put to tender. As to the finality of the figures, for this purpose, the audited balance sheet duly certified by the Chartered Accountant made up to a date as close as to the date of tender shall only be reckoned. Any information or clarification given by the tenderers outside the statement not forming part of the audited statement shall not be binding.
- 9. The contractor should have executed building works/related works i.e., PRE-FABRICATED PUF INSULATED STRUCTURE costing at more than 50% of the value of the work put to tender in a single contract.
  - The Performance/Experience should be supported by performance certificates issued by the concerned organization by an officer not below the rank of Superintending Engineer or

- equivalent rank (i.e. agreement executing authority), responsible person of the private organization.
- 10. Failure on the part of the tenderer to comply with the above basic criteria, in Sl.No.8 & 9 the tenders will be summarily rejected, as per the TT Act rule 28 of 2000.

#### SPECIAL CONDITIONS FOR PRE-QUALIFICATION TENDER

- 1. The tenderer should furnish the audited Balance sheet and Profit and Loss Account for past five financial years along with the tender to cover item No. IV & V of Schedule II and certificate of financial soundness from Bankers are to be enclosed.
- 2. Proof of the Item No. II (a) and VI (b), Schedule II Bankers Certificates (Annexure-D) with the latest reconciliation statement and latest Auditor's balance sheet certified by the Chartered Accountant are to be enclosed.
- 3. Latest auditor's report certified by a Chartered Accountant and balance sheet indicating the present status including the unutilised bank O.D. of the tenderer and bankers certificate for the cash in Bank and O.D. facilities availed to be produced for Item VI of schedule II.
- 4. In Proof of having the given tools and plants, the tenderer shall produce attested Xerox copies of R.C. book of vehicles or bills for the purchase of tools and plants & auditor's report certified by the Chartered Accountant shall contain information regarding the machinery for which R.C. Book not required for Schedule V.
- 5. Copies of work orders and Agreement executed in respect of works not commenced and for ongoing works, certificates from the customer (not less than the rank of Executive Engineer) regarding stage of works in progress should be enclosed for Schedule VI B.
- 6. In respect of Contractor executing works in Govt. departments and Private organisations shall produce attested photo copy of the letter with details of balance work and balance amount, issued by the Chief Executive of the department or from the authority who executed the Agreement for Schedule VI -B.
- 7. The Tenderer shall produce an affidavit signed by him/her/them on a stamp paper for a value of Rs.100/- as per the format enclosed with this tender schedule at Annexure 'A'.

#### SPECIAL CONDITIONS FOR GOODS AND SERVICE TAX (GST)

- 1. Cost of Tender schedule for sale, includes applicable GST.
- 2. 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 along with sum of the quoted tender value excluding GST at the end (both in figures and words).
- 3. 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.
- 4. The total bid price will be the cumulative of Value quoted for BoQs listed under Schedule A (Total Basic rate + GST) of Booklet-3 shall be substituted.
- 5. The Security Deposit (Without GST) shall be 2% (Two percentage) of the value of Contract.
- 6. In addition to the aforesaid security deposit, retention amount shall be deducted from the running account bills, a sum equivalent to 5% (Five Percent) of the total value (excluding GST) for all the running account bills as retention amount.
- 7. Out of the 5% retention amount (without GST), 2.50 % (Two and Half Percent) of the total value of the work executed will be released to the contractor on payment of final RA bill.
- 8. The balance 2.50 % will be retained for a period as specified in the tender schedule, as all defects shall have been made good according to the true intent and meaning hereof, whichever shall happen last.
- 9. The retention amount of 2.50% excluding GST (Two and half Percent) of the total value of contract after deducting any amount due to TPIPL, shall be refunded to the contractor without interest after the defects liabilities attached to the contract is over.
- 10. The lowest tenderer will be identified who quotes lowest total tender price which excluding GST as per the clause S.No.4. 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. After negotiation with lowest tenderer, the GST amount will be recalculated as applicable on the sum of the Negotiated tender value for Construction Cost specified in the BoQ.
- 11. For every Bill, GST will be reimbursed to the contractor upon submission of GST remittance proof. The contractor should submit the Material purchase bill mentioning the name of the works in the package and GST No. to TPIPL.

- 12. At the time of payment for first running account bill, the contractor should produce the GST paid details on goods (Materials) to TPIPL along with Input Tax Credit (ITC).
- 13. 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 TPIPL.
- 14. 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 TPIPL along with Input Tax Credit (ITC) availed at the time of payment of final bill to TPIPL.
- 15. In the final bill, the Goods and Service Tax (GST) amount retained in previous payment has to be released to the contractor without interest.
- 16. After receipt of final work bill payment for construction, the contractor shall furnish to TPIPL, with the complete GST paid details along with Input Tax Credit (ITC) details within 3 months matched with GSTN (Goods and Service Tax Network).
- 17. 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.
- 18. The Contractor should be required to indicate their GST registration number under the Goods and Services Tax (GST) Act, 2017 in the tender form.

#### **PRE-QUALIFICATION SCHEDULE**

#### SPECIAL INFORMATION TO THE TENDERERS

#### Basic requirement for eligibility:

- 1. The contractors those who have carried out such type of similar works are most preferable.
- 2. Minimum 5% working capital should be available.

The working capital available (cash at Bank + unutilised bank credit (OD) + sundry debtors Sundry Creditor) (Excluding Deposits & Advances) should be atleast 5% of the balance work on hand of all the works under execution by the contractor plus the value of the work put to tender. As to the finality of the figures, for this purpose, the audited balance sheet duly certified by the Chartered Accountant made up to a date as close as to the date of

tender shall only be reckoned. Any information or clarification given by the tenderers outside the statement not forming part of the audited statement shall not be binding.

# 3. Executed value of work (Including Taxes / GST) (at or more than 50% of the value of this work under a single contract).

The performance Certificate in having satisfactorily executed and completed building works / related works. i.e., Prefabricated PUF Insulated structure (The completed value (including Taxes / GST) shall be more than 50% of the value of the contract put to tender in a single contract directly issued by the concerned organization during past five years). (i.e. the works executed under sub-contract will not be considered for this purpose). 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. In case of contractors who have executed works in Government, the satisfactory performance certificate in the prescribed format from the Superintending Engineer concerned of Government, should be furnished in the prescribed form given in the documents.

Credentials of the tenderer(s) for the works executed by him/them within the past 5 years supported by certificates issued by the authority not lower than the rank of Superintending Engineer. The date of completion of the works stated in the experience certificate should be within the past 5 years prior to the date of tender.

<u>Note:</u>- The tenderer should fulfill the above basic eligibility criteria. If the tenderer fails to fulfill the above basic criteria their tender will be summarily rejected as per the provisions of TT Act Rule no.28 of 2000.

#### SCHEDULE - I STRUCTURE AND ORGANISATION OF TENDERER:

I. Name of the Company : Address Telephone No. Fax No. E-Mail-id Description of the company II. (For e.g. General, Civil Engineering Supplier of equipments etc..) III. Classification of Registration IV. Name and Address of the Bankers : V. Number of Years of experience as a General Contractor VI. Name and Address of partners or Associated companies to be involved in Project and whether parent / subsidiary / other VII. Name and Address of companies who will be involved in the Electrical work VIII. Organisation chart showing the structure of the company including names and positions of directors and key personnel : to be attached

# **SCHEDULE - II FINANCIAL CAPABILITY OF THE TENDERER**

I.	Name of the firm	:
II.	Financial Position	
	a. Cash	:
	b. Current Assets	:
	c. Current Liabilities	:
	d. Working Capital	:
III.	Income tax Permanent Account	t No.
IV.	Annual Turnover as per the Income tax returns	
	a. During 2019 – 20	:
	b. During 2018 – 19	:
	c. During 2017 – 18	:
	d. During 2016 – 17	:
	e. During 2015 – 16	:
V.	Annual Income as per Income tax return	:
	a. During 2019 – 20	:
	b. During 2018 – 19	:
	c. During 2017 – 18	:
	d. During 2016 – 17	:
	e. During 2015 – 16	:
VI.	Financial resources	
	a. Own Resources	:
	b. Bank Credits	:
<u>Note</u>	i. The balance sheet and Bashould be on the same date	anker's Certificate for cash at Bank, un-utilized OD

ii. Proof should be produced for the above details.

# SCHEDULE - III TECHNICAL COMPETENCE

SI. No	Designation	Name	Qualification	Professional Experience and details of works carried out	Remarks
(1)	(2)	(3)	(4)	(5)	(6)
1	Project Manager				
2.	Works Manager (Civil)				
3.	Works Manager (Mechanical)				
4.	Engineer In-charge of Design Office				

 $\underline{\textit{Note:}}$  Proof should be produced for the particulars given in the Schedule – III.

# **SCHEDULE - IV MANPOWER**

		With the applicant's Pay roll	No. that could be made available for the work	_
1.	Number of Engineering Graduates	÷		
2.	Number of Administrative Graduates	:		
3.	Number of skilled employees	:		
4.	Number of Unskilled Employees	:		

#### SCHEDULE - V- MACHINERY

SI. No	Name of the equipment	No. of Units	Kind and Make	Capacity	Age and Conditions		Present book value	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

#### Note:

- i. For the proof of having the given tools and plants the tenderers are to produce attested photo copies of R.C. Book of vehicles with latest F.C. or bills for the purchase of tools and plants & the Auditor's Report certified by the Chartered Accountant shall contain information regarding the machinery for which R.C. Books are not required.
- ii. The value given in the balance sheet for Tools & Plants and the certificate issued for Tools and Plants by the Chartered Accountant should be tallied and both of them should be on the same date.
- iii. Consent letter should be obtained from the concerned party either to lease or to rent of any tools and plants & testing apparatus. If hired the required R.C Books etc., of the tools and plants which machinery are to be hired is to be obtained from the hirer with documental evidence and enclosed with the tender. Failure to comply with this condition will be taken as that the tenderer has no tools and plants.

#### SCHEDULE - VI - A - EXPERIENCE

## Please fill in information about the works completed for the past 5 years in Government Departments/Private Organisation

SI. No	Name and location of the work	Name of the customer awarded the work	Contract value (including taxes / GST)	Scheduled time for completion	Date of commencem ent of work		Actual date of completion	Actual completion cost (including taxes / GST)	Fine imposed if any	Reason if delayed for the completion of work	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)

#### Note:

- i. List of completed certificate are to be obtained from not less than the rank of Superintending Engineer in Govt. departments/Responsible Persons of Private Organisation are to be furnished by the participated tenderers along with the tender.
- ii. If the tenderers have furnished the performance certificate for executed building/related works i.e., PRE-FABRICATED PUF INSULATED STRUCTURE with extension of time granted, the reason for EOT should be mentioned in the certificate issued by the concerned Organization.

#### SCHEDULE - VI - B - EXPERIENCE (IN PROGRESS)

Please fill in information about all the works in progress (i.e. ongoing works) including those where the company has received a letter of intent but a formal contract has not been signed in Government

SI. No	Name of the work and its location	Name of the customer who awarded the work	Contract value	Scheduled date of completion	Date of commencement of work	Value completed and certified	Percentage of physical completion	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

#### Note:

 Copy of work order and agreement executed in respect of works not commenced and for ongoing works, the certificates from the customer (not less than the rank of Executive Engineer/ Responsible Persons of Private Organisation) regarding stage of works in progress are to be enclosed.

#### Annexure - A

The tenderer should produce an affidavit on a stamp paper for a value of ₹100/- with Notary Public seal to be affixed. (Should be produced the scanned and attested copy along with tender for each tender separately. The scanned and attested true copy of affidavit is mandatory even though the tenderer produced the scanned copy of original affidavit. Otherwise the tender will be rejected). The specimen of the affidavit is as follows

		<u>AFFIDAVII</u>		
	I / We	aged	years, so	n of
do her	eby solemnly and sincerely affirm	n and declare as follows	s for and on b	ehalf of the firm.
1.	Name of Work :			
2.1.	Balance work on hand being exe Private / Public undertaking and		_	
	Departments as on date is		:₹	Lakhs
2.2	The break up details are as fo	llows.	:	

#### STATEMENT FOR BALANCE WORKS ON HAND

Sl.No.	Name of Work	Reference	Value of Balance works (including taxes / GST)
(a)	Work order issued and work in pro	ogress.	
i)			
ii)			
(b)	Work order issued but work is ye	et to be started	
i)			
ii)			
	<b>Total</b> Balance work on hand (Includin	g Taxes/GST)	

<u>Note:</u> The certificate of proof for balance works on hand should be obtained not below the rank of Executive Engineer for Government works, responsible person of the Private organization (if Private work executed).

3	3. <b>I</b>	No.	of	staff	in	the	firm	are	as	deta	iled	bel	ow.

a. Manager :
b. Engineers :
c. Diploma holders :
d. Skilled workers :

**Note:** For item no.3 proof shall be obtained from the Chartered Accountant and produced as per the format Annexure – E enclosed.

- 4. Number of works running under pre-qualification bid :
- 5. List / details of contract terminated in the past 5 years

I / we hereby agree for debarring for one year from tendering if any facts are suppressed by me / us.

## SIGNATURE WITH SEAL OF THE NOTARY PUBLIC

#### SIGNATURE OF THE TENDERER

#### Note:-

- i) For balance works on hand it should be supported with relevant documents.
- ii) The Notary Public and the tenderer should sign and affix the seal in all pages of the affidavit without fail.
- iii) The tenderer should produce the attested true copy of Affidavit (Notary Public/Gazetted Officer) along with tender.
- iv) Failure on the part of the tenderer for the above note (i) to (iii), the tender shall be rejected as per the provisions of TT Act rule 28 of 2000.

The tenderers competing in the tenders showing his / her / their Private work experience should enclose the following in the Annexure – 'B' duly certified by the Chartered Accountant in addition to the performance certificate issued by the concerned user. The specimen of the Certificate in the format of Annexure – 'B' is as follows.

#### ANNEXURE - 'B'

#### **CA CERTIFICATE**

I certify that the contractor Thiru....../ Firm M/s..... have executed the following works.

SI.	Name of	Place /	Value of	Agreement	Final value of	Date of co	Date of completion		Remarks
No	work	District and State	Agreem ent	Period	work during completion	Due date fixed for completion	Actual date of completion		
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.

- i. Certified that TDS has been made for the above work.
  - (Form -16A & Form -26AS should be enclosed).
- ii. Certified that the above said completion cost is included in the respective financial years of the contractor / firm for the Tax purpose.
- iii. Certified that the income and expenditure statement for the above said work has been duly audited by me / us.

## SEAL AND SIGNATURE OF THE CHARTERED ACCOUNTANT

#### Note:

- Copies of agreement along with the details of payment received should be enclosed along with the tender.
- ii. For Private work experience the tenderer should produce form 16A & Form 26 AS. The value of private work experience should be tallied with Form 16A & Form 26 AS. Otherwise the tender shall be rejected as per the provisions of TT Act rule 28 of 2000.

# ANNEXURE - C

### **EXPERIENCE CERTIFICATE**

Superintending Enginee	r /		
Lr. No			Date:
M/s. / Th	niru		
have completed the follo	wing work in	າ	
1. Name of work		:	
2. Agreement No.		:	
3. Agreement value		:	₹
4. Agreement period		:	
5. Date of Handing over	of site	:	
6. Due date of completion	n	:	
7. Actual date of comple	tion	:	
8. <u>Actual Value during</u> <u>Completion of the en</u> <u>Contract</u>		:	
9. Extension of time deta	ails	:	
10. Fine details		:	
11. Performance of the	contractor	:	
a. Quality		:	
b. Integrity		:	
c. Achieving Pro	gress	:	
d. Financial Sour	ndness	:	
12. Whether any advers	e remarks al	bout th	e tenderer :
			gineer or equivalent rank
For Private Work : A		ignato	euting authority). ry / responsible e works.

### ANNEXURE - D

### SPECIMEN OF BANKER CERTIFICATE

### TO WHOMSOEVER IT MAY CONCERN

This is to certify t	hat Thiru / M	/s	residin	g at			is <i>i</i>
are having SBA / CA bea	ring account	No	and	l his / ther	n accou	nt details	are as
on as follows:-							
1. Cash at Bank	:						
2. Over Draft sanction:							
3. Over Draft utilised :							
4. Over Draft un-utilised	:						
					(S	Bank Ma eal with N	_
Note to the tenderer:-	The above enclosed wi	•		reflected	in the	Balance	sheet

### ANNEXURE – E

### Specimen of the Labour Force Certificate is as follows.

It is certified that the contractor Thiru/ M/s. ..... has / have the following

labour forces		
1. Manager	:	Nos.
2. Engineer	:	Nos.
3.Skilled	:	Nos.
4. Semi Skilled & Others	:	Nos.
It is also certified that the contractor labour forces and this certificate is issued by them.		•

#### <u>ANNEXURE – F</u>

### **LETTER OF CONSENT**

- 1. I/we agree to abide by all the detailed specifications, terms and conditions stipulated by TPIPL, which I/we have read and understood.
- 2. I/we certify that the tender is offered without any alteration/addition/omission.
- 3. I/we certify that all the conditions of the tender are accepted.
- 4. I/we agree that TPIPL is not responsible for any data corruption that might arise during the transmission/uploading of data in the website or due to disruption in communication error in my/our tender.
- 5. I/we agree that TPIPL has right to change schedule of opening or any technical corrective action to resolve any error that might arise during the opening of the tender by TPIPL.
- 6. I/we certify that I/we are responsible for the submitting of correct copies of documents as per the tender procedure of TPIPL & I /we understand that any error in doing so my/our tender may be summarily rejected by TPIPL.
- 7. In the event of failure on my/our part to comply with all the requirements mentioned in this tender document I/we unconditionally agree that TPIPL is at its liberty to reject my/our tender.

Signature of Tenderer

#### ANNEXURE - G (Specimen of the Sales Tax Verification Certificate) FORM OF CERTIFICATE OF SALES TAX VERIFICATION Name and style in which the applicant is issued or assessable to Sales Tax and address for the purpose of assessment. Name and address of all companies, firms or associations or persons in which the applicant is interested in his individual or fiduciary capacity. Places of business of the applicant (All places of business should be mentioned). The district, taluk and division in which the 3. applicant is assessed to Sales Tax (all the places of business should be furnished). Total contract amount or value or patronage 4. (a) received in the preceding year. 2015 - 2016 2016 - 2017 2017 - 2018 2018 - 2019 2019 - 2020 **(b)** Particulars of sales tax for the preceding years (Amount in Rs.) **Total Taxable** Total tax assessed Year Total tax paid Balance due Reason Turnover for balance 2015 - 2016 2016 - 2017 2017 - 2018 2018 - 2019 2019 - 2020 If there has been no assessment in any year whether returns were submitted and if they were division in which the returns were sent. Whether any penal action or proceedings for recovery of sales tax is pending. The names and addresses of branches, (e) if any.

I declare that the above info	rmation is correct and complete to the	ne best of my knowledge and belief.						
PLACE:		Signature						
DATE:								
To be filled in by the Assessing Authority								
• 1	eant mentioned above has been doing eart mentioned above eart mentioned above has been doing eart mentioned above eart m							
	•							
LACE:         Signature.           ATE:								

# ANNEXURE – H CHECKLIST TO SUPPLEMENT TO THE TENDER

S.NO	DESCRIPTION OF SCHEDULE	PAGE NO
1	Earnest Money Deposit (EMD)	
2	Schedule –I	
	Structure and organization	
3	Schedule-II – Financial capability	
4	Schedule-III – Technical competence	
5	Schedule-IV – Man Power	
6	Schedule-V – Machinery	
7	Schedule-VI-A – Experience Certificate (works completed within past 5 years)	
8	Schedule – VI-B – Experience (Works under progress)	
9	Affidavit as per the format (Annexure – 'A') available in the tender schedule.	
10	Annexure-B	
11	Current Income tax returns	
12	Experience certificate (Annexure-C) as specified in the tender	
	documents.	
13	Revenue solvency for a value of Rs.30.00 lakhs with upto date EC. (i.e. the Encumbrance certificate should have been obtained from the sub registrar office on (or) after the date of tender notice for the period from the date of solvency).	
14	Balance sheet with profit and loss account for the past 5 years duly certified by the Chartered Accountant.	
15	Banker certificate (Annexure-D) for the Bank balance and unutilized Over Draft (OD).	
16	Tools and Plants, Machineries certificate duly authorized by Chartered Accountant.	
17	Certificate received from the concerned authorities for Balance works on hand as specified in the tender schedule.	
18	Proof for work force (Annexure-E) as specified in the tender document.	
19	Any other crucial documents like Proprietorship, Partnership Deed, Company incorporation certificate etc., is enclosed with the tender.	
20	GST Registration Certificate.	
21	Letter of Consent (Annexure – F)	
22	Sales Tax verification certificate (Annexure – G)	

#### **BOOKLET-3**

### OTHER TERMS & CONDITIONS OF THE TENDER INCLUDING DRAWING

### Schedule 'A'

### FINANCIAL BID IN COVER - II GIVEN SEPARATELY

# Schedule 'B' - ANNEXED SEPARATELY TYPICAL DRAWINGS OF THE PROPOSED BUILDINGS

Particulars	Description			
Administrative Building	1 Plan			
	2 Plan of foundation layout			
	3. Footing and Plinth Beam cross sectional view			
	4 Plan of Base plate			
	5 Elevation View			
Training Center and	1 Plan			
Administrative Block				
	2 Plan of foundation layout			
	3 Footing, pedestal layout, Plinth Beam			
	4 Plan of Base plate			
	5.Base plate details			
	6 Elevation View			
Technology Center	1 Plan			
	2 Plan of foundation layout			
	3 Plinth Beam, Purlin layout			
	4 Section Details			
	5 Elevation View			

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

### Schedule 'C'

### **Additional Specifications/Conditions**

- 1. The Contractor shall make his own arrangements for clean, fresh water for use in the work and shall meet all charges thereof.
- 2. All iron work or steel work of every kind, 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 red lead paint without extra claim.
- 3. The Teak Wood shall be of best Indian Wood only and the country wood shall be species like Pillamarudu or Kariamarudhu or its equivalent shall be subject to inspection and approval by the Concerned Engineer before use.
- 4. Holes and chassis for electric wiring, water supply, drainage etc., shall be provided as directed during the progress of work without claiming any extra cost.
- 5. All external corners, edges of beams, edges of door and window openings etc., shall be finished with camber 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 cost for finishing the corners, edges etc., will be paid.
- 6. The arrangements for Steel rods for reinforcement for each RCC work shall be in accordance with the working drawings supplied.
- 7. The planks for form work and centering for RCC work shall be of well-seasoned timber approved by the Concerned Engineer according to sub clause 10 of T.N.B.P. No. 30. They must be made smooth and perfectly leveled at top so as to give a smooth and even finish to the 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 concerned 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 concerned 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. As and when required, the proper care shall be ensured to minimize wastage.
- 15. For all RCC works the rate shall include the treatment of bearings as per plan of TNBP. No extra payment will be made.
- 16. 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 floor wise will not be entertained under any circumstances.
- 17. The contractor should not employ child labours.
- 18. If night work required to fulfill the agreed rates of progress, all arrangement shall be made by the contractor inclusive of lighting without any extra cost.
- 19. Rates:- The tenderer shall quote their rates for the finished item of work only as given in the Schedule-A, it shall be clearly understood that no increase in the rates tendered for will be permissible on any account after the tenders are accepted.
  However price adjustment will apply only when the fluctuation of rates exceeds by 3% compared to the estimate rates (RBI Index Price). Price adjustment shall be made for both increase and decrease in the cost of materials in accordance to the G.O.Ms.No.101 Public works
  - (G2) Dept, Dated: 10.06.2009. The applicable class in the said G.O. form part of this tender and the interpretations, amendments and corrections and deletions for the above G.O. issued after the G.O. date will also be valid for this tender.
- 20. The rate for all the items shall be quoted for in the metric units.
- 21. 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.
- 22. The electrical works should be executed by a person or firm holding 'A' grade or 'B' grade licence issued by Licensing Board / Government of Tamil Nadu.

- 23. Once the offer of the tenderer is accepted by TPIPL, 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 (with GST) shall be forfeited and tenderer shall not be entitled to refund the same.
- 24. 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 unprecedented 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 Engineer within one month from the date of execution of the agreement failing which TPIPL shall be entitled to take out whatever 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.
- 25. Water closet, basins, urinals, sinks and other sanitary ware shall be of approved make as required in the relevant items. The fixing of these should be in accordance with the special specifications after the completion of the work.
- 26. 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" at this end and at the other end with the depth of not less than 3".
- 27. The contractor should procure approved quality of paint only in containers. The above container should be used in the presence of the Concerned Engineer and got approved before use. On any account paint in other than original container will not be allowed for use.
- 28. 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 contract and the contractor is not responding to the demand for the payments of the said amount, then TPIPL. shall be entitled to recover the said amount under the provisions of the Tamil Nadu Revenue Recovery Act
- 29. Any extension of time may not be granted by the authority unless the delay is caused by TPIPL.
- 30. The contractor is bound by all the condition of clauses of standard General condition to contract as amended time to time if in the course the contract, any G.O. is issued

- introducing new condition or clauses, Supplemental Agreement must be executed by the contractor for implementing the condition.
- 31. If the contractor is allowed to use the existing roads, he shall maintain them in good condition at his own cost throughout the period of contract.
- 32. 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.
- 33. Royalty / seigniorage charges due for use of any quarry land shall be paid by the contractor.
- 34. The contractor should be responsible for the safe custody storage of materials under dry conditions at the place of work approved by the concerned Engineer.
- 35. The contractor should abide by the contractor's labour regulation framed by Tamil Nadu.
- 36. Impounding minimum 10 cm of water over roofs for 48 hours before laying the weathering course and pressed tiles to check the water tightness.
- 37. Photo copies of the certificate for the technical personnel to be enclosed along with the tender.
- 38. 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.
- 39. No tenderer is permitted to withdraw his / her / their tender at any stage. If any tenderer withdraws his/ her/ their offer within the tender validity period his / her / their EMD/ SD (with GST) shall be forfeited and his / her / their name will become noted for blacklisting in future.
- 40. 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 works executed under sub-contract will not be considered for this purpose. The evidence for the same should be produced prescribed form from an officer not less than the rank of the Superintending Engineer of the Government or Government undertakings /responsible person of the Private organizations.

The experience with private organizations should be supported along with TDS statement.

In case, the contractors who have executed works in Govt..., a satisfactory performance certificate in the prescribed format from the Superintending Engineer concerned

departments should be furnished

Credentials of the tenderer(s) for the works executed by him / them in the past 5 years supported by certificates issued by the authority not lower than the rank of Superintending Engineer should be furnished. The date of completion of the works stated in the experience certificate should be within the past 5 years prior to the date of tender.

#### 42. Conciliation

If any dispute or difference arises between TPIPL and the contractor with regard to the Contractual obligations, the same shall be referred to a Conciliator and settled by conciliation as per the provisions of the Arbitration and Conciliation Act, 1996. The sole Conciliator shall be nominated by the Managing Director of TPIPL. Conciliatory efforts are mandatory in tune with the Alternative Disputes Resolution (ADR) process before invoking the Arbitration Clause. The Conciliator shall endeavor to conclude his proceedings within three weeks from the date of reference of a dispute or claim to him. The venue of the conciliation shall be at Chennai and the language to be used in conciliation proceedings shall be in English.

#### 43. Arbitration

In case of any dispute or difference arising between TPIPL and the Contractor relating to any matter arising out of or connected with the Contract which still remains unsettled even after Conciliation, such dispute or difference shall be referred to the sole Arbitrator nominated by the Managing Director of TPIPL. The Arbitral proceedings shall be conducted in accordance with the provisions of the Arbitration and Conciliation Act, 1996. If the Arbitrator for any reason has to discontinue the Arbitration before completion of the arbitral proceedings, the Managing Director of TPIPL shall nominate another eligible and suitable person as Arbitrator and such Arbitrator may continue the proceedings from the stage at which his predecessor has discontinued or may proceed de novo.

The Arbitral Award shall be final and binding on both TPIPL and the Contractor. No part of the Contract shall be suspended by the Contractor on the ground of pendency of the Arbitral Proceedings. The venue of Arbitration shall be at Chennai. The language to be used in the Arbitral proceedings shall be in English.

#### 44. Jurisdiction

The Courts in the City of Chennai alone shall have the jurisdiction to try any matter or dispute or reference between TPIPL and the Contractor arising out of the Contract.

#### 45. Penalty for Defective Construction

If any defect is noticed by TPIPL in the construction of any portion of work/ component,

TPIPL shall levy penalty upto 10% of the total value of the defective work as assessed by TPIPL, in addition to the rectification of works at his cost.

#### 46. Penalty for Slow Process

If the Contractor fails to maintain the required rate of progress/ milestones stipulated for the work as a whole or in any of the component or in the case of works not commenced, TPIPL shall have the right to impose penalty of such an amount as he may deem fit for every day of delay caused in the progress of the work as a whole or in part as well as for the portion of the work remaining not commenced, subject to the condition that the total penalty imposed shall not exceed 5% of the total contract value. The penalty levied on the Contractor is however subject to modification at the discretion of TPIPL for valid reasons which are to be recorded.

### 47. Procedure for Levying of Penalty

The programme schedule drawn for the work entrusted contract basis, should be kept up by the Contractor without any slippage. TPIPL shall monitor the execution of the work with reference to the programme schedule stipulated. TPIPL on identification of any defective construction or any slippage in the programme schedule in any of the component shall issue a show-cause notice either by RPAD or through personal service to the Contractor, giving 15 days' time for furnishing the reasons therefore by the Contractor. In cases, where the reason adduced by the Contractor is not convincing, the penalty contemplated in the agreement conditions shall be invoked.

#### 48. Liquidated Damages

If the Contractor fails to complete the work as a whole or part thereof within the stipulated period, the Contractor shall be liable to pay liquidated damages at 0.10% of the value of the contract value / as decided by TPIPL for the delay. The amount recoverable towards liquidated damages shall, however, be restricted to 5% of the total contract value. The imposition of the liquidated damages clause will be without prejudice to the rights of TPIPL to terminate the contract as time-barred.

For imposing liquidated damages, detailed show cause notice shall be served on the defaulting Contractor either by RPAD or through personal service. The first notice shall be served allowing 15 days' time to the Contractor for furnishing the reply by them. In case of the non-receipt of reply on expiry of 15 days' time from the date of first notice, the second notice shall be served allowing 7 days of time to the Contractor for furnishing the reply by them. Again in case of non-receipt of reply on expiry of 7 days' time from the date of second notice, the third notice shall be served to allow 3 days of time to the Contractor

for furnishing the reply by them. On receipt of the reply, it shall be verified by TPIPL and liquidated damages clause shall be invoked by issuing an explicit speaking order to the Contractor. Similarly, the non-receipt of any reply from the Contractor shall attract imposing the liquidated damages clause automatically and in this case also, the liquidated damages shall be imposed by issuing an explicit speaking order to the Contractor.

#### 49. Foreclosure of Works

TPIPL shall have the right to issue notice to the Contractor, for any reason whatsoever does not require the whole or part of the works to be carried out after the award of the contract. The contractor shall not have any claim towards compensation or whatsoever, on account of any profit or advantage, which he might have derived from the execution of such works. For the works executed which could not be utilized in view of the foreclosure, the Contractor shall be paid an eligible amount as certified by TPIPL.

#### Schedule 'D'

#### GENERAL CONDITIONS

Applicable to all cases of work where a minimum of fifty workers are employed.

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

The contractor's special attention is invited to clauses to the General conditions to contract of Tamil Nadu Building Practice and he is requested to provide at his own expense the following amenities to the satisfaction of the Concerned 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 sterilized dressings and sterilized 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 proximity 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 at least 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 Concerned 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 exceed 100	3 Nos
iii. For every additional 100	3 Nos
If women are employed, separate latrines and urinals screened from those for me	en 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 at least four times daily and atleast twice during working hours and kept in a strictly sanitary conditions.

#### 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 force in the locality are accustomed to. A foot area of about 6'×5' for 2 persons shall be provided. The sheds are to be in rows with five feet clear space between rows if conditions could permit. The work force shall be laid out in units of 400 persons each. Each unit to have a clear space of 12m allaround.

#### ADDITIONAL CONDITIONS

- 1. Once the offer of the tender is accepted by TPIPL, 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 (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/her/their own cost against losses due to floods and other acts of God. No claim from the Contractor shall be entertained by TPIPL for such losses.

i) Earnest Money Deposit (*without GST*) : 1% (one)

ii) Security Deposit *(with applicable GST)* : 2% (two) of the contract value

- iii) Retention Money Deposit (with applicable GST): At 5% (five) from the each bill
- 3. The contractor / tenderers who are covered under the Employees Provident fund and Miscellaneous Provision Act 1952 shall produce the Registration Number 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.
- 4. 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.
- 5. The testing shall be done by the contractor at their own cost of the materials such as cement, sand, bricks, steel, pressed tiles, water, etc., and the finished products like concrete cubes. Every consignment of cement and steel supply should be tested for quality at contractors own cost.
- 6. It should be clearly understood that the rate quoted by the tenderer / contractor is inclusive 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.
- 7. The tenderer / contractors will produce test certificate obtained from any one of the Government institutions for cement and steel brought to site. As and when required by TPIPL, the cement and steel brought to the site shall be tested by TPIPL from any one of

- the approved Government institutions and only when the test results confirm to the ISI specifications they will be allowed to be used in the works.
- 8. TPIPL 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.
- 9. Tenderer's representative participating in tender opening should produce the authentication letter from the tenderer on the date and time of opening of tender.
- 10. Tenders from joint ventures will not be considered.
- 11. All photo copies of the documents enclosed with tender should be attested by the notary public / Gazetted officer.
- 12. Telegraphic tenders will not accepted.
- 13. The tenderers are not permitted to produce / submit any documents after opening/during opening of tender.
- 14. The EMD amount should be the exact amount SUBMITTED. If short, the tender status will be shown as invalid.

# 15. Condition for Engaging the migrated/interstate workers in the Construction work site by the Contractors:

- 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.

#### PRICE ADJUSTMENT CLAUSE

Contract price shall be adjusted for increase or decrease in rates for select critical construction inputs namely cement, steel and POL in accordance with the following principles and procedures and as per formula given below and will be operated by the respective concerned Engineer.

- A. Price adjustment will apply only when the fluctuations of rates exceeds by 3% compared to the estimate rates (RBI Index).
- B. The price adjustment shall apply for the work done from the start date upto end of the initial Intended completion date or extended period by the concerned Engineer and shall not apply to the work carried out beyond the stipulated time for reasons attributable to the contractor.
- C. The price adjustment shall be determined during each quarter of the calendar year for the purpose of calculation of price adjustment in respect of cement and steel.
- D. In respect of POL it may be considered on PASS through basis with payment of actual rates / price at the rates charged by IOC.
- E. All works for which price escalation is contemplated must have miles stones fixed in physical terms and have a prefixed timeline for usage of inputs which would clearly stipulate the nature and quantum of cement, steel and other inputs which would be utilized for the work in each time period between two milestones. Escalation will be given only for those quantities which would have been used had the contractors stuck to this original timeline. However if the contractor does a certain quantity of the work in the third quarter which he should have done in the second quarter he can still claim escalation on that quantity at the rates as applicable in the second quarter if the reason for executing the same in the third quarter is attributable to the contractor.

#### F. The formula for adjustment of prices are

R= Value of work during the quarter under consideration.

#### i. Adjustment of cement component

Price adjustment for increase or decrease in the cost of cement procured by the contractor shall be paid in accordance with the following formula if this component is involved in the work executed during the quarter under consideration.

- $V_c = 0.85 \text{ X P}_c / 100 \text{ x R x ( C}_1 C_0) / C_0$
- $V_c$  = Increase or decrease in the cost of work during the quarter under consideration due to changes in the rates of cement.
- $C_0$  = The RBI index for cement for the quarter during the date of opening of tenders
- $C_1$  = The RBI index for cement for the quarter under consideration
- $P_C$  = Percentage for the cement component of the work

#### ii. Adjustment of Steel component

Price adjustment for increase or decrease in the cost of steel procured by the contractor shall be paid in accordance with the following formula if this component is involved in the work executed during the quarter under consideration.

$$V_s = 0.85 X P_s / 100 x R x (S_1 - S_0) / S_0$$

 $V_s$  = Increase or decrease in the cost of work during the quarter under consideration due to changes in the rates of steel.

 $S_0$  = The RBI index for steel for the quarter during the date of opening of tenders

 $S_1$  = The RBI index for steel for the quarter under consideration

 $P_S$  = Percentage for the steel component of the work

The following percentages will govern the price adjustment for the entire contract.

a. Cement - P c - %

b. Steel - P s - %

G. Liquidated damages will be imposed on the contractor for the lapses / shortfall in achieving the rate of progress as per existing schedule.

If the CONTRACTOR fails to maintain the stipulated time of completion specified, he shall be liable to pay liquidated damages as set out in ADDITIONAL CONDITIONS OF TENDER AND AGREEMENT. It shall be clearly understood that failure to meet the completion dates and or slow progress of work shall also attract penalty as per General Conditions of Contract in Tamil Nadu Building Practice (TNBP).

# SPECIAL CONDITIONS FOR SENDING THE CEMENT CONCRETE CUBES FOR TESTING

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

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

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

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

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

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

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

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

- 3. The concrete cubes shall be cured for 28 days and send on 29<sup>th</sup> 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.
- 5. If the concrete cube is found to be of lesser strength then reduction in agreement rates shall be adopted as per the powers delegated to the concerned Engineers.
- 6. For working out the reduction of rates following procedures will be adopted.
  - When the strength of cubes tested is between 75% and 100% of the following strength the agreement rates should be reduced proportionately to the allowable strength of concrete (e.g.) concrete mix C.C. 1:2:4
  - (150 kg/cm<sup>2</sup>) cube strength achieved during testing 120 kgs (i.e.,) above 75%
- 7. When the strength of cube tested falls below 75% of the allowable strength, the R.C. Component from where the cube samples are collected shall be rejected. However as an additional check, non-destructive test will be conducted through recognized institutions like Anna University etc., where the concrete component can be rejected or reduced rate to be adopted will then be decided. However for working out the reduced rate, the cubes strength value only should be taken and worked out as given in para (6) above.

#### ADDITIONAL SPECIFICATION FOR QUALITY OF MATERIALS AND TESTS TO BE CONDUCTED

SL.	Material to be	Sampling		Name of test	Permissible Limits	Standards
1	Water	Lab Test: Local Source - Once in Three months Out source - Once in a month				IS 456- 2000 Clause 5.4
					Not more than 5 ml (or 50 mg/Lit) of 0.02 normal NaOH	
			ъ)		Not more than 25 ml (or 250 mg/Lit) of 0.02 normal H <sub>2</sub> SO <sub>4</sub>	
			C)	Solids: (i) Total Dissolved Solids	3000 mg/Lit	
				(ii) Sulphates (as SO <sub>4</sub> )	400 mg/Lit	
				(iii) Chlorides (as Cl)	2000 mg/Lit for Concrete not containing embedded steel and 500 mg/Lit for Reinforced Concrete work.	7
				(iv) Suspended Matter	2000 mg/Lit	
			d)	pH value	Not less than 6	
		Field Test: (Using Litmus Paper) Local Source - Once in Fortnight Out Source - For each Load(Lorry Load)		pH value	Not less than 6	
2	Cement (43 Grade)	One test for Every 300 Tonnes of single Brand (Test to be done, if there is change in Brand)				IS 269-2015
			a)	Initial setting Time	Not less than 30 minutes	
			ъ)	Final setting Time	Not more than 600 minutes	
			c)	Fineness of Cement		
				i) By Permeability Method	Not less than 225 m <sup>2</sup> /Kg	
				ii) By Standard Sieve Test	(or) Retained not more than 10%	
			av	Soundness of Cement		
			α,	i) By Le-Chatelier Method	Expansion not more than 10 mm	
				(or)		
				ii) By Auto Clave Test	0.80%	
			c)	Compressive Strength of C.M (1:3) Cube		
				i) 3 days (72 +/- 1 hr)	Not less than 23 Mpa (or) 230 Kg/Cm <sup>2</sup>	
				ii) 7 days (168 + / - 2 hrs)	Not less than 33 Mpa (or) 330 Kg/Cm <sup>2</sup>	
				iii) 28 days (672 + / -4 hrs)	Not less than 43 Mpa (or) 430 Kg/Cm <sup>2</sup>	
3	Steel			1	Kg/CIII	
301	a) Mild Steel (Grade I - Fe 250)	Each Load and Each Diameter (Min. 3 Samples)			=	IS 432 (Part-I 1982
			1	Yield Stress	Min.250 N/mm <sup>2</sup> (Or) 25 Kg/mm <sup>2</sup>	
				Elongation	Min.23.0%	
			c)	Ultimate Tensile Stress	Min 410 N/mm <sup>2</sup> (Or) 41 Kg/mm <sup>2</sup>	

SL. No	Material to be Tested	Sampling		Name of test	Permissible Limits	Standards
	b) High Strength Deformed Bars (Fe 415)	Each Load and Each Diameter (Min. 3 Samples)				18 1786 - 200
			a)	0.20% Proof Stress / Yield Stress	Min.415 N/mm <sup>2</sup> (or) 41.50 Kg /mm <sup>2</sup>	
			b)	Elongation	Min. 14.50%	
			c)		10% More than the actual Proof stress. But not less than 485 N/mm² (or) 48.50 Kg/ mm²	
	C) High Strength Deformed Bars (Fe 500)	Each Load and Each Diameter (Min. 3 Samples)				IS 1786 - 200
			a)	0.20% Proof Stress / Yield Stress	Min.500 N/mm <sup>2</sup> (or) 50.0 Kg /mm <sup>2</sup>	
			b)	Elongation	Min.12.0%	
			c)	Tensile Stress	8% More than the actual 0.2 Percent Proof stress. But not less than 545 N/mm² (or) 54.50 Kg/mm²	
4	Sand	Each Load		Clay, Fine silt and Fine Dust	Not more than 5% by Mass	IS 2116-1980
5	Coarse Aggregate	Every Quarry	a)	Either Crushing Value (Or) Impact Value		IS 383-1970
				i) Crushing Value		
				Aggregates used for concrete other than wearing surfaces.	Not more than 45%	
				Aggregates used for concrete for wearing surfaces(Such as Roads, Pavements).		
				(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).	Not more than 30% by weight	
			<b>b</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	Lot Size - For Every One Lakh Bricks - (Number of Samples 20.Nos)				IS 1077-1992
				For Class 35		
	-		a)	Compressive Strength	Not Less than 35 Kgf/cm <sup>2</sup> (or) 3.50 N/mm <sup>2</sup>	
			ъ)	Water Absorption	Not more than 20% by Weight	
			1	Efflorescence For Class 50	Rating not more than Moderate	
		2	a)		Not Less than 50 Kgf/cm <sup>2</sup> (or)5.0 N/mm <sup>2</sup>	
			b)	Water Absorption	Not more than 20% by Weight	
			c)	Efflorescence	Rating not more than Moderate	

SL.No	Tested	Sampling	Name of test	Permissible Limits	Standards
7	Hydraulic pressed Tiles	One test for area upto 1999 sq.m and one additional test for every 1000 sq.m.			IS 2690 - 199
		and part thereof			
			a) Water Absorption	Shall not exceed 15%	
_			b)  Flextural Strength	Shall not be less than 20 Kg / cm <sup>2</sup>	
8	Vitrified Tiles	One Test for an area upto 1999 sq.m and one additional test for every 1000sq.m. and part thereof.	-		IS 15622 - 200
			Deviation percent in Length &	±0.10	
			Width (2 or 4 sides)	±4.00	
			Deviation percent in Thickness	-1100	
			Maximum Deviation percent in	±0.10	
			Rectangularity		
			Confess Flat	±0.20	4
			Surface Flatness (Warpage)	Assessed a 0.08 lodfolderst mars 1.0	
			Water absorption percent by mass	Average <_0.08 Individual max 1.0	
				Average 47, Individual 44,min	
			Modulus of rupture in N/mm <sup>2</sup> Breaking Strength in, N	> 7.5mm thickness, 1500 (Min)	
			Scratch hardness of surface	6, Min	1
			(Mohs)		
			Bulk density in (g/cc)	2.20 Min	
			Impact Resistance	Required	
		Y)	Chemical Properties / Resistance	Required	
9	Electric Cable	One test for each Brand, each size	Conductor resistance at 20° C	l les	IS 664 - 1990
			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	
10	112 3	One sample for each	For 4.0 Sq.mm cable	Max. allowable limit 4.95 Ohm / Km	1
10	Wood	work	Lab Test – Moisture Test	Not more than 12%	IS 287 – 1993
			Field Test – Visual observation	Free from Rotten, unsound knots (or) knots incluster	IS 3629 - 196
11	Cube test in Lab		Compressive strength of 150mm Cube		IS 456- 2000
		1 to 5 m <sup>5</sup> ~ 1 set	M20 (1:1.5:3)		
		6 to 15 m³ - 2 sets	7 days	Not less than 135 Kg / cm <sup>z</sup>	
		16 to 30 m³ -3 sets	28 days	Not less than 200 Kg / cm <sup>2</sup>	
		31 to 50m³-4 sets	M25 (1:1:2)		
		>50m³—4plus one for each add 50m³	7 days	Not less than 170 Kg / cm <sup>2</sup>	
		(1 set =3 cubes)	28 days	Not less than 250 Kg / cm <sup>2</sup>	
			M30		
			7 days	Not less than 205 Kg / cm <sup>4</sup>	
			28 days	Not less than 300 Kg / cm <sup>2</sup>	/
12	Slump test	Type of work	With vibration	Without vibration	
	Slump test at site for all Reinforced concrete at regular intervals (Slump in mm)	Mass concrete, large section, roads and pavements		50 to 75	
		RCC foundation, substructures, thick walls and other heavy sections	25 50	40 to 115	

SL.No	Material to be Tested	Sampling		Name of test	Permissible Limits	Standards
		Thin vertical sections such as walls, beams, columns with congested reinforcement		40 to 50	100 to 175	
		When using concrete Pump		80 to 100		
13	M-Sand					IS: 383-2016 (3 <sup>rd</sup> Revision) For Zone-II
13.1	Test for Size and	Grading of Aggregate		IS Sieve Size in mm		IS: 2386(Part-I)- 1963
			a)	10 mm	Shall be 100%	
			b)	4.75 mm	Shall be between 90 & 100%	
			c)	2.36 mm	Shall be between 75 & 100%	
			d)	1.18 mm	Shall be between 55 & 90%	
			e)	600 micron	Shall be between 35 & 59%	
			ŋ	300 micron	Shall be between 8 & 30%	
			g)	150 micron	Shall be between 0 & 10%	
13.2	Test for	Specific Gravity			Shall be between 2.1 and 3.2	
13.3	Test for Wa	iter absorption, %			Shall not be more than 5%	
13.4	Test for	Bulk density				IS: 2386(Part-II
19200	**********		a)	Bulk density in Kg/l-loose	Limit not specified	1963
			b)	condition Bulk density in Kg/l-	Limit not specified	
13.5	Test for Del	eterious Materials		compacted condition		
			a)	Coal and Lignite	Shall not be more than 1%	
			b)	Clay lumps	Shall not be more than 1%	
			c)	Material finer than 75 μm IS sieve	Shall not be more than 10%	
			d)	Organic Impurities	Shall pass the test	
			e)	Silt content	Limit not specified	
13.6	Test for Sour	ndness of Aggregate				
			aft	loss of weight of the material er 5 cycles when tested with dium sulphate solution.		
13.7	Test for To	tal Alkali Content	То	tal alkali content as Na <sub>2</sub> O		
			1133	uivalent Percent	Shall not be more than 0.3%	
13.8	Test for S	ulphate content		ALIE DE LOUIS ACCESSANCE DE LA CONTRACTION DEL CONTRACTION DE LA C		
			Te	st for Sulphate content as	Shall not be more than 0.5%	
13.9		d Soluble Chloride		Acid Chloride content Percent	Shall not be more than 0.04%	
13.10	Test for Alkali	Aggregate reactivity	Ac	celeration Mortar bar Method		
			ac	e Average expansion of celerated mortar bar after 16 ys of casting percentage	1. Expansions of <0.10% - Indicates Innocuous behavior of aggregate. 2. Expansions between 0.10 and 0.20% includes both Innocuous and deleterious aggregate. 3. Expansion >0.20% indicative of Potentially deleterious aggregate.	
13.11	Test for Bulk	ing of Sand percent		Bulking of sand Percent	Limit not specified	IS: 2386(Part-II

### CONDITIONS OF EMPLOYING TECHNICALLY QUALIFIED PERSON

Technical o	ualified ma	an should l	be emplo	ved as	follows:

SL.NO.	L.NO. Value of Contract Qualification and No. of Tec Assistant to be employed (with GST)			
(1)	(2)	(3)		
1.1 Upto 1 the officer	Lakh	No Technical Assistant need be employed. However, if		
		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.		
	akh to Rs. 3 Lakhs Junior Engineer.	One Diploma holder in Civil Engineering or not less than		
		One B.E., (Civil) or equivalent degree holder or not less icer (Assistant Executive Engineer or Assistant Divisional		
1.4. Rs.10 years	Lakhs to Rs.25 Lakhs	One B.E., (Civil) or equivalent degree holder with three		
		experience in Civil Engineering works not less than one retired sub-divisional Officer plus one Diploma holder in Civil Engineering.		
1.5. Rs.25 years	Lakhs to Rs.50 Lakhs	One B.E., (Civil) or equivalent degree holder with three		
		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		
years		One B.E., (Civil) or equivalent degree holder with three		
		experience or not less than one retired Sub-Divisional Officer and one more B.E., (Civil) or equivalent degree holder.		
1.6. Above nature of a	Rs.50 Lakhs nd the	To be examined in individual case depending on 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	<b>EXPERIENCE</b>
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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 concerned Engineer-in-charge of the work counter signed by the concerned Engineer-in-charge shall be taken as the conclusive evidence and I/we shall be bound by such a certificate.

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

#### SPECIAL CONDITION FOR ELECTRICAL WORKS

- The work shall be carried out in accordance with the General specification for electrical works and the code of practice for electrical wiring installation I.S. 732-1963 & I.S. 3043-1964 and as amended upto date. All installation shall comply with the requirements of Indian Electricity Rules 1956 & Act and I.S. Code amended upto date.
- 2. Approval of the Engineer in-charge shall be taken well in advance for all materials and brand of materials to be used on work by the contractors, based on the approved brand of materials. 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.
- 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 incharge 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 TPIPL after obtaining service connection from Electricity Board and testing the line. Any loss and tampering of materials for which the payment was made good by TPIPL will be made 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" (3 mm) hyleam/Bakelite sheet. The thickness of MS sheet shall not be less than 3 mm thick.
- 18. Provision of fittings.
  - a. All switch Board shall be so placed that the bottom is normally 1.22 meter above floor level of such height as decided by the Engineer-in-charge.
  - b. All fittings shall be provided at 2.6 metre from the floor level or such height as decided by the Engineer in-charge.
  - c. The convenient 5/15 Amps. plug socket shall be 25cm. above the floor level or such height as decided by the Engineer in-charge.
  - d. Wiring shall run normally at 2.6 metre from the floor level or such height as decided by the Engineer in-charge.
- 19. The materials issued if any by TPIPL 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 fitting 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 galvanized stone enameled finished. The saddles used shall not be less than 24 gauge upto 25mm dia pipes and not less than 20 gauge for inner dia pipes.
- 27. The main earthening shall not less than 8 SWG copper (4.06mm) in case of copper wire earthening or 6 SWG.GI wire (4.98mm) in case of G.I. wire earthening. Separate earthing shall be provided for all mountings of rain Boards, distribution boards, 5/15 amps. 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 buried 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, plugpoint etc., should be restricted to three 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.

### SPECIFICATION OF ITEMS TO BE USED ON THE FIRE PROTECTION SYSTEM PIPING:

### **Under Ground Piping:**

The underground piping shall be MS black pipes conforming to IS 1239 class C the fittings shall be of IS 1239 part II. The pipes shall be provided with an anticorrosive treatment of Pypkote over a coat of primer as per IS 10221.

The pipes shall be laid 1 meter below the ground level on the road crossing area. The laying of the pipes shall be carried out as per the instructions given in this document.

The flanges shall be drilled to IS 1538.

### **Above Ground Piping:**

The above ground piping shall be of MS black pipes conforming to IS 1239 class C with the fittings conforming to IS 1239 Part II. The flanges shall be drilled as per IS:1538.

The pipe shall be fastened to the ceiling and the walls with proper supports maintaining the designated distances between supports. The pipe shall be painted with one coat of primer and one coat of P.O red paint.

### **CONVENTIONAL FIRE ALARM SYSTEM:**

### **Manual Call Point:**

The Manual Call Point shall be of break glass type unit completely enclosed in a MS housing each provision for conduit coupling. The Manual call point shall have the word Prescribed in car .Bold letters on Facia window "In case of FIRE BREAK GLASS" installation of Manual call point, it shall be provided with a push button of 30V, 3Amp rating and with 2 sets of No& NC contacts. The Manual call point shall be wall-mounting type and shall be provided with chain & hammer attached to it and shall be of weather proof type. The area of glass shall not be less than 30 Sq.mm.

### **Smoke Detector:**

The smoke detector with base and LED Photoelectric type shall work on Dual Chamber ionization principal to detect the products of combustion during the inpatient stage of Fire i.e. to detect in its early stage by sensing visible and invisible products of smoke. (Under Fire conditions. Presence of smoke shall trigger the circuit of the detector and shall send a signal of the control panel.

### **Fire Extinguisher:**

### **Dry Chemical Powder Extinguisher:**

Dry Chemical powder Extinguisher shall be with ISI Marking as per IS:15683. The extinguisher is to be fitted with separate body & handle. It is to be provided with wire-braided hose, with a ordinary nozzle for 4 kg extinguisher should be fitted with sodium bi carbonate powder. The Expelling of powder shall be done with the help of CO<sub>2</sub> cartridge.

### **Carbon Di-Oxide Extinguisher:**

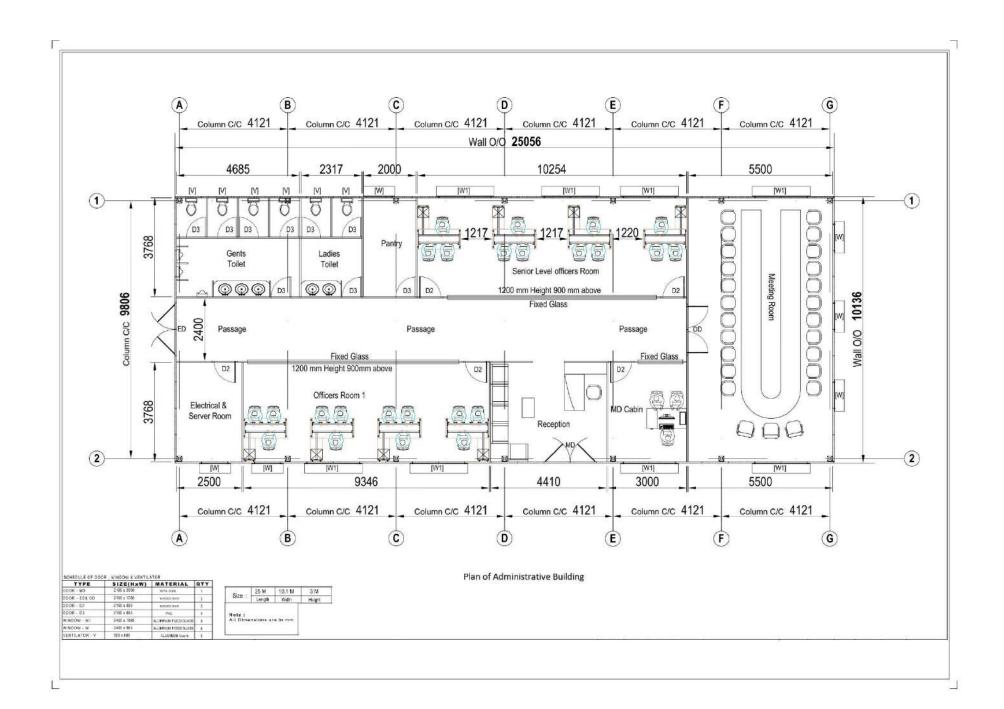
The CO<sub>2</sub> fire extinguisher shall be as per IS:15683 bearing ISI marking. The gas shall be stored in liquid form at a pressure of 70 KSC. The operation of the extinguisher shall be through a simple wheel mechanism. It shall also be filled with a safety device for emergency release of gas to prevent bursting of cylinders due to pressure fluctuations.

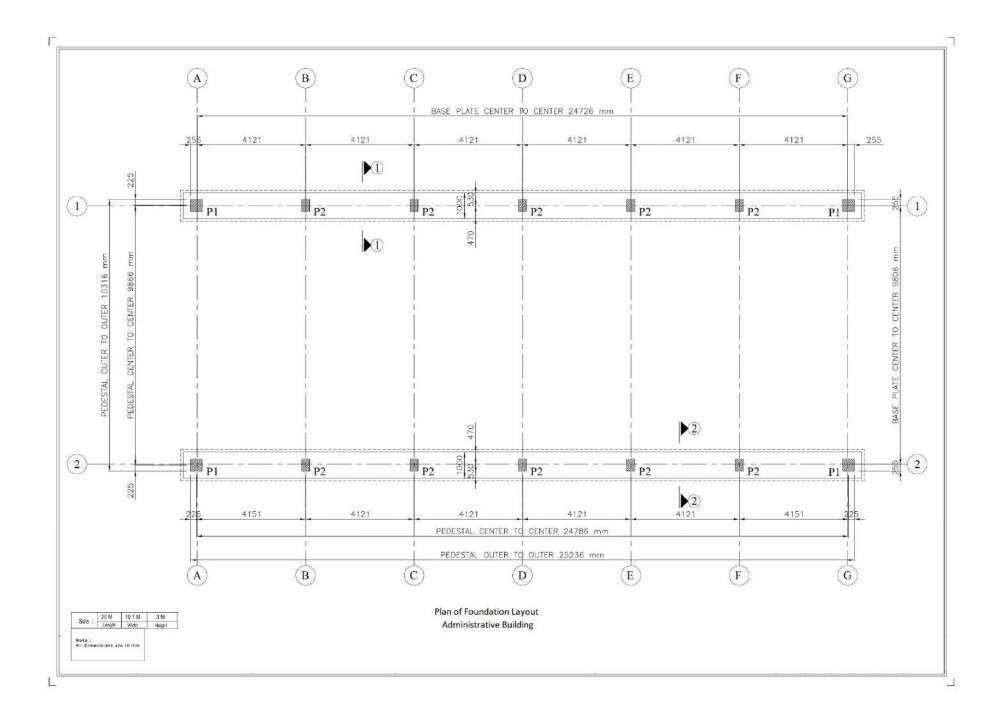
The Extinguishers shall be capacities of 2Kg and 4.5 Kg. The 2 Kg and 3 Kg extinguisher shall be fitted with a nonconductive distributor horn and the 4.5 Kg extinguisher shall have a flexible high pressure hose between the operating value and the horn.

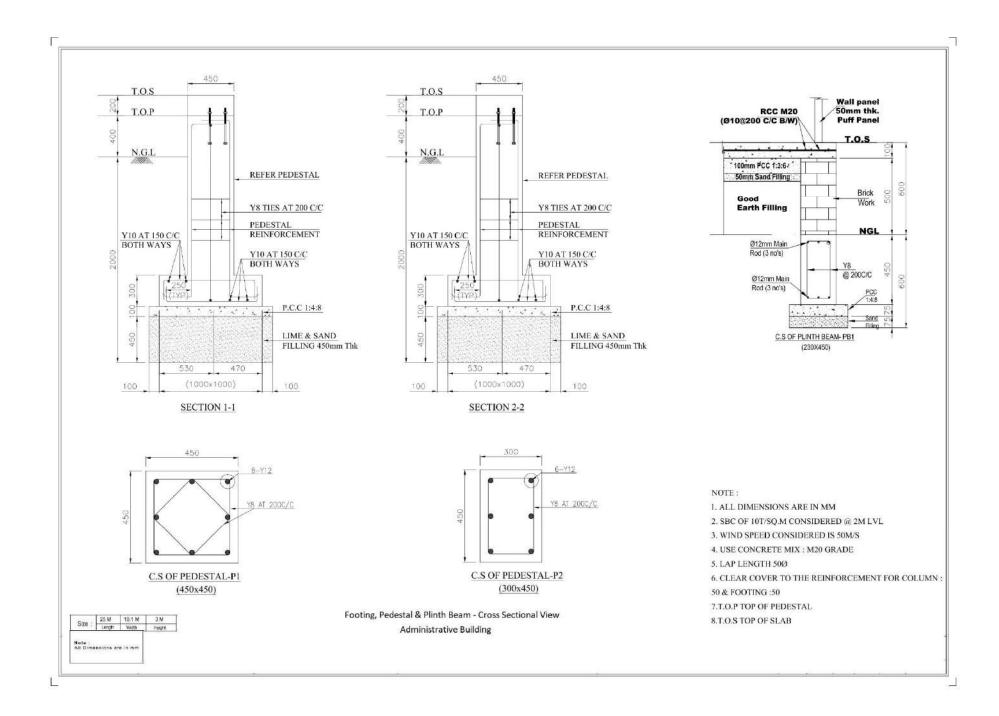
# Schedule 'B' TYPICAL DRAWINGS OF THE PROPOSED BUILDINGS

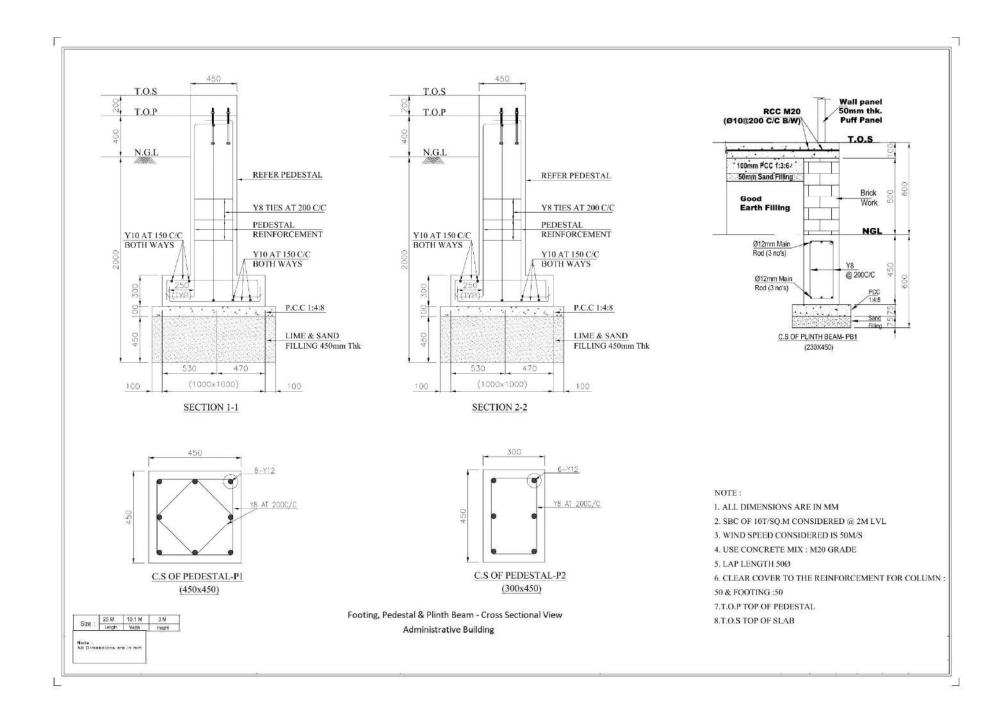
Particulars	Description						
Administrative Building	1 Plan						
	2 Plan of foundation layout						
	3. Footing and Plinth Beam cross sectional view						
	4 Plan of Base plate						
	5 Elevation View						
Training Center and	1 Plan						
Administrative Block							
	2 Plan of foundation layout						
	3 Footing, pedestal layout, Plinth Beam						
	4 Plan of Base plate						
	5.Base plate details						
	6 Elevation View						
Technology Center	1 Plan						
	2 Plan of foundation layout						
	3 Plinth Beam, Purlin layout						
	4 Section Details						
	5 Elevation View						

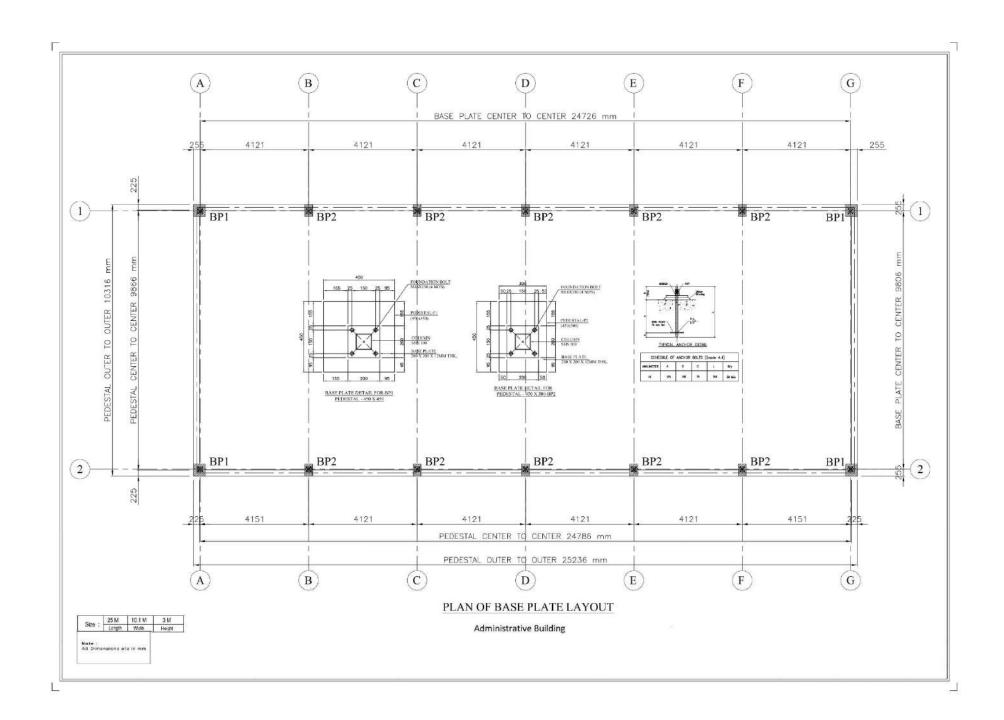
Note: (i) All drawings to be signed by the contractor as well as the officer entering contract.

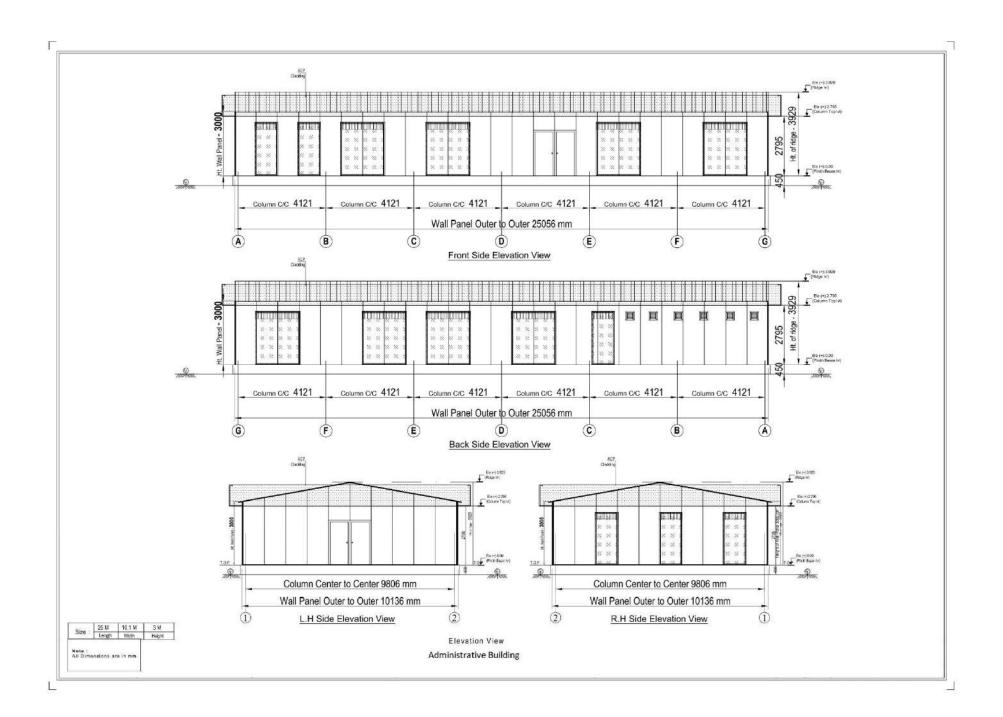


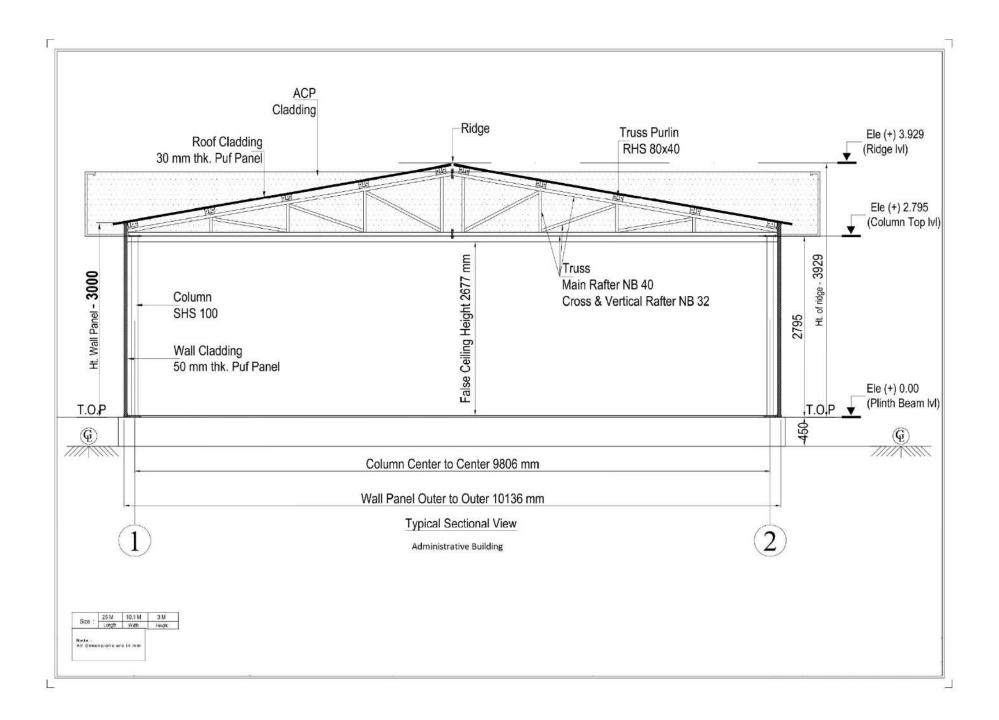


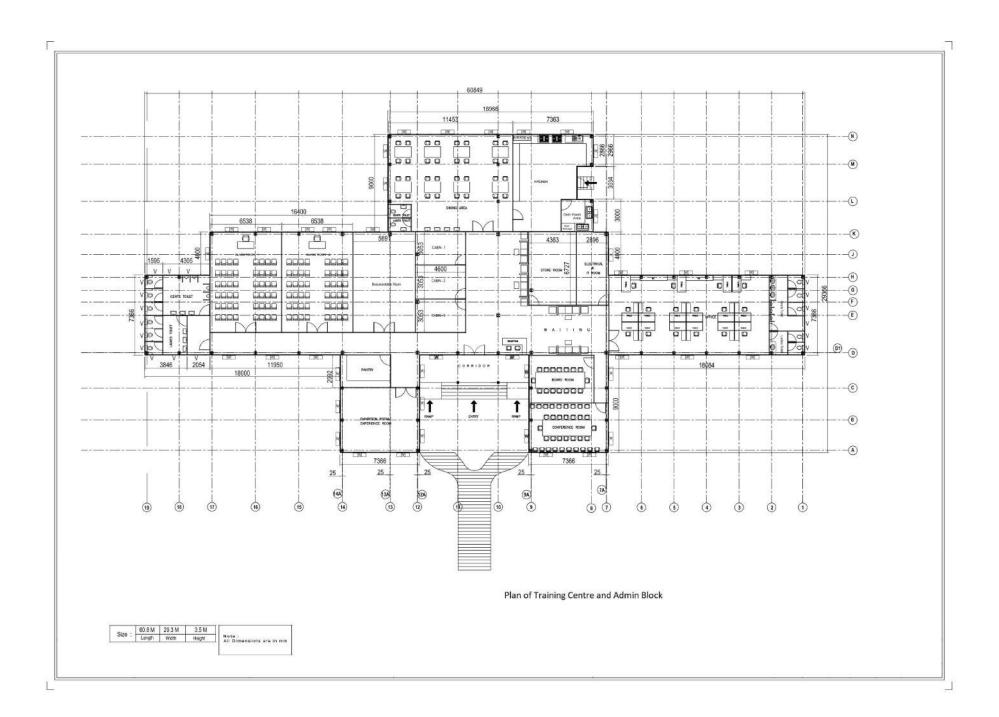


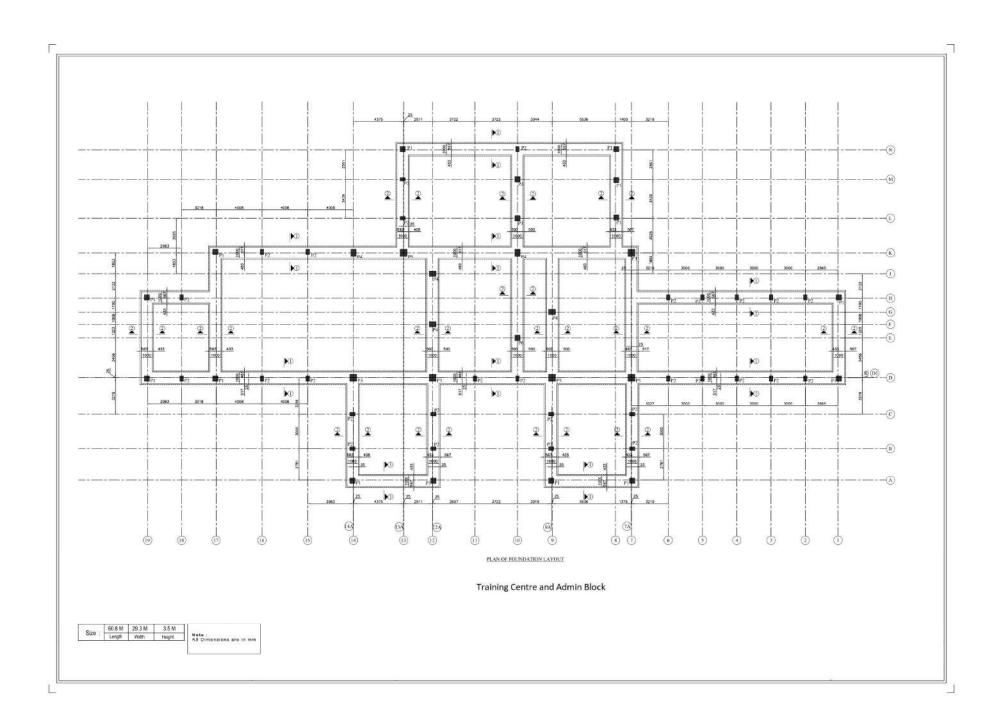


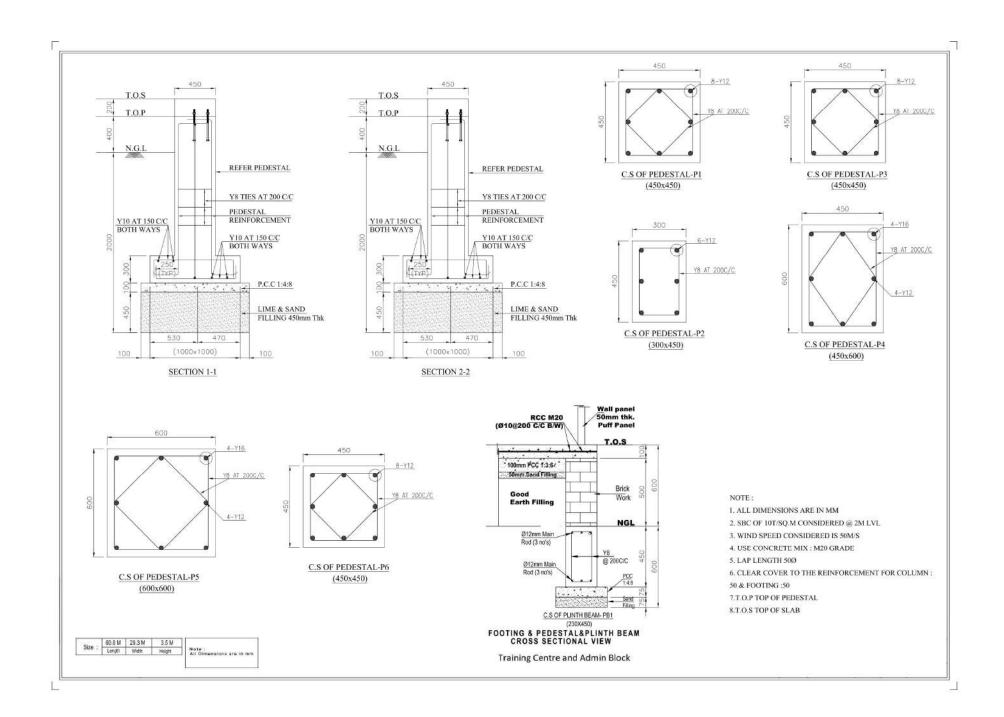


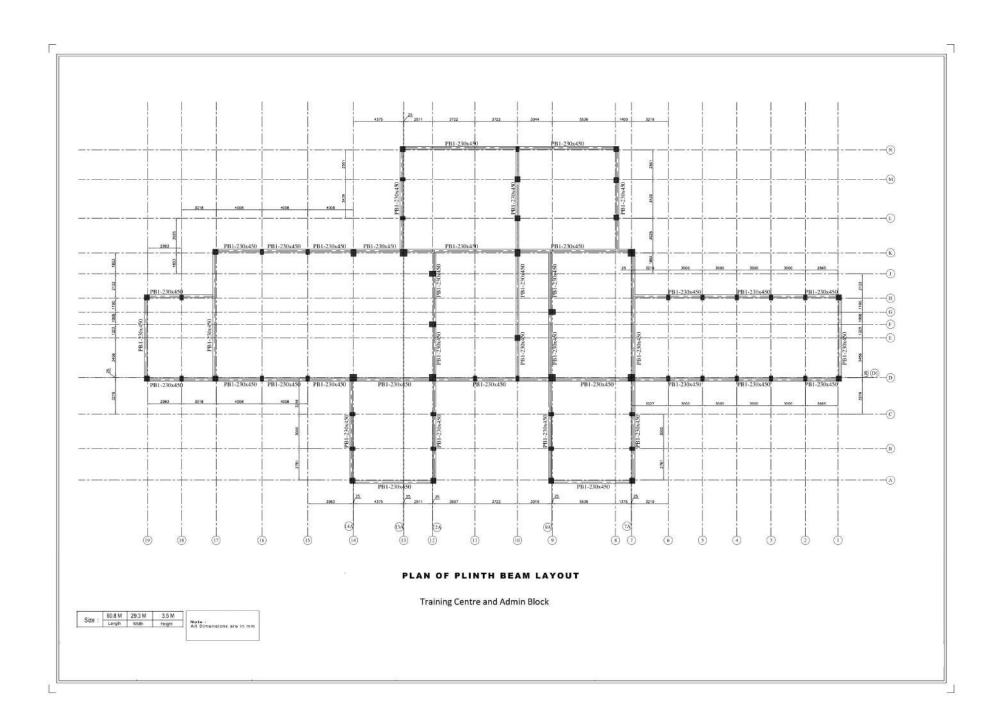


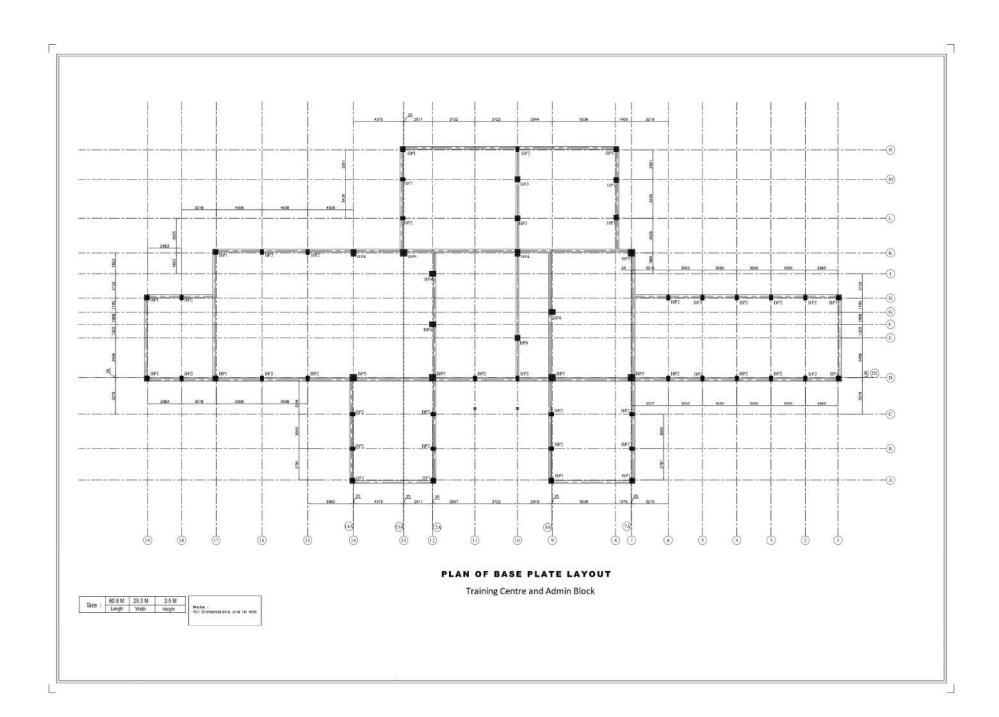


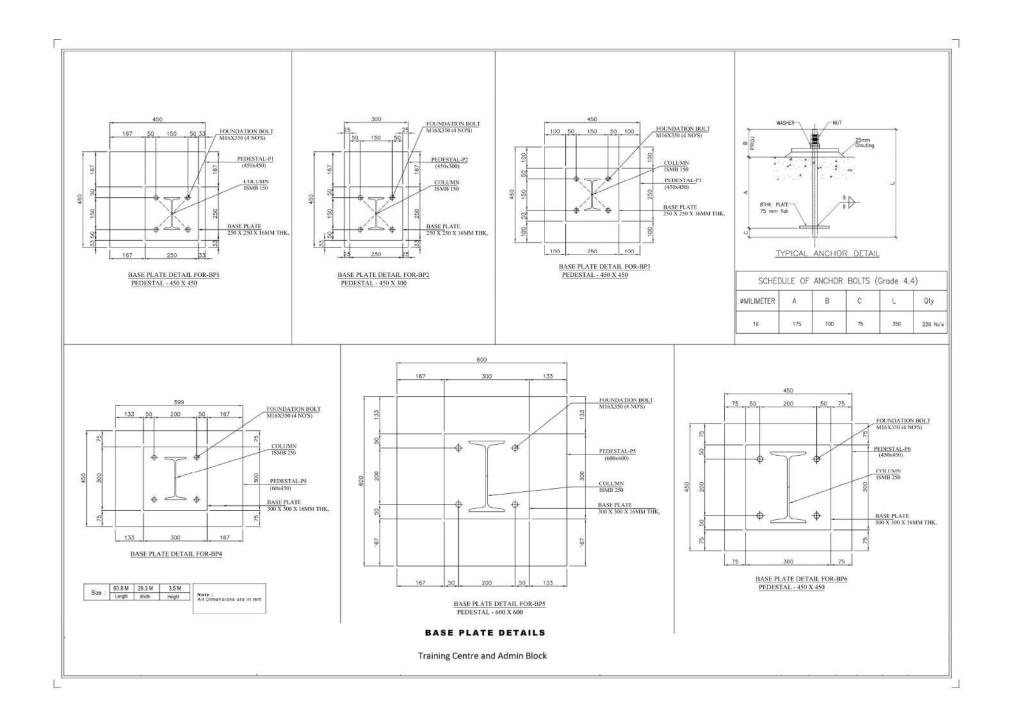


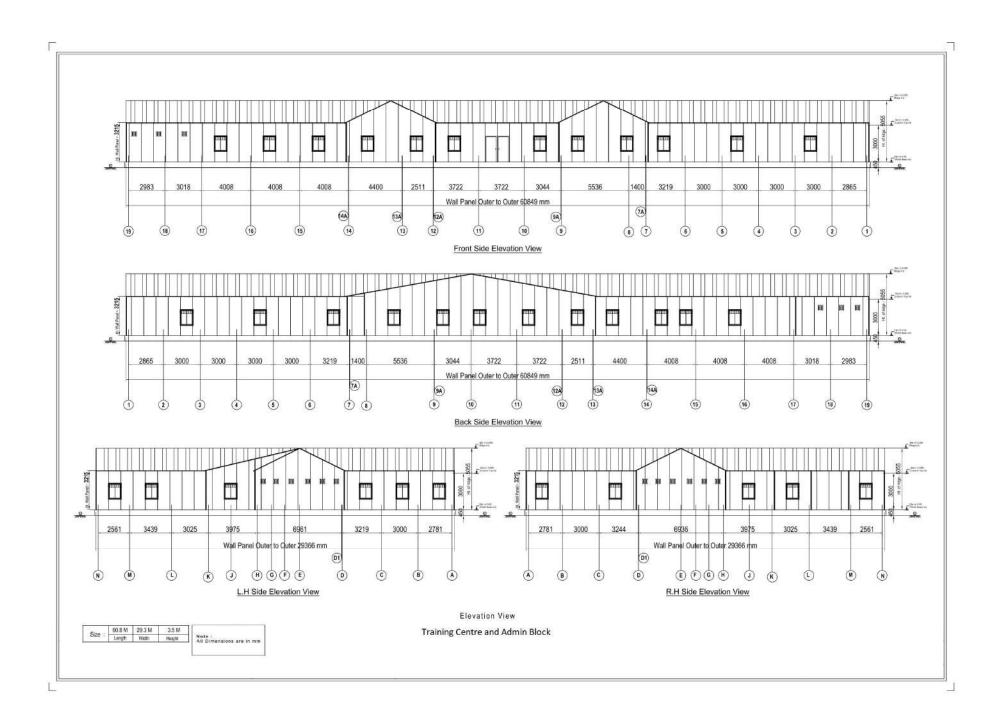


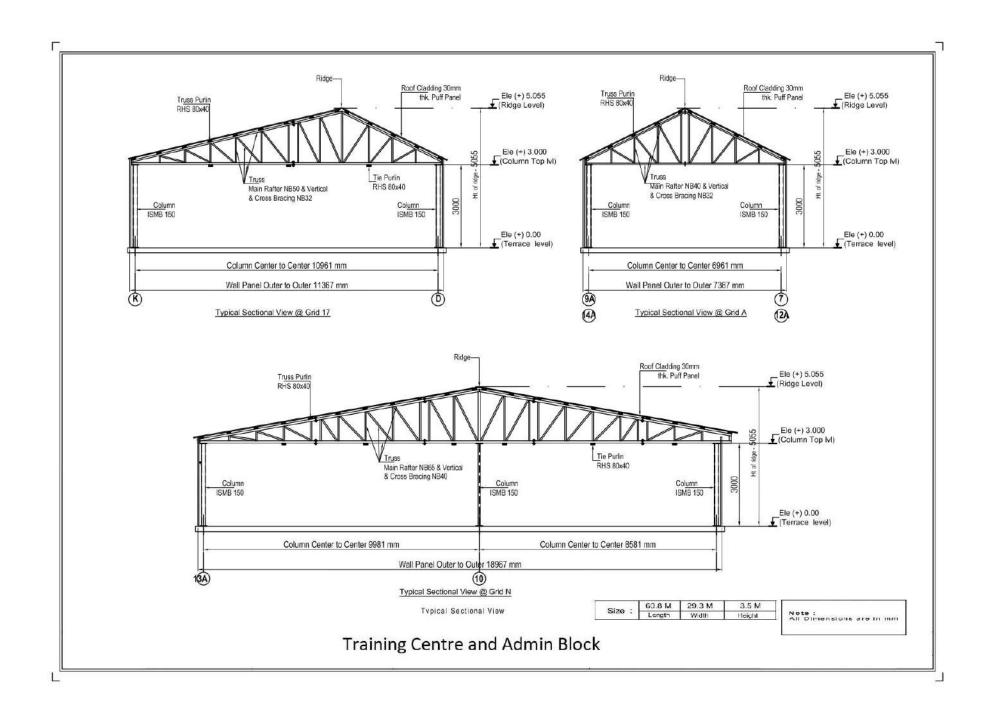


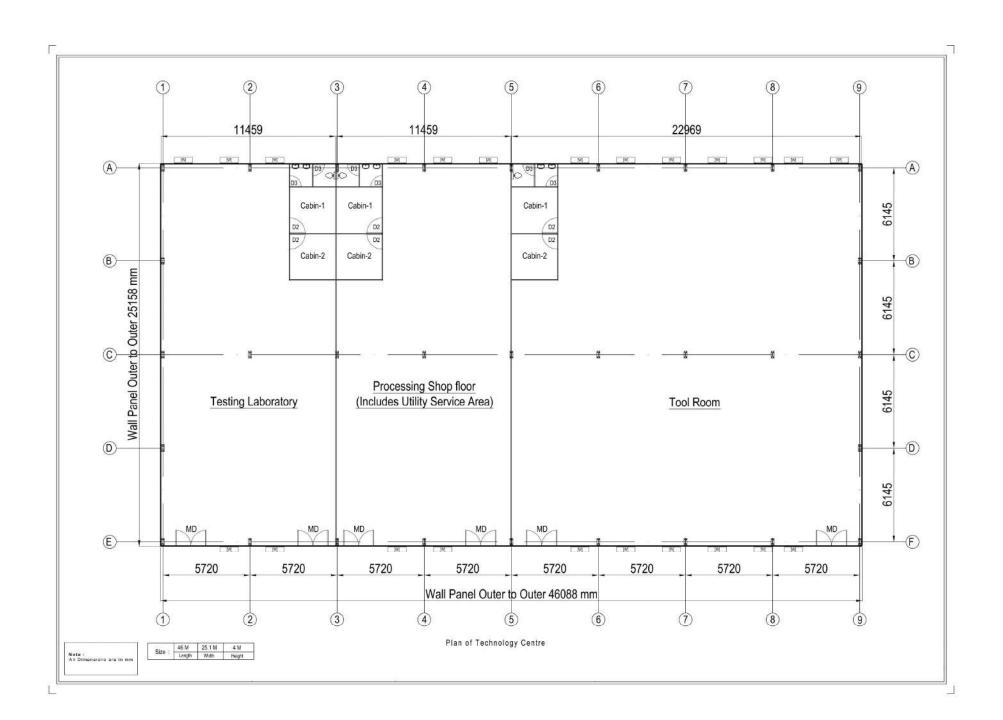


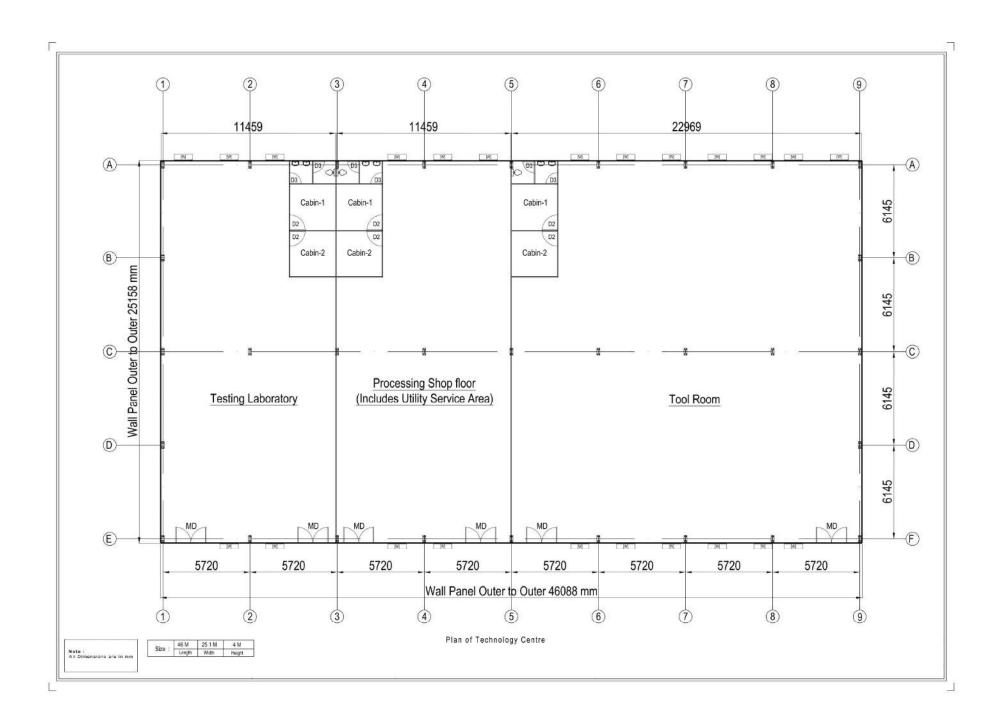


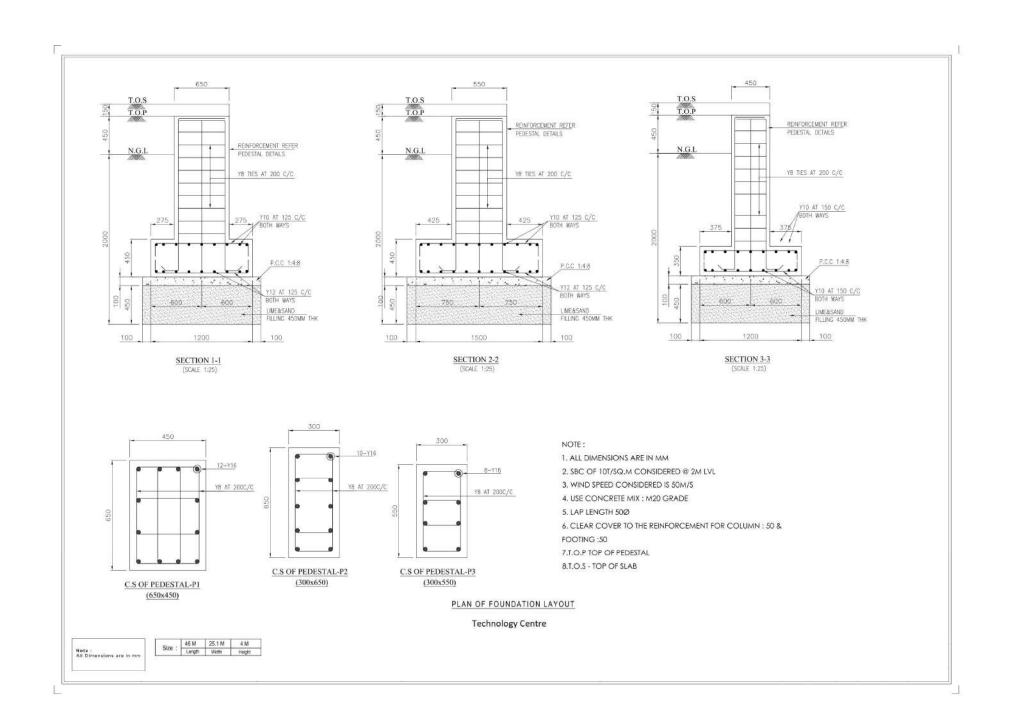


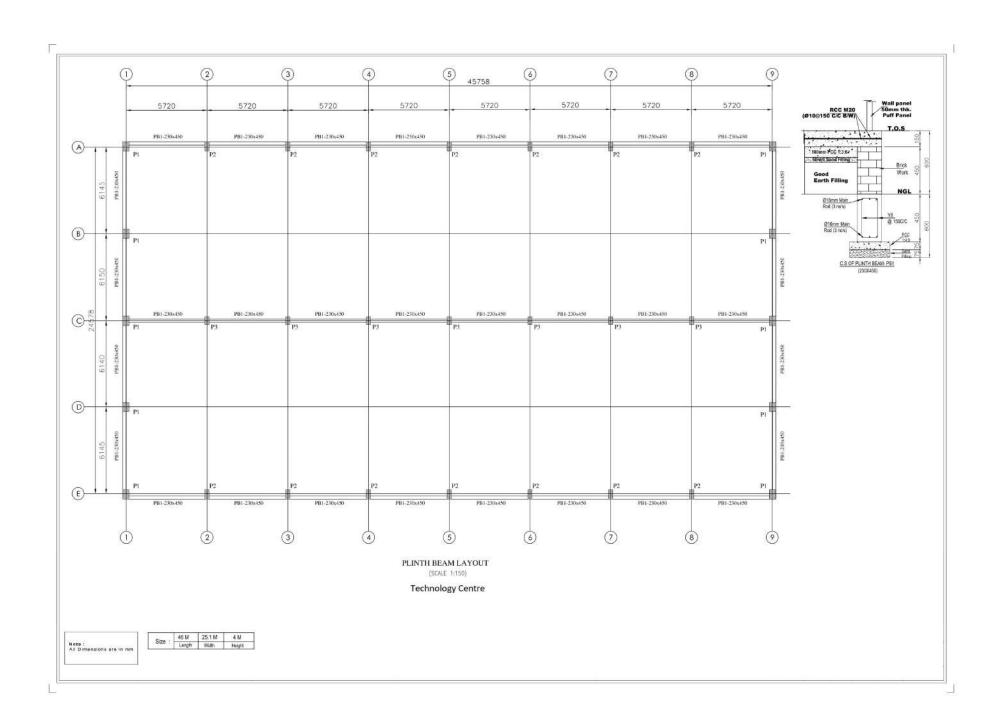


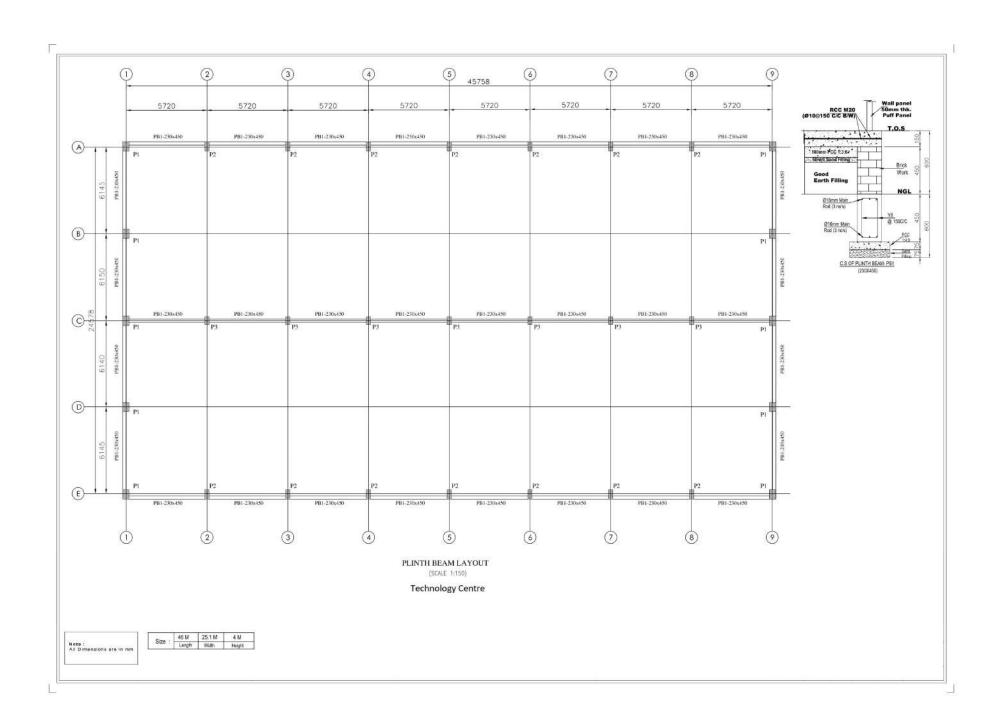


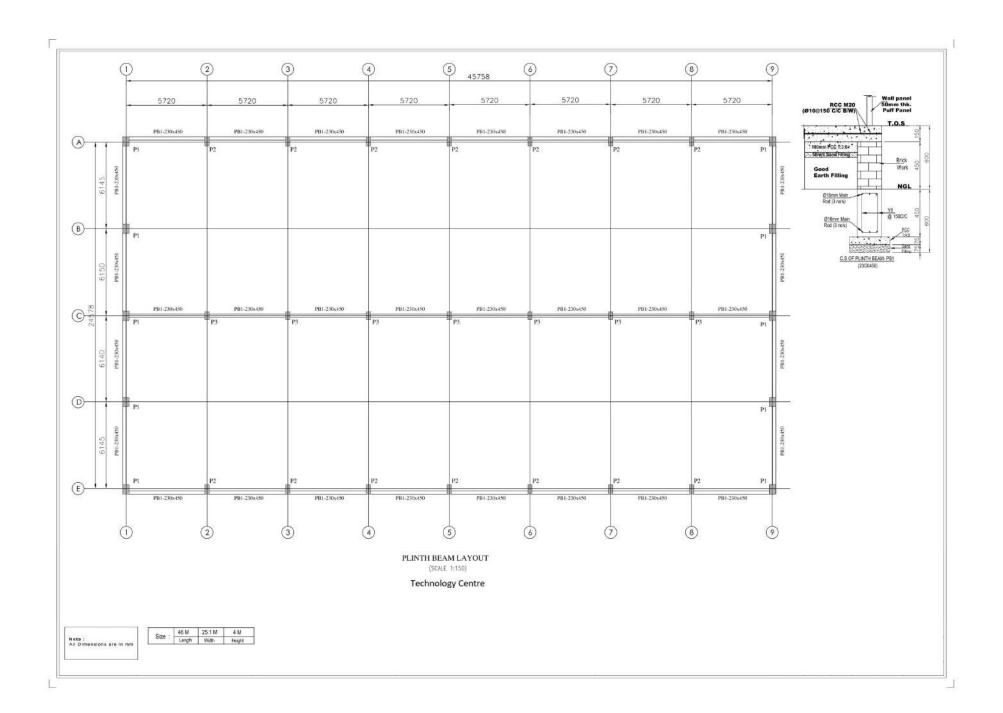


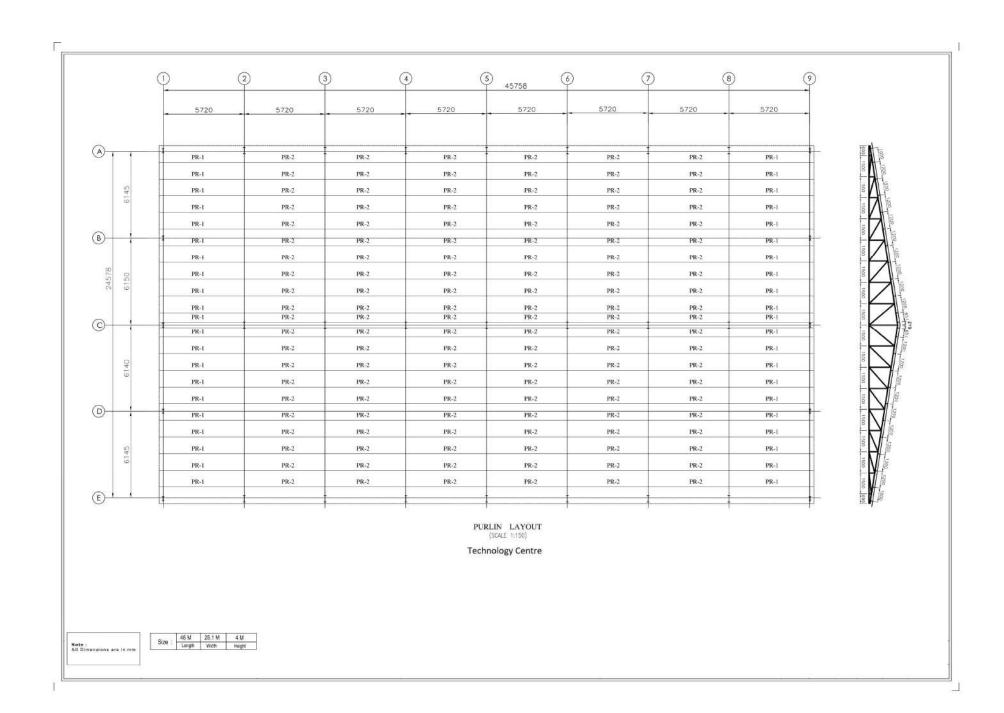


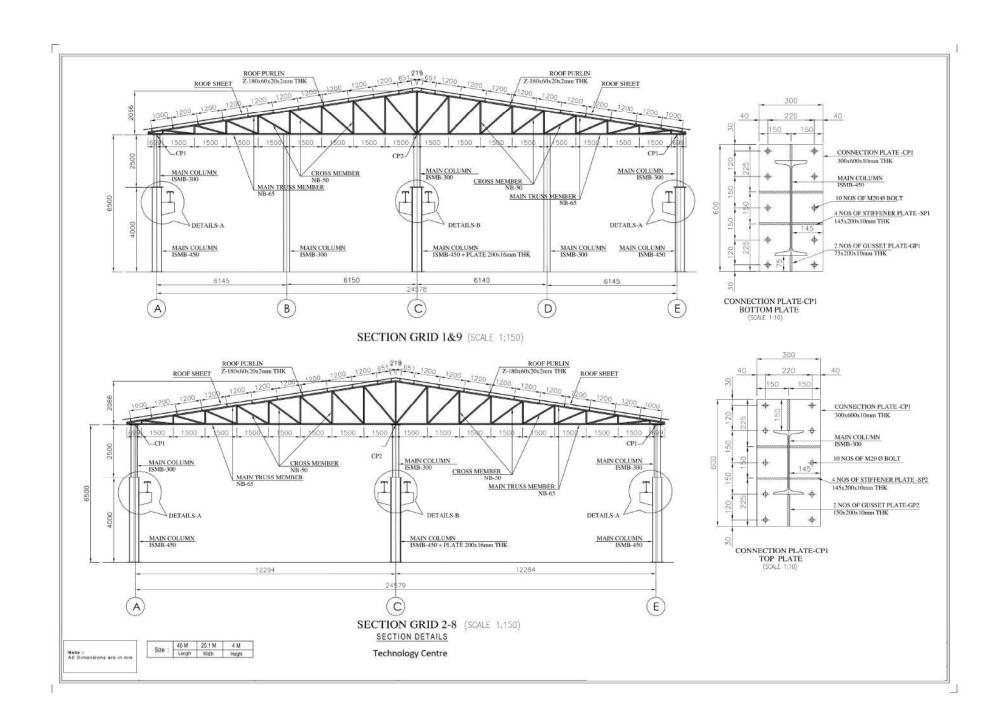


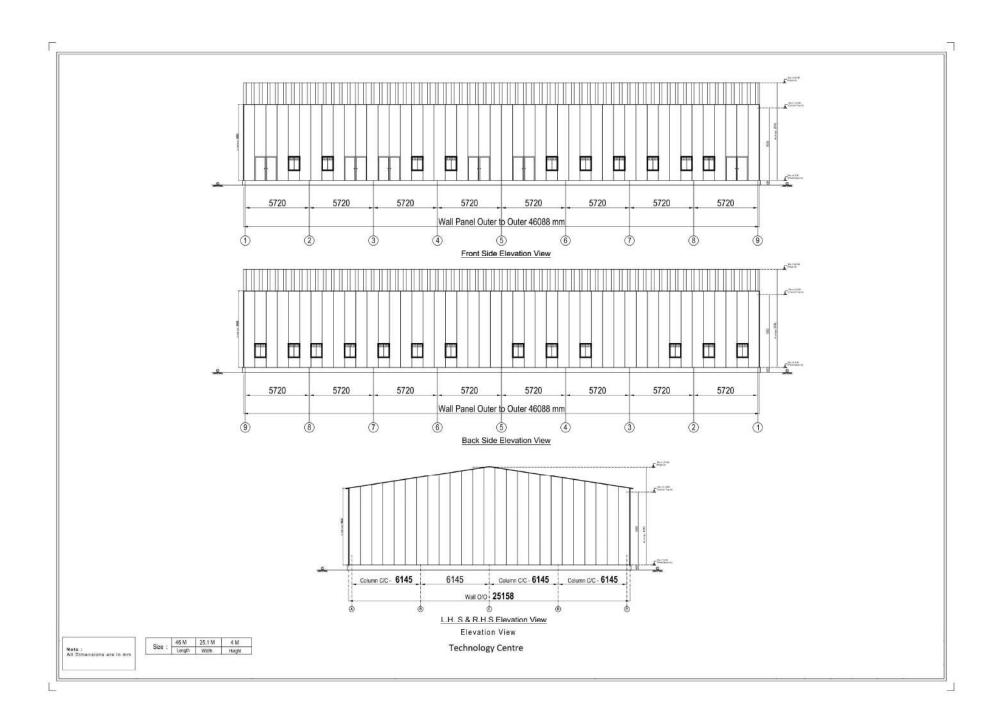












#### Name of the Work:

Tender Reference No: 04 / A - REQUEST FOR PROPOSAL FOR CONSTRUCTION OF PREFABRICATED PUF INSULATED STRUCTURE FOR ADMINISTRATIVE BUILDING, TRAINING CENTRE & ADMINISTRATIVE BLOCK, TECHNOLOGY CENTRE AT TAMILNADU POLYMER INDUSTRIES PARK, PUZHUDIVAKKAM AND VOYALUR VILLAGES, PONNERI TALUK, THIRUVALLUR DISTRICT, TAMIL NADU

### SCHEDULE 'A'

## FINANCIAL BID IN COVER – II BILL OF QUANTITIES

### General

The Bill of Quantities shall contain items for the construction, installation, testing, of the Works to be carried out by the Contractor.

The Bill of Quantities will be used to calculate the Contract Price. The contractor shall be paid for the quantum of work done at the rate mentioned for each item in the Bill of Quantities.

Where there is a discrepancy between the unit rate and the total amount derived from the multiplication of the unit price and the quantity, the unit rate will govern.

Where there is a discrepancy in the unit rate between the rate in figures and words, the correct rate based on data as certified by TPIPL shall be taken as final.

The Employer shall adjust the amount stated in the Bill of Quantities in accordance with the above procedure for the correction of errors and this shall be binding on the bidder, If the bidder does not accept the corrected Bid derived through the above procedure, his bid will be rejected and his EMD may be forfeited.

The rates in the BOQ shall be for carrying out the work in conformity to the BIS, TNBP and Technical Specifications and other Terms and Conditions set out in the Bid Document.

All pages in the BOQ should be signed without omission. All corrections/ over writing should be properly attested by the Bidder.

### **Change in Quantities:**

The quantity furnished in the 'Bill of Quantities' [Schedule-A] is only approximate and it is subject to variation before finalization of the Bid.

If the final quantity of the work done differs from the quantity mentioned in the BoQ for the particular item/items, the rates as in the agreement shall be adopted.

Name of the Work: CONSTRUCTION OF PREFABRICATED PUF INSULATED STRUCTURE FOR ADMINISTRATIVE BUILDING, TRAINING CENTRE & ADMINISTRATIVE BLOCK, TECHNOLOGY CENTRE AT TAMILNADU POLYMER INDUSTRIES PARK, PUZHUDIVAKKAM AND VOYALUR VILLAGES, PONNERI TALUK, THIRUVALLUR DISTRICT, TAMIL NADU

### **ABSTRACT**

S.No	Particulars	Amount in Rs.
1	Administrative Building	
2	Administrative Building – Furniture	
3	Training Center and Admin Block	
4	Technology Center	
5	Technology Center, Training Center	
	and Administrative Block – Furniture	
	TOTAL (RS. IN FIGURES)	
	TOTAL (RS. IN WORDS)	

	<sub>T</sub>	Description	T.N.B.P.		Rat	Amount			
S.No	Qty	Description of work	Specification Number	Unit	Rs.in.Figure	Rs.in Words	(Rs.)		
1	2	3	4	5	6		7		
	Furnished Below								

### 1. BoQ for Administrative Building

			T.N.B.P.		Rate		
S.No	Qty	Description of work	Specification Number	Unit	Rs.in.Figure	Rs.in Words	Amount (Rs.)
1	2	3	4	5		6	7
	A.	Foundation and Basement					
1	170.95	Earth work excavation for foundation in all soils and sub-soils to the required depth as may be directed except in hard rock requiring blasting but inclusive of shoring, strutting, and bailing out water wherever necessary and refilling the sides of foundation with excavated earth in 150mm thick layers well watered rammed and consolidated and depositing the surplus earth in places shown clearing and levelling the site with an initial lead of 10 metres and lift as specified here under etc. complete in all respects complying with relevant standard specifications. (Including Refilling)	23 and 95	1 Cum. (One Cum)			
2	13.02	Supply and filling in plinth basement with M- sand in layers of 50mm thickness well watered, rammed and consolidated complying with relevant standard specification including cost of Stonedust etc., all complete and as directed by the officer	24 and 25	1 Cum. (One Cum)			
3	30.99	Supply and filling in of Lime and M-sand each 50% below Ground level for foundation footing column in layers of 450mm thickness and at plinth beam well watered, rammed and consolidated complying with relevant standard specification including cost of lime and M-sand etc., all complete and as directed by the officer.	28	1 Cum. (One Cum)			
4	23.36	Plain cement concrete 1:4:8 (One of cement, four of sand and eight of hard broken stone Jelly) for foundation using 40 mm gauge 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 the officers.		1Cum. (One Cum)			

			T.N.B.P.			Rate	
S.No	Qty	Description of work	Specification Number	Unit	Rs.in.Figure	Rs.in Words	Amount (Rs.)
1	2	3	4	5		6	7
5	52.43	Providing and laying in position, Standardised Concrete Mix M-20 Grade in accordance with IS:456-2000 using 20mm and down graded hard broken granite stone jelly for the all RCC items of works 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 the 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)	13 & 31C	1 Cum. (One Cum)			
6	26.05	Plain cement concrete 1:3:6 (One of cement three of sand and six of HBS jelly) using 20m gauge hard broken stone jelly excluding the shuttering and centering but including laying, curing and finishing with relevant standard specifications in foundation and basement, and other similar works & as directed by the the officers.	24,25&95	1Cum. (One Cum)			
7	8.17	Brick work in CM 1: 5 One of cement and five of sand) using Chamber burnt bricks of size 9" x 4 3/8" x2 <sup>3</sup> /4" (23 x 11.2 x 7cm) in basement including dewatering wherever necessary proper setting, curing etc., complete with relevant standard specifiations.	28	1Cum. (One Cum)			
8	172.32	Filling in foundation and basement and other similar works with Excavated earth /stone dust in layers of 150mm thick well watered rammed and consolidated complying with relevant standard specification etc., all complete and as directed by the the officers.	95	1Cum. (One Cum)			

			T.N.B.P.			Rate	
S.No	Qty	Description of work	Specification Number	Unit	Rs.in.Figure	Rs.in Words	Amount (Rs.)
1	2	3	4	5		6	7
9	136.42	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 specifaction and as directed by the the officersa.For Column footings, plinth beam, Grade beam, Raftbeam, Raft slab etc.,	30 (8)	1 Sqm. (One Sqm)			
10	58.93	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.	13,56 and 57	1 Sqm. (One Sqm)			
11	4.25	Supplying, fabricating and placing in position of Mild steel Grills / Ribbed Tor Steels for reinforcement for all floors including cost of binding wire, bending tying etc., all complete and as directed by the the officers.		1 MT (One MT)			
12	260.48	PROVIDING ANTI-TERMITE TREATMENT for flooring as directed by the the officers	Special	1 Sqm. (One Sqm)			
13	260.48	Supply and laying of stain free Nano Vitified TILES 600 x600x8mm with required cement moratar 1:3including Grout joint filler complte in all respects and complying with relevent standard specifications and as directed by the the officers.	Special	1 Sqm. (One Sqm)			

			T.N.B.P.			Rate	
S.No	Qty	Description of work	Specification Number	Unit	Rs.in.Figure	Rs.in Words	Amount (Rs.)
1	2	3	4	5		6	7
14	58.93	Providing PAINTING TWO COATS OVER NEW plastered surfacewith Plastic Emulsion paint with nbstandred specification as as directed by the the officersPlinth beam		1 Sqm. (One Sqm)			
15	56.00	Supply and fixing of foundation bolt as directed by the the officers.	Special	1 Nos (One Nos)			
	В.	Super Structure - Pre-Fabricated PUF Insulated Structure					
16	291.82	Roof truss made out of main truss member NB 40 with corss member NB32 of tubular section, roof purlin $80x$ 40mm - 2mm thick with fixing base plate 10mm thick and support with structural coluloumn member height 3.0 metre as per design . The Roof sheet shall be done with 30mm thick Sandwich panel having density of $40Kg/CUM$ . ( $\pm$ 2Kgs) including screws,wahers etc., complete - Color: Sky blue/Off white.	110	1 Sqm. (One Sqm)			
17	158.80	Outer wall - The insulated wall cladding shall be done with sandwich type panels including supports made out of MS tubular section, 1.6mm thick GI base channel and 1.2mm thick GI top channel for wall panel, 1.6mm theik MS framework for windows and doors, 0.4mm thick PPGI corner flashing as required. The panels shall be made out with 0.35 mm thick Pre coated plain sheets at outer side and inner side of PUF having density of 40 kg/Cu.M. Total thickness of wall panel shall be 50 mm. The panels are joined together by tongue and groove method and placed in the vertical direction. Color: Off white.	Special	1 Sqm. (One Sqm)			

			T.N.B.P.			Rate	
S.No	Qty	Description of work	Specification Number	Unit	Rs.in.Figure	Rs.in Words	Amount (Rs.)
1	2	3	4	5		6	7
18	158.80	Wall Inner cladding - Inside wall cladding made up of 8mm thick calcium silicate board and applying 2 coat of emulsion paint with joint putty and primer		1 Sqm. (One Sqm)			
19	158.80	Wall panel exterior painting - Providing and applying One coat of Textured paint of ASIAN PAINTS SCRATCH FINISH texture with 2 coats of Apex Suprema to external walls after thoroughly sandpapering the surfaces to remove dust, dirt, etc. including the cost of material, cleaning of paint stains, labor etc., complete at all levels as directed by the Engineer-incharge.	66	1 Sqm. (One Sqm)			
20	52.80	Windows -Windows shall of 8mm thick dark tinted toughned glass with powder coated Alumnium frame and sunshade. Size: 1m/2m x 2.4m (Ht.)		1 Sqm. (One Sqm)			
21	8.40	Glass double door - 10mm toughened glass Double door (1000mmX2400mmX2)	Special	1 Sqm. (One Sqm)			
22	66.93	Partition for Office area - GI Frames partition system made out of 48mm stud with flange of 32mm and 34mm placed at 610mm spacing over 50mm Floor and ceiling channel with equal flange of 32mm. Double side cladding with 12mm thick Gypsum board for dry areas and 8mm thick calcium silicate board for wet areas and applying 2 coat of emulsion paint with joint putty and primer and 25mm thick Rockwool insulation for better acoustic insulation with 2.4mtr Height 8mm thick toughned glass	Special	1 Sqm. (One Sqm)			

			T.N.B.P.			Rate	
S.No	Qty	Description of work	Specification Number	Unit	Rs.in.Figure	Rs.in Words	Amount (Rs.)
1	2	3	4	5	6		7
23	182.14	Partition for Toilet area - GI Frames partition system made out of 48mm stud with flange of 32mm and 34mm placed at 610mm spacing over 50mm Floor and ceiling channel with equal flange of 32mm. Double side cladding with 12mm thick Gypsum board for dry areas and 8mm thick calcium silicate board for wet areas and applying 2 coat of emulsion paint with joint putty and primer and 25mm thick Rockwool insulation for better acoustic insulation.	Special	1 Sqm. (One Sqm)			
24		Single Glass door - 10mm toughened glass single door as per drawing (1000mmX2400mm)	Special	1 Nos (One Nos)			
25	4.54	Double Glass door - 10mm toughened glass Double door as per drawing (1800mmX2400mm)	Special	1 Nos (One Nos)			
26	1.00	Flush door - Door leaf - Wooden flush door (30mm), Door frame - 1.6mm MS sheet, Enamel painted. Door hardware - SS hinges, Door lock, 40kg Door closer. Size: 2100(Ht.)X950	72, 74 and Special	1 Nos (One Nos)			
27	9.00	PVC Door - Door leaf - PVC flush door (30mm), Door frame - 1.6mm MS sheet, Enamel painted. Door hardware - SS hinges, Door lock. Size: 2100(Ht.)X750	72, 74 and Special	1 Nos (One Nos)			
28	8.00	Ventilator - Aluminium Louvered Ventilator with Pind Glass	74 and 81A	1 Nos (One Nos)			
29	253.76	False Ceiling - Frame works made out of GI section designed to fixed to the above roof truss and walls using M6 fasteners of suitable length. False ceiling should be done with polymeric section of 250x6mm with an air gap of minimum 4mm and joined together by tongue and groove using self tapping screws.	Special	1 Sqm. (One Sqm)			

			T.N.B.P.			Rate	
S.No	Qty	Description of work	Specification Number	Unit	Rs.in.Figure	Rs.in Words	Amount (Rs.)
1	2	3	4	5		6	7
30	50.10	Rain water Gutter - 0.47mm thk. GI color coated plain sheet including folding charges and fixing fasterners. 4" PVC down take pipe at every 5-6 metres with PVC elbow, MTA, clamp, screws, etc. MS Clamp made our of 25x6 flat, complete.	107 and	1 R.M (One RM)			
31		ELECTRICAL	Special				
a	26.00	2'X2' LED light fitting 36W		1 Nos (One Nos)			
b	6.00	LED Batten light 40W		1 Nos (One Nos)			
c	6.00	LED Batten light 18W		1 Nos (One Nos)			
d	12.00	LED Down light		1 Nos (One Nos)			
e	6.00	LED 7W lamp		1 Nos (One Nos)			
f	9.00	20A AC Point		1 Nos (One Nos)			
g	4.00	1.5 Ton AC - 3 Star Inverter		1 Nos (One Nos)			
h	5.00	1 Ton AC - 3 Star Inverter		1 Nos (One Nos)			

			T.N.B.P.			Rate	
S.No	Qty	Description of work	Specification Number	Unit	Rs.in.Figure	Rs.in Words	Amount (Rs.)
1	2	3	4	5		6	7
				1 Nos			
i	15.00	Ceiling fan 1200mm		(One			
				Nos)			
,	60.00	S.A. D. S. (DD)		1 Nos			
1	60.00	5 Amps Points (RP)		(One Nos)			
				1 Nos			
k	6.00	15 Amps points Single ph		(One			
1	0.00	To ramps points single pin		Nos)			
				1 Nos			
1	1.00	SPN DB With RCCB		(One			
				Nos)			
				1 Nos			
m	2.00	7 Segment DB With RCCB		(One			
			_	Nos)			
i	1.00	VTPN DB with MCCB		1 Nos			
1	1.00	VIPN DB WITH MCCB		(One Nos)			
				1 Nos			
e	1.00	Incoming cable for DB with cable tray		(One			
				Nos)			
				1 Nos			
f	2.00	Pipe earthing with GI cable/flat		(One			
				Nos)			
32		PLUMBING	Special				
				1 Nos			
a	6.00	EWC with Accessories		(One			
				Nos)			
<sub>h</sub>	5.00	Wash basin with accessories		1 Nos			
b	3.00	wash bash with accessories		(One Nos)			
				1108)			<u> </u>

			T.N.B.P.			Rate	
S.No	Qty	Description of work	Specification Number	Unit	Rs.in.Figure	Rs.in Words	Amount (Rs.)
1	2	3	4	5		6	7
				1 Nos			
c	6.00	Тар		(One			
				Nos)			
				1 Nos			
d	3.00	Urinal		(One			
				Nos)			
	<b>7</b> .00			1 Nos			
e	5.00	Urinal Partition		(One			
			-	Nos)			
f	1.00	SS Sinterwith Consider alatforms		1 Nos			
1	1.00	SS Sink with Granite platform		(One Nos)			
			-	1 Nos			
σ.	9.00	3/4" UPVC Ball valve		(One			
g	7.00	5/4 Of ve Ban varve		Nos)			
			1	1 Nos			
h	1.00	1000 ltr Water Tank with 4mtr MS Stand		(One			
				Nos)			
			1	1 Mtr			
i	42.00	3/4" UPvc Pipe in Mtr		(One			
				Mtr)			
				1 Mtr			
j	36.00	1 1/4" UPvc Pipe in Mtr		(One			
				Mtr)			
				1 Mtr			
k	36.00	2 1/2" Pvc Pipe in Mtr		(One			
			]	Mtr)			
				1 Mtr			
1	18.00	4" Pvc Pipe in Mtr		(One			
				Mtr)			
33		IT NETWORK DATA & VOICE	Special				

			T.N.B.P.			Rate	
S.No	Qty	Description of work	Specification Number	Unit	Rs.in.Figure	Rs.in Words	Amount (Rs.)
1	2	3	4	5		6	7
				1 Mtr			
a	850.00	Cat 6 UTP cable (Approx Qty)		(One			
				Mtr)			
	• • • • •			1 Nos			
b	31.00	Cat 6 Information Outlet(DATA 1 & Voice 1)		(One			
				Nos)			
c	15.00	Dual Face Plate with back Box (Approx Qty)		1 Nos (One			
	13.00	Approx Qty)		Nos)			
				1 Nos			
d	1.00	Single Face Plate with back Box (Approx Qty)		(One			
				Nos)			
				1 Nos			
e	1.00	2.5, 4 Sq.mm Ferrule 0-9		(One			
				Nos)			
f	4.00	Cable Tie 150, 200.300		pkt			
	1400	D 1 1/010		1 Nos			
g	14.00	Patch cord(2M)		(One			
				Nos) 1 Nos			
h	28.00	Patch cord(1M)		(One			
11	20.00	i aten cord(11v1)		Nos)			
				1 Nos			
i	1.00	15 U Rack With accessories		(One			
				Nos)			
				1 Nos			
j	2.00	Patch panel (24 port)		(One			
				Nos)			
				1 Nos			
k	1.00	Cable Manager		(One			
				Nos)			

			T.N.B.P.			Rate	
S.No	Qty	Description of work	Specification Number	Unit	Rs.in.Figure	Rs.in Words	Amount (Rs.)
1	2	3	4	5		6	7
				1 Mtr			
1	10.00	Raiser cable 25 pair (Unarmoured - Approx Qty)		(One			
				Mtr)			
				1 Nos			
m	1.00	50 pair MDF		(One			
				Nos)			
				1 Nos			
n	10.00	200MM*200MM Ms Juction Box (Approx Qty)		(One			
				Nos)			
				1 Mtr			
0	140.00	1.5"PVC Pipe (Approx Qty)		(One			
				Mtr)			
	21.00	Tradica and Nicola disc		1 Nos			
p	31.00	Testing and Numbering		(One Nos)			
					+		
	2.00	VGA & HDMI Cable		1 Nos (One			
q	2.00	VGA & HDIVII Cable		Nos)			
r	1.00	Accessories		1 Lot			
•	1.00	110000000000000000000000000000000000000		(One Lot)	)		
		ADDRESSABLE FIRE DETECTION AND ALARM	Special				
34		SYSTEM	1				
				1 Nos			
a	1.00	Addressable intelligent Single - Loop Fire Alarm Control panel		(One			
				Nos)			
				1 Nos			
b	22.00	Addressable Smoke detector with base		(One			
				Nos)			
				1 Nos			
c	1.00	Addressable Haet detector with base		(One			
				Nos)			

			T.N.B.P.			Rate	
S.No	Qty	Description of work	Specification Number	Unit	Rs.in.Figure	Rs.in Words	Amount (Rs.)
1	2	3	4	5		6	7
				1 Nos			
d	22.00	Response indicator for all detectors located above false ceiling		(One			
				Nos)			
	2.00	T D 14.11 11.11		1 Nos			
e	3.00	Loop Powered Addressble Hooter		(One Nos)			
				1 Nos			
f	1.00	Input/Output module		(One			
_	1.00	input output mousie		Nos)			
				1 Nos			
g	3.00	Addressable Single action Manual pull station		(One			
				Nos)			
		Supplying, installing, testing and commissioning of 2 core of		1 Mtr			
h	165.00	1.5 sq. mm, Armored insulated copper wires confirming to		(One			
		standards. (Approx Qty)		Mtr)			
	2.00			1 Nos			
i	2.00	Isolator		(One			
				Nos)			
j	1.00	Accessories		1 Lot			
J	1.00	Accessories		(One Lot)			
				1 Nos			
k	2.00	12 V 7AH Battery		(One			
				Nos)			
				1 Nos			
1	3.00	MCP Sticker		(One			
				Nos)			
35		Fire Extinguisher	Special				
	4 2 2			1 Nos			
a	4.00	Dry 4Kg		(One			
				Nos)			

			T.N.B.P.			Rate	
S.No	Qty	Description of work	Specification Number	Unit	Rs.in.Figure	Rs.in Words	Amount (Rs.)
1	2	3	4	5		6	7
b	3.00	Co2 4.5Kg		1 Nos (One Nos)			
С	8.00	Extinguisher Sticker		1 Nos (One Nos)			
С		Facia - Providing and fixing stick type Aluminium Composite Panels of Aludecor/equivalent make for external wall / column / canopy cladding in combination of solid / smoothie silver colours, including all necessaryaluminium L.type frame work and complete weather sealing. The composite panel should consist of 2 mm thermoplastic core of LDPE sandwiched between 2 skins of 0.25mm thick Aluminium sheet (alloy designation 310S) making a total panel thickness of 3 mm. The surface will be furnished with Lumiflon based fluorocarbon coating on top sides and service coating on reverse side. Coatings shall conform to specifications of ECCA / AAMA and conforming to the Mechanical Properties of Panel as per detailed technical specification. The system shall be fixed using GI L,brackets and GI steel bolts and nuts complete with spring washers and cap nuts and all other necessary accessories. The bracket support shall be designed as per manufacturer's specification and shall withstand a wind pressure of 100 Kg/ sqm. All hardware shall be corrosion resistant.		1 Sqm. (One Sqm)			
Total	(Rs.in F	igures)					
Total	(Rs.in W	Vords)					

2. BoQ for Administrative Building - Furniture

		Administrative bunding - Furniture	T.N.B.P.		Rat	te	
S.No	Qty	Description of work	Specification Number	Unit	Rs.in.Figure	Rs.in Words	Amount (Rs.)
1	2	3	4	5	6		7
1	4	Charges for supply of SENIOR LEVEL OFFICE TABLE, made up of 36mm thick pre laminated exterior grade partical board confirming IS.12823, For the table top, legs and 18mm for the modesty,drawer and cupboard. All the cutting edges are duly sealed with 2mm thick PVC edge banding for the top, legs, drawer and door and 0.5mm thick PVC for all the visible edges. the Table has the provision for 3 drawers and 2 drawers on the side table with telescopic channel for the drawer and lock, including all necessary accessories for fixing. Size:W 1800 x D 750 x H 750 / Side table: W 1200 x D 450 x H 750.		1 No (One No)			
2	4	Charges for supply of OFFICE TABLE, made up of 36mm thick pre laminated exterior grade partical board confirming IS.12823, For the table top, legs and 18mm for the modesty,drawer and cupboard. All the cutting edges are duly sealed with 2mm thick PVC edge banding for the top, legs, drawer and door and 0.5mm thick PVC for all the visible edges. The Table has the provision for 3 drawers and 2 drawers on the side table with telescopic channel for the drawer and lock , including all necessary accessories for fixing. Size:W 1500 x D 750 x H 750/ Side table: W 1050 x D 450 x H 750.	Special	1 No (One No)			
3	8	Charges for supplying and fixing of SENIOR/ OFFICER HIGH BACK CHAIR, Made up of 25mm round 14 guage MS pipe for the "S" type leg, and 12mm thick hot pressed molded ply with 40 density molded PU foam upholstered with fabric for the seat, for the back single Piece Nylon / ABS back with nylon netted fabric. P.P. arm rest, five prong MS powder coated base with rubberised wheels, including all necessary accessories for fixing.	Special	1 No (One No)			

			T.N.B.P.		Rat	e	
S.No	Qty	Description of work	Specification Number	Unit	Rs.in.Figure	Rs.in Words	Amount (Rs.)
1	2	3	4	5	6		7
4	16	Charges for supplying and fixing of SENIOR / OFFICER VISITOR CHAIR, Made up of 25mm round 14 guage MS pipe for the "S" type leg, and 12mm thick hot pressed molded ply with 40 density molded PU foam upholstered with fabric for the seat , for the back single piece Nylon / ABS back with nylon netted fabric. P.P. arm rest , including all necessary accessories for fixing.	Special	1 No (One No)			
5		Charges for supply of Reception Table " L ", Made up of 25mm thick pre laminated exterior grade partical board confirming IS.12823, for the table top, modesty, legs, 18mm thick for the CPU, keyboard, drawr and cupboard. All the cutting edges are duly sealed with 2mm thick PVC edge banding for the top, legs, drawer and door and .5mm thick PVC for all the visible edges. the Table has the provision for one drawer and one cupboard with telescopic channel for the drawer and keyboard , including all necessary accessories for fixing. Size:w 2400 x D 1800 x H 750/1050.	Special	1 No (One No)			
6	2	Charges for supplying and fixing of Reception Sofa 2- seater, made up of silver wood frame work with 40 density PU molded foam for the seat and back upholstered with artifical leather. Including all necessary accessory for fixing. (as per the design)	Special	1 No (One No)			
7	1	Charges for supply of <b>Teak Wood Center Table</b> , Made up of $50 \times 50 \text{ mm}$ square leg and $50 \times 35 \text{mm}$ thick cross support, 8mm thick glass, all the raw parts are coated with PU polish size:W $900 \times D450 \times H$ $450$ . (as per the design)	Special	1 No (One No)			
8	1	Charges for supply of <b>Teak Wood Corner Table</b> , Made up of 50 x 50 mm square leg and 50 x 35mm thick cross support, 8mm thick glass, all the raw parts are coated with PU polish size:W 500 x D 500 x H 450. ( as per the design)	Special	1 No (One No)			

			T.N.B.P.		Rat	e	
S.No	Qty	Description of work	Specification Number	Unit	Rs.in.Figure	Rs.in Words	Amount (Rs.)
1	2	3	4	5	6		7
9	1	Charges for supply of MD TABLE, made up of 50mm thick pre laminated exterior grade partical board confirming IS.12823, For the table top, legs and 18mm for the modesty, drawer and cupboard. All the cutting edges are duly sealed with 2mm thick PVC edge banding for the top, legs, drawer and door and .5mm thick PVC for all the visible edges. the Table has the provision for 3 drawers and 2 drawers on the side table with telescopic channel for the drawer and lock, including all necessary accessories for fixing. Size:w 2100 x D 750 x H 750/ Side table: W 1200 x D 450 x H 750.	Special	1 No (One No)			
10	1	Charges for supplying and fixing of MD HIGH BACK CHAIR, Made up of 25mm round 14 guage MS pipe for the "S" type leg, and 12mm thick hot pressed molded ply with 40 density molded PU foam upholstered with fabric for the seat, for the back single piece Nylon / ABS back with nylon netted fabric. P.P. arm rest, five prong metal chrome coated base with nylon wheels. including all necessary accessories for fixing.	Special	1 No (One No)			
11	3	Charges for supplying and fixing of Conference Chair/ Visitor chair, Made up of 25mm round 14 guage MS pipe for the "S" type leg, and 12mm thick hot pressed molded ply with 40 density molded PU foam upholstered with fabric for the seat, for the back single piece Nylon / ABS back with nylon netted fabric. P.P arm rest, including all necessary accessories for fixing.		1 No (One No)			
12	59	Charges for supply of MD ROOM BACK CUPBOARD, made up of 18mm thick pre laminated exterior grade partical board confirming 12823, for the top, legs, horziontal shelf 9mm thick for the back. All the cutting edges are duly sealed with 2mm thick PVC edge banding for the top, self and 0.5mm thick PVC for all the visible edges, including all necessary accessories for fixing. Size: W 2700 x D 400 x H 1950	Special	1 Sqft (One Sqft)			

			T.N.B.P.		Rat	e	
S.No	Qty	Description of work	Specification Number	Unit	Rs.in.Figure	Rs.in Words	Amount (Rs.)
1	2	3	4	5	6		7
13	1	Charges for supply of MEETING TABLE, Made up of 36mm thick pre laminated exterior grade partical board confirming IS.12823, for the Table Top, Legs and 18mm for the modesty. All the cutting edges are duly sealed with 2mm thick PVC edge banding for the top, legs, and 0.5mm thick PVC for all the visible edges. the Table has the provision for electrical manual opening POP up box(10nos). including all necessary accessories for fixing. size: W 6750 x D 1800 x H 750.	Special	1 No (One No)			
14	16	Charges for supplying and fixing of Conference Chair/ Visitor chair, Made up of 25mm round 14 guage MS pipe for the "S" type leg, and 12mm thick hot pressed molded ply with 40 density molded PU foam upholstered with fabric for the seat, for the back single piece Nylon / ABS back with nylon netted fabric. P.P. arm rest, including all necessary accessories for fixing.	Special	1 No (One No)			
15	3	Charges for supplying and fixing of MD HIGH BACK CHAIR, Made up of 25mm round 14 guage MS pipe for the "S" type leg, and 12mm thick hot pressed molded ply with 40 density molded PU foam upholstered with fabric for the seat, for the back single piece Nylon / ABS back with nylon netted fabric. P.P. arm rest, five prong metal chrome coated base with nylon wheels. including all necessary accessories for fixing.	Special	1 No (One No)			
Total	Rs.in 1	Figure					
Total	Rs.in v	vords					

## 3. BoQ for Training Center and Administrative Block

			T.N.B.P.		Ra	ite	
S.No.	Qty	Description of work	Specification Number	Unit	Rs.in Figure	Rs.in Words	Amount (Rs.)
1	2	3	4	5	(	6	7
	A.	Foundation and Basement					
1	897.52	Earth work excavation for foundation in all soils and sub-soils to the required depth as may be directed except in hard rock requiring blasting but inclusive of shoring, strutting, and bailing out water wherever necessary and refilling the sides of foundation with excavated earth in 150mm thick layers well watered rammed and consolidated and depositing the surplus earth in places shown clearing and levelling the site with an initial lead of 10 metres and lift as specified here under etc. complete in all respects complying with relevant standard specifications. (Including Refilling)	23 and 95	1 Cum. (One Cum)			
2	210.10	Supply and filling in of Lime and M-sand each 50% below Ground level for foundation footing column in layers of 450mm thickness and at plinth beam well watered, rammed and consolidated complying with relevant standard specification including cost of lime and M-sand etc., all complete and as directed by departmental officer.	24 and 25	1 Cum. (One Cum)			
3	83.80	Plain cement concrete 1:4:8 (One of cement, four of sand and eight of hard broken stone Jelly) for foundation using 40 mm gauge 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 the officers.	28	1 Cum. (One Cum)			

			T.N.B.P.		Ra	ite	
S.No.	Qty	Description of work	Specification Number	Unit	Rs.in Figure	Rs.in Words	Amount (Rs.)
4	225.29	Providing and laying in position, Standardised Concrete Mix M-20 Grade in accordance with IS:456-2000 using 20mm and down graded hard broken granite stone jelly for the all RCC items of works 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 the 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)	30	1 Cum. (One Cum)			
5	93.42	Plain cement concrete 1:3:6 (One of cement three of sand and six of HBS jelly) using 20m gauge hard broken stone jelly excluding the shuttering and centering but including laying, curing and finishing with relevant standard specifications in foundation and basement, and other similar works & as directed by the the officers. — Flooring area	13 & 31C	1 Cum. (One Cum)			
6	45.69	Brick work in CM 1: 5 One of cement and five of sand) using Chamber burnt bricks of size 9" x 4 3/8" x23/4" (23 x 11.2 x 7cm) in basement including dewatering wherever necessary proper setting, curing etc., complete with relevant standard specifiations.	24, 25 and 95	1 Cum. (One Cum)			
7	865.63	Filling in foundation and basement and other similar works with Excavated earth /stone dust in layers of 150mm thick well watered rammed and consolidated complying with relevant standard specification etc., all complete and as directed by the the officers.	28	1 Cum. (One Cum)			

			T.N.B.P.		Ra	ite	
S.No.	Qty	Description of work	Specification Number	Unit	Rs.in Figure	Rs.in Words	Amount (Rs.)
8		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 specifaction and as directed by the the officers.	30 (8)	1 Sqm. (One Sqm)			
a.	511.46	For Column footings, plinth beam, Grade beam, Raftbeam, Raft slab etc.,					
9	182.35	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.	13, 56 and 57	1 Sqm. (One Sqm)			
10	20.28	Supplying, fabricating and placing in position of Mild steel Grills / Ribbed Tor Steels for reinforcement for all floors including cost of binding wire, bending tying etc., all complete and as directed by the the officers.	30, 86	1 MT (One MT)			
11	934.20	PROVIDING ANTI-TERMITE TREATMENT for flooring as directed by the the officers	Special	1 Sqm. (One Sqm)			
12	934.20	Supply and laying of stain free Nano Vitified TILES 600 x600x8mm with required cement moratar 1:3including Grout joint filler complte in all respects and complying with relevent standard specifications and as directed by the the officers.	Special	1 Sqm. (One Sqm)			

			T.N.B.P.		Ra	ite	
S.No.	Qty	Description of work	Specification Number	Unit	Rs.in Figure	Rs.in Words	Amount (Rs.)
13	58.93	Providing PAINTING TWO COATS OVER NEW plastered surfacewith Plastic Emulsion paint with nb standard specification as as directed by the the officersPlinth beam		Sqm. (One Sqm)			
14	228.00	Supply and fixing of foundation bolt as directed by the the officers.		1 No (One No)			
15	3.00	Steps		1 No (One No)			
	В.	Super Structure - Pre-Fabricated PUF Insulated Structure					
16	1074.33	i) Roof truss made out of main truss member NB 65 with vertical and corss bracing member NB40 of tubular section, roof purlin RHS 80 x40 with fixing base plate 10mm thick and support with ISMB 150 column upto 3 mtrs. span of 18.562M. ii) Roof truss made out of main truss member NB 50 with vertical and corss bracing member NB32 of tubular section, roof purlin RHS 80 x40 with fixing base plate 10mm thick and support with ISMB 150 column upto 3 mtrs. span of 10.961M. iii) Roof truss made out of main truss member NB 40 with vertical and corss bracing member NB32 of tubular section, roof purlin RHS 80 x40 with fixing base plate 10mm thick and support with ISMB 150 column upto 3 mtrs. span of 6.961M. Height of Ridge from column top is 2.055M as per design. The Roof sheet shall be done with 30mm thick Sandwich panel having density of 40Kg/CUM. (± 2Kgs) including Ridge,screws,wahers etc., complete - Color: Sky blue/Off white.	110	1 Sqm. (One Sqm)			

			T.N.B.P.		Ra	ite	
S.No.	Qty	Description of work	Specification Number	Unit	Rs.in Figure	Rs.in Words	Amount (Rs.)
17	749.02	Outer wall - The insulated wall cladding shall be done with sandwich type panels including supports made out of MS tubular section, 1.6mm thick GI base channel and 1.2mm thick GI top channel for wall panel, 1.6mm theik MS framework for windows and doors, 0.4mm thick PPGI corner flashing as required. The panels shall be made out with 0.35 mm thick Pre coated plain sheets at outer side and inner side of PUF having density of 40 kg/Cu.M. Total thickness of wall panel shall be 50 mm. The panels are joined together by tongue and groove method and placed in the vertical direction. Color: Off white.	Special	1 Sqm. (One Sqm)			
18	749.02	Wall Cladding - Inside wall cladding made up of PVC section of minimum 250 x 6mm thickness with an air gap of minimum 4mm by tongue and groove method using self tapping screws. Color:Beige	Special	1 Sqm. (One Sqm)			
19	46.00	Windows shall of 2 track Aluminium sliding windows with glass, sunshade and safety MS grills. Size: 1m x 1.2m (Ht.)	Special	1 No (One No)			
20	1.00	Steel Double Door (2100(Ht.)X1925) with vision glass (300x300mm)	Special	1 No (One No)			
21	1.00	Steel Single Door (2100(Ht.)X950) with vision glass (300x300mm)	Special	1 No (One No)			
22	628.18	Double side partition made up of enamel painted 25 x 50mm MS and GI section with double side paneling of polymeric section of minimum 250 x 6mm thickness with Rockwool insulation for better acoustic insulation. These panels are joined together by tongue and groove method using self tapping screws. Colour: Beige		1 No (One No)			
23	7.00	Door leaf - Wooden flush door (30mm), Door frame - 1.6mm MS sheet, Enamel painted. Door hardware - SS hinges, Door lock, 40kg Door closer. Size: 2100(Ht.)X1925	72, 74 and Special	1 No (One No)			_

			T.N.B.P.		Ra	nte	
S.No.	Qty	Description of work	Specification Number	Unit	Rs.in Figure	Rs.in Words	Amount (Rs.)
24	15.00	Door leaf - Wooden flush door (30mm), Door frame - 1.6mm MS sheet, Enamel painted. Door hardware - SS hinges, Door lock, 40kg Door closer. Size: 2100(Ht.)X950		1 No (One No)			
25	13.00	Door leaf - PVC flush door (30mm), Door frame - 1.6mm MS sheet, Enamel painted. Door hardware - SS hinges, Door lock. Size: 2100(Ht.)X750		1 No (One No)			
26	22.00	Aluminium Louvered Ventilator with Pind Glass	Special	1 No (One No)			
27	934.20	Frame works made out of GI section designed to fixed to the above roof truss and walls using M6 fasteners of suitable length. False ceiling should be done with polymeric section of 250x6mm with an air gap of minimum 4mm and joined together by tongue and groove using self tapping screws.	Special	1 Sqm. (One Sqm)			
28	170.00	Rain water Gutter - 0.47mm thk. GI color coated plain sheet including folding charges and fixing fasterners. 4" PVC down take pipe at every 5-6 metres with PVC elbow, MTA, clamp, screws, etc. MS Clamp made our of 25x6 flat, complete.		1 R.M (One R.M)			
29		ELECTRICAL	Special				
a	80.00	2'X2' LED light fitting 36W		1 No (One No)			
b	36.00	LED Batten light 40W		1 No (One No)			
c	120.00	LED Down light		1 No (One No)			
d	20.00	20A AC Point		1 No (One No)			

			T.N.B.P.		Ra	ite	
S.No.	Qty	Description of work	Specification Number	Unit	Rs.in Figure	Rs.in Words	Amount (Rs.)
				1 No			
e	35.00	Ceiling fan 1200mm		(One			
				No)			
	40000			1 No			
f	100.00	5 Amps Points (RP)		(One			
				No)			
	20.00	15 A		1 No			
g	20.00	15 Amps points Single ph		(One No)			
				1 No			
h	6.00	7 Segment DB With RCCB		(One			
"	0.00	7 Segment DD with Reed		No)			
				1 No			
i	1.00	VTPN DB with MCCB		(One			
				No)			
				1 No			
j j	1.00	Incoming cable for DB with cable tray		(One			
				No)			
				1 No			
k	2.00	Pipe earthing with GI cable/flat		(One			
				No)			
30		PLUMBING	Special				
				1 No			
a	13.00	EWC with Accessories		(One			
				No)			
,	16.00	W. 11 ' '11		1 No			
b	16.00	Wash basin with accessories		(One			
				No)			
	16.00	Ton		1 No			
С	16.00	Тар		(One No)			
				110)			

			T.N.B.P.		Ra	ite	
S.No.	Qty	Description of work	Specification Number	Unit	Rs.in Figure	Rs.in Words	Amount (Rs.)
d	7.00	Urinal		1 No (One No)			
e	9.00	Urinal Partition		1 No (One No)			
f	2.00	SS Sink with Granite platform		1 No (One No)			
ър	23.00	3/4" UPVC Ball valve		1 No (One No)			
h	3.00	1000 ltr Water Tank with 4mtr MS Stand		1 No (One No)			
i	90.00	3/4" UPvc Pipe in Mtr		1 Mtr (One Mtr)			
j	90.00	1 1/4" UPvc Pipe in Mtr		1 Mtr (One Mtr)			
k	60.00	2 1/2" Pvc Pipe in Mtr		1 Mtr (One Mtr)			
1	30.00	4" Pvc Pipe in Mtr		1 Mtr (One Mtr)			
31		IT NETWORK DATA & VOICE	Special		_		

			T.N.B.P.	Τ	Ra	ate	
S.No.	Qty	Description of work	Specification Number	Unit	Rs.in Figure	Rs.in Words	Amount (Rs.)
a	2400.00	Cat 6 UTP cable (Approx Qty)		1 Mtr (One Mtr)			
b	60.00	Cat 6 Information Outlet(DATA 1 & Voice 1)		1 No (One No)			
c	30.00	Dual Face Plate with back Box (Approx Qty)		1 No (One No)			
d	1.00	Single Face Plate with back Box (Approx Qty)		1 No (One No)			
e	2.00	2.5, 4 Sq.mm Ferrule 0-9		1 No (One No)			
f	5.00	Cable Tie 150, 200.300		pkt			
g	30.00	Patch cord(2M)		1 No (One No)			
h	60.00	Patch cord(1M)		1 No (One No)			
i	1.00	15 U Rack With accessories		1 No (One No)			
j	3.00	Patch panel (24 port)		1 No (One No)			
k	2.00	Cable Manager		1 No (One No)			

			T.N.B.P.		Ra	ite	
S.No.	Qty	Description of work	Specification Number	Unit	Rs.in Figure	Rs.in Words	Amount (Rs.)
1	20.00	Raiser cable 25 pair (Unarmoured - Approx Qty)		1 Mtr (One Mtr)			
m	1.00	50 pair MDF		1 No (One No)			
n	17.00	200MM*200MM Ms Juction Box (Approx Qty)		1 No (One No)			
0	350.00	1.5"PVC Pipe (Approx Qty)		1 Mtr (One Mtr)			
p	60.00	Testing and Numbering		1 No (One No)			
q	4.00	VGA & HDMI Cable		1 No (One No)			
r	1.00	Accessories		1 LOT (One Lot)			
32		ADDRESSABLE FIRE DETECTION AND ALARM SYSTEM	Special				
a	1.00	Addressable intelligent Single - Loop Fire Alarm Control panel		1 No (One No)			
b	50.00	Addressable Smoke detector with base		1 No (One No)			

			T.N.B.P.		Ra	ite	
S.No.	Qty	Description of work	Specification Number	Unit	Rs.in Figure	Rs.in Words	Amount (Rs.)
				1 No			
c	10.00	Addressable Haet detector with base		(One			
			_	No)			
				1 No			
d	25.00	Response indicator for all detectors located above false ceiling		(One			
				No)			
				1 No			
e	11.00	Loop Powered Addressble Hooter		(One			
				No)			
				1 No			
f	1.00	Input/Output module		(One			
				No)			
				1 No			
g	11.00	Addressable Single action Manual pull station		(One			
				No)			
		Supplying, installing, testing and commissioning of 2 core		1 Mtr			
h	550.00	of 1.5 sq. mm, Armored insulated copper wires		(One			
"	330.00	confirming to standards. (Approx Qty)		Mtr)			
		comming to standards. (Approx Qty)		IVIU)			
				1 No			
i	3.00	Isolator		(One			
			]	No)			
				1			
j	1.00	Accessories		LOT			
J	1.00	Accessories		(One			
				Lot)			
				1 No			
k	2.00	12 V 7AH Battery		(One			
				No)			
			]	1 No			
1	11.00	MCP Sticker		(One			
				No)			
33		Fire Extinguisher	Special				

			T.N.B.P.		Ra	ite	
S.No.	Qty	Description of work	Specification Number	Unit	Rs.in Figure	Rs.in Words	Amount (Rs.)
				1 No			
a	10.00	Dry 4Kg		(One			
				No)			
				1 No			
b	4.00	Co2 4.5Kg		(One			
				No)			
				1 No			
c	8.00	Extinguisher Sticker		(One			
				No)			
Total l	Rs.in Figu	ire					
Total 1	Rs.in Wo	rds					

## 4. BoQ for Technology Center

S.No.	Qty 2	Description of work	T.N.B.P Specification Number 4	Unit 5		ate 6	Amount (Rs.)
	Α.	Foundation and Basement			Rs.in Figure	Rs.in Words	
1	683.32	Earth work excavation for foundation in all soils and sub-soils to the required depth as may be directed except in hard rock requiring blasting but inclusive of shoring, strutting, and bailing out water wherever necessary and refilling the sides of foundation with excavated earth in 150mm thick layers well watered rammed and consolidated and depositing the surplus earth in places shown clearing and levelling the site with an initial lead of 10 metres and lift as specified here under etc. complete in all respects complying with relevant standard specifications. (Including Refilling)	23 and 95	1Cum . (One Cum)			
2	64.07	Supply and filling in plinth basement with M- sand in layers of 50mm thickness well watered, rammed and consolidated complying with relevant standard specification including cost of Stonedust etc., all complete and as directed by departmental officer.	24 and 25	1Cum . (One Cum)			
3	126.90	Supply and filling in of Lime and M-sand each 50% below Ground level for foundation footing column in layers of 450mm thickness and at plinth beam well watered, rammed and consolidated complying with relevant standard specification including cost of lime and M-sand etc., all complete and as directed by departmental officer.	28	1Cum . (One Cum)			
4	62.73	Plain cement concrete 1:4:8 (One of cement, four of sand and eight of hard broken stone Jelly) for foundation using 40 mm gauge 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 the officers.	30	1Cum . (One Cum)			

S.No.	Qty	Description of work	T.N.B.P Specification Number	Unit	Rate	Amount (Rs.)
5	314.95	Providing and laying in position, Standardised Concrete Mix M-20 Grade in accordance with IS:456-2000 using 20mm and down graded hard broken granite stone jelly for the all RCC items of works 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 the 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)	13 & 31C	1Cum . (One Cum)		
6	117.25	Plain cement concrete 1:3:6 (One of cement three of sand and six of HBS jelly) using 20m gauge hard broken stone jelly excluding the shuttering and centering but including laying, curing and finishing with relevant standard specifications in foundation and basement, and other similar works & as directed by the the officers.	24, 25 and 95	1Cum . (One Cum)		
7	19.79	Brick work in CM 1: 5 One of cement and five of sand) using Chamber burnt bricks of size 9" x 4 3/8" x23/4" (23 x 11.2 x 7cm) in foundation and basement including dewatering wherever necessary proper setting, curing etc., complete with relevant standard specifiations.	28	1Cum . (One Cum)		
8	663.01	Filling in foundation and basement and other similar works with Excavated earth /stone dust in layers of 150mm thick well watered rammed and consolidated complying with relevant standard specification etc., all complete and as directed by the the officers.				

S.No.	Qty	Description of work	T.N.B.P Specification Number	Unit	Rate	Amount (Rs.)
9		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 specifaction and as directed by the the officers.	30 (8)	1 Sqm. (One Sqm)		
a	431.34	a.For Column footings,plinth beam,Grade beam, Raftbeam, Raft slab etc.,	13, 56 and 57	1 Sqm. (One Sqm)		
10	72.65	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.	13, 56 and 57	1 Sqm. (One Sqm)		
11	110.70	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.		1 Sqm. (One Sqm)		
12	23.62	Supplying, fabricating and placing in position of Mild steel Grills / Ribbed Tor Steels for reinforcement for all floors including cost of binding wire, bending tying etc., all complete and as directed by the the officers.		1 MT (One Mt)		

S.No.	Qty	Description of work	T.N.B.P Specification Number	Unit	Ra	nte	Amount (Rs.)
13	1 11 <i>11</i> 4X	PROVIDING ANTI-TERMITE TREATMENT for flooring as directed by the the officers		1 Sqm. (One Sqm)			
14	72.65	Providing PAINTING TWO COATS OVER NEW plastered surfacewith Plastic Emulsion paint with nbstandred specification as as directed by the the officersPlinth beam		1 Sqm. (One Sqm)			
15	324.00	Supply and fixing of foundation bolt as directed by the the officers.		1 No (One No)			
	B.	Super Structure - Pre-Fabricated PUF Insulated Structure					
12	1322.50	Roof truss made out of main truss member NB 65 with corss member NB50 of tubular section, Z roof purlin 180 x60 x20mm - 2mm thick with fixing base plate 10mm thick and support with ISMB 450 upto 4 mtrs. and above ISMB 300 - 2.5mtrs and also with ISMB300 intermeiate structural coluloumn member height 6.5metre as per design . The Roof sheet shall be done with 30mm thick Sandwich panel having density of 40Kg/CUM. (± 2Kgs) including screws,wahers etc., complete - Color: Sky blue/Off white.	110	1 Sqm. (One Sqm)			

S.No.	Qty	Description of work	T.N.B.P Specification Number	Unit	Rate	Amount (Rs.)
13	873.84	Outer wall - The insulated wall cladding shall be done with sandwich type panels including supports made out of MS tubular section, 1.6mm thick GI base channel and 1.2mm thick GI top channel for wall panel, 1.6mm thcik MS framework for windows and doors, 0.4mm thick PPGI corner flashing as required. The panels shall be made out with 0.35 mm thick Pre coated plain sheets at outer side and inner side of PUF having density of 40 kg/Cu.M. Total thickness of wall panel shall be 50 mm. The panels are joined together by tongue and groove method and placed in the vertical direction. Color: Off white.	Special	1 Sqm. (One Sqm)		
14	873.84	Wall Cladding - Inside wall cladding made up of PVC section of minimum 250 x 6mm thickness with an air gap of minimum 4mm by tongue and groove method using self tapping screws. Color:Beige	Special	1 Sqm. (One Sqm)		
15	23.00	Windows shall of 2 track Aluminium sliding windows with glass, sunshade and safety MS grills. Size: 1m x 1.2m (Ht.)	Special	1 No (One No)		
16	6.00	Steel Double Door (2100(Ht.)X1925) with vision glass (300x300mm)	Special	1 No (One No)		
17	295.71	Double side partition made up of enamel painted 25 x 50mm MS and GI section with double side paneling of polymeric section of minimum 250 x 6mm thickness with Rockwool insulation for better acoustic insulation. These panels are joined together by tongue and groove method using self tapping screws. Colour: Beige	Special	1 Sqm. (One Sqm)		
18	6.00	Door leaf - Wooden flush door (30mm), Door frame - 1.6mm MS sheet, Enamel painted. Door hardware - SS hinges, Door lock, 40kg Door closer. Size: 2100(Ht.)X950		1 No (One No)		
19	6.00	Door leaf - PVC flush door (30mm), Door frame - 1.6mm MS sheet, Enamel painted. Door hardware - SS hinges, Door lock. Size: 2100(Ht.)X750		1 No (One No)		

S.No.	Qty	Description of work	T.N.B.P Specification	Unit	Rate	Amount (Rs.)
20	3.00	Aluminium Louvered Ventilator with Pind Glass	Number Special	1 No (One No)		
21	72.00	False Ceiling - Frame works made out of GI section designed to fixed to the above roof truss and walls using M6 fasteners of suitable length. False ceiling should be done with polymeric section of 250x6mm with an air gap of minimum 4mm and joined together by tongue and groove using self tapping screws.	Special	1 Sqm. (One Sqm)		
23	92.00	Rain water Gutter - 0.47mm thk. GI color coated plain sheet including folding charges and fixing fasterners. 4" PVC down take pipe at every 5-6 metres with PVC elbow, MTA, clamp, screws, etc. MS Clamp made our of 25x6 flat, complete.	107 and Special	1 R.M (One RM)		
24		ELECTRICAL	Special			
a	42.00	140 W LED FITTING MEDIUM BAY		1 No (One No)		
b	12.00	2'X2' LED light fitting 36W		1 No (One No)		
С	28.00	LED Batten light 40W		1 No (One No)		
d	3.00	LED Batten light 18W		1 No (One No)		
e	0.00	LED Down light		1 No (One No)		
f	6.00	LED 7W lamp		1 No (One No)		

Number   1 No   1 No				T.N.B.P			
Section   Sect	S.No.	Qty	Description of work	Specification	Unit	Rate	Amount (Rs.)
Section   Content   Cont				Number	1.37		
No   No   No   No   No   No   No   No		( 00	20A A C Paint				
No	g	6.00	20A AC Point		`		
No   One   Wall mounted fan   One   No   No   No							
No   1 No   (One   No)		0.00	W. H 1.0				
1 No (One No)	h	0.00	Wall mounted fan		`		
i   0.00   Ceiling fan 1200mm   (One   No)     j   40.00   5 Amps Points (RP)   1 No (One   No)     k   10.00   15 Amps points Single ph   (One   No)     1   0.00   SPN DB With RCCB   (One   No)     m   2.00   7 Segment DB With RCCB   (One   No)     n   0.00   VTPN DB with MCCB   (One   No)     o   1.00   Incoming cable for DB with cable tray   1 No (One   No)     p   2.00   Pipe carthing with GI cable/flat   Special   1 No (One   No)     a   3.00   EWC with Accessories   Special   1 No (One   No)     a   3.00   EWC with Accessories   1 No (One   No)     1 No (One   No)   1 No (One   No)   1 No (One   No)     1 No (One   No)   1 No (One   No)   1 No (One   No)     1 No (One   No)   1 No (One   No)   1 No (One   No)     25   PLUMBING   Special   1 No (One   No)   1 No (One							
No   1 No   (One   No)							
1 No (One No)   1 No (One No	i	0.00	Ceiling fan 1200mm				
Jacob   Jaco							
No   1 No   1 No   (One   No)   1 No   (One							
1 No	j	40.00	5 Amps Points (RP)		`		
R							
No   1 No   (One   No   No   No   No   No   No   No   N							
1   0.00   SPN DB With RCCB   1   No (One No)	k	10.00	15 Amps points Single ph		`		
1   0.00   SPN DB With RCCB   (One No)					No)		
No   No     1 No     1 No     (One   No )   1 No					1 No		
1 No (One No)   1 No (One No	1	0.00	SPN DB With RCCB				
m   2.00   7 Segment DB With RCCB   (One No)					No)		
No   1 No   1 No   (One   No)   1 No   (One					1 No		
1 No   (One   No)	m	2.00	7 Segment DB With RCCB		(One		
n   0.00   VTPN DB with MCCB   (One   No)					No)		
No   No   1 No   1 No   (One   No)   1 No					1 No		
o 1.00 Incoming cable for DB with cable tray  p 2.00 Pipe earthing with GI cable/flat  p PLUMBING  a 3.00 EWC with Accessories	n	0.00	VTPN DB with MCCB		(One		
o         1.00         Incoming cable for DB with cable tray         (One No)           p         2.00         Pipe earthing with GI cable/flat         (One No)           25         PLUMBING         Special           a         3.00         EWC with Accessories         (One					No)		
No   No   No   1 No   1 No   (One   No)					1 No		
No   No   No   1 No   1 No   (One   No)	o	1.00	Incoming cable for DB with cable tray		(One		
p 2.00 Pipe earthing with GI cable/flat  25 PLUMBING  a 3.00 EWC with Accessories  Special  1 No (One No)  1 No (One No)  1 No (One No)							
p 2.00 Pipe earthing with GI cable/flat (One No)  25 PLUMBING  Special  1 No (One No)  1 No (One							
25 PLUMBING Special 1 No 1 No (One	p	2.00	Pipe earthing with GI cable/flat				
25 PLUMBING Special 1 No (One							
a 3.00 EWC with Accessories 1 No (One	25		PLUMBING	Special			
a 3.00 EWC with Accessories (One				1	1 No		
	a	3.00	EWC with Accessories				
		2.00			No)		

S.No.	Qty	Description of work	T.N.B.P Specification Number	Unit	Rate	Amount (Rs.)
b	6.00	Wash basin with accessories		1 No (One		
				No)		
				1 No		
c	3.00	Тар		(One		
				No)		
1	2.00	2/4# LIDY/C D -11 l		1 No		
d	3.00	3/4" UPVC Ball valve		(One No)		
				1 No		
e	1.00	1000 ltr Water Tank with 4mtr MS Stand		(One		
	1.00	Tool in which rains with this stand		No)		
				1 Mtr		
f	18.00	3/4" UPvc Pipe in Mtr		(One		
				Mtr)		
				1 Mtr		
g	24.00	1 1/4" UPvc Pipe in Mtr		(One		
				Mtr)		
,	24.00	2 1/2" Pvc Pipe in Mtr		1 Mtr		
h	24.00			(One		
				Mtr) 1 Mtr		
i	18.00	4" Pvc Pipe in Mtr		(One		
1	10.00	The Tipe in Min		Mtr)		
26		IT NETWORK DATA & VOICE	Special			
			•	1 Mtr		
a	300.00	Cat 6 UTP cable (Approx Qty)		(One		
				Mtr)		
				1 No		
b	15.00	Cat 6 Information Outlet(DATA 1 & Voice 1)		(One		
				No)		
	7.00	Deal For Districted Leads D. (A. O.)		1 No		
С	7.00	Dual Face Plate with back Box (Approx Qty)		(One		
				No)		

S.No.	Qty	Description of work	T.N.B.P Specification	Unit	Rate	Amount (Rs.)
S.1. (0.	20		Number			Timount (1151)
				1 No		
d	1.00	Single Face Plate with back Box (Approx Qty)		(One		
				No)		
				1 No		
e	1.00	2.5, 4 Sq.mm Ferrule 0-9		(One		
				No)		
f	2.00	Cable Tie 150, 200.300		pkt		
	1.7.00	D 1 1/010		1 No		
g	15.00	Patch cord(2M)		(One		
				No)		
1.	20.00	Detal and (1M)		1 No		
h	30.00	Patch cord(1M)		(One No)		
				1 No		
i	1.00	9 U Rack With accessories		(One		
1	1.00	7 C Rack with accessories		No)		
				1 No		
j	3.00	Patch panel (24 port)		(One		
3		a men paner (2 + port)		No)		
				1 No		
k	1.00	Cable Manager		(One		
				No)		
				1 Mtr		
1	10.00	Raiser cable 25 pair (Unarmoured - Approx Qty)		(One		
				Mtr)		
				1 No		
m	1.00	50 pair MDF		(One		
				No)		
				1 No		
n	6.00	200MM*200MM Ms Juction Box (Approx Qty)		(One		
				No)		
				1 Mtr		
0	150.00	1.5"PVC Pipe (Approx Qty)		(One		
				Mtr)		

			T.N.B.P			
S.No.	Qty	Description of work	Specification	Unit	Rate	Amount (Rs.)
			Number			
				1 No		
p	15.00	Testing and Numbering		(One		
				No)		
				1		
	1.00	Accessories		LOT		
q	1.00	Accessories		(One		
				Lot)		
27		ADDRESSABLE FIRE DETECTION AND ALARM	Special			
27		SYSTEM				
				1 No		
a	1.00	Addressable intelligent Single - Loop Fire Alarm Control panel		(One		
				No)		
				1 No		
b	64.00	Addressable Smoke detector with base		(One		
				No)		
				1 No		
c	1.00	Addressable Heat detector with base		(One		
				No)		
				1 No		
d	32.00	Response indicator for all detectors located above false ceiling		(One		
				No)		
				1 No		
e	5.00	Loop Powered Addressble Hooter		(One		
				No)		
				1 No		
f	1.00	Input/Output module		(One		
				No)		
				1 No		
g	5.00	Addressable Single action Manual pull station		(One		
				No)		
		Supplying, installing, testing and commissioning of 2 core		1 Mtr		
h	500.00	of 1.5 sq. mm, Armored insulated copper wires		(One		
		confirming to standards. (Approx Qty)		Mtr)		

S.No.	Qty	Description of work	T.N.B.P Specification Number	Unit	Rate	Amount (Rs.)
i	4.00	Isolator		1 No (One No)		
j	1.00	Accessories		1 LOT (One Lot)		
k	2.00	12 V 7AH Battery		1 No (One No)		
1	5.00	MCP Sticker		1 No (One No)		
28		Fire Extinguisher	Special			
a	6.00	Dry 4Kg		1 No (One No)		
b	2.00	Co2 4.5Kg		1 No (One No)		
c	8.00	Extinguisher Sticker		1 No (One No)		
Total l	Rs.in Fig	ure	•			
——— Гotal l	Rs.in Wo	ords				

## 5. BoQ for Technology Center, Training Center and Administrative Block - Furniture

		reciniology center, framing center and fraministrative block	T.N.B.P.		Ra	te	Amount
S.No	Qty	Description of work	Specification Number	Unit	Rs.in.Figure	Rs.in Words	(Rs.)
1	2	3	4	5	6		7
1	2	Charges for supply of Training Table, made up of 25mm thick pre laminated exterior grade particle board confirming IS.12823, for the table top and 18mm for the modesty, legs, CPU, keyboard, drawer and cupboard. All the cutting edges are duly sealed with 2mm thick PVC edge banding for the top, legs, drawer and door and 0.5mm thick PVC for all the visible edges. the Table has the provision for one drawer and one cupboard with telescopic channel for the drawer and keyboard, including all necessary accessories for fixing. Size:W 1200 x D 600 x H 750.	Special	1 No (One No)			
2	96	Charges for supply of Training Chair, Made up of 25 mm thick 18 guage MS pipe for the frame and 12mm thick hot press molded ply fo the seat and back, with 40 density molded foam for seat and back upholster with desire fabric, PU arm rest with special design front and back movement with flip type writing pad mechanisum with 18mm theik ISI make MR grade plywood laminated with .8mm thick pasted with 50 ton press to get uniform surface. all the cutting edges are sealed with 2mm thick PVC edge banding. all the raw parts are coated with 60 to 70 micron 7 tank process powder coating. including all necessary for fixing.	Special	1 No (One No)			
3	1	Charges for supply of Board Room Table, Made up of 36mm thick pre laminated exterior grade particle board confirming IS.12823, for the Table Top, Legs and 18mm for the Double modesty. All the cutting edges are duly sealed with 2mm thick PVC edge banding for the top, legs, and .5mm thick PVC for all the visible edges. the Table has the provision for electrical manual opening POP up box( 4nos). including all necessary accessories for fixing. size: W 4200 x D 1200 x H 750.	Special	1 No (One No)			
4	1	Charges for supply of Board Room Table, Made up of 36mm thick pre laminated exterior grade particle board confirming IS.12823, for the Table Top, Legs and 18mm for the Double modesty, 8mm thick smoked glass in the middle, All the cutting edges are duly sealed with 2mm thick PVC edge banding for the top, legs, and .5mm thick PVC for all the visible edges. the Table has the provision for electrical manual opening POP up box(4nos). including all necessary accessories for fixing. size: W 3000 x D 1200 x H 750.	Special	1 No (One No)			

S.No	Qty	Description of work	T.N.B.P. Specification Number	Unit	Rate		Amount
					Rs.in.Figure	Rs.in Words	(Rs.)
1	2	3	4	5	6		7
5	1	Charges for supply of Reception Table " L " , Made up of 25mm thick pre laminated exterior grade particle board confirming IS.12823, for the table top, modesty, legs, 18mm thick for the CPU, keyboard, drawer and cupboard. All the cutting edges are duly sealed with 2mm thick PVC edge banding for the top, legs, drawer and door and 0.5mm thick PVC for all the visible edges. the Table has the provision for one drawer and one cupboard with telescopic channel for the drawer and keyboard , including all necessary accessories for fixing. Size: W 2400 x D 1800 x H 750/1050.	Special	1 No (One No)			
6	4	Charges for supplying and fixing of Reception Sofa 3- seater, made up of silver wood frame work with 40 density PU molded foam for the seat and back upholstered with artifical leather. Including all necessary acessory for fixing. (as per the design)		1 No (One No)			
7	4	Charges for supply of <b>Teak Wood Center Table</b> , Made up of 50 x 50 mm square leg and 50 x 35mm thick cross support, 8mm thick glass, all the raw parts are coated with PU polish size:W 900 x d 450 x H 450. (as per the design)		1 No (One No)			
8	7	Charges for supply of <b>Teak Wood Corner Table</b> , Made up of 50 x 50 mm square leg and 50 x 35mm thick cross support, 8mm thick glass, all the raw parts are coated with PU polish size:W 500 x D 500 x H 450. (as per the design)		1 No (One No)			
9	8	Charges for supply of Four seater foldable dining table, Made up of 1mm thcik SS 304 grade sheet back with 18mm thick ISI BWR plywood for the top and 50mm round 18 guage SS 304 pipe for the leg and 35mm round pipe for the side support special design swivel mechanism for the seating8mm thick SS 304 grade seat with25mm plywood backing fixed in the swivel mechanism. All the parts are properly tick welded and polished. including all necessary accessories for fixing. size:W 1200 x D 900 x H 750.	Special	1 No (One No)			
10	636	Charges for supplying and fixing of modular workstation 76mm Tile base PARTITION, Made up of special design 1.2mm thick alunimum section for the vertical, horziontal, raceway, and top cover, all the parts are coated with 60 to 70 micron powder coating. 9mm thick pre laminated exterior grade particle board confirming IS.12823 for the mounting tiles and 8mm thick MDF upholstered with desire fabric for the fabric tile. 4mm thick Saint Gobain marker Glasss. single race way in the bottom to run the cables. including all necessary for fixing. size: H 1200.	Special	1 Sqft (One Sqft)			

S.No	Qty	Description of work	T.N.B.P. Specification Number	Unit	Rate		Amount
					Rs.in.Figure	Rs.in Words	(Rs.)
1	2	3	4	5	6		7
11	400	Charges for supply of workstationTable Top, made up of 25mm thick pre laminated exterior grade particle board confirming IS.12823, All the cutting edges are duly sealed with 2mm thick PVC edge banding. PVC cable manager cap, including all necessary for fixing. size:W 1500 x 1500 x D 600 x T 25mm	Special	1 Sqft (One Sqft)			
12	16	Charges for supply of WORSTATION MOBILE DRAWER, made up of 25mm thick pre laminated exterior grade particle board confirming IS.12823, for the table top and 18mm for the legs, drawer. All the cutting edges are duly sealed with 2mm thick PVC edge banding for the top,drawer faciya and 0.5mm thick PVC for all the visible edges. telescopic channel for the drawer with set lock, including all necessary accessories for fixing. Size:w 400 x D 450 x H 625.	Special	1 No (One No)			
13	45	Charges for supply of LOW HEIGHT STORAGE , made up of 25mm thick pre laminated exterior grade particle board confirming IS.12823, for the table top and 18mm for the modesty, legs, doors, 9mm thick for the back board. All the cutting edges are duly sealed with 2mm thick PVC edge banding for the top, legs, door and 0.5mm thick PVC for all the visible edges. the Table has the provision for one drawer and one cupboard with telescopic channel for the drawer and keyboard , including all necessary accessories for fixing. Size:w 1800 x D 450 x H 750.	Special	1 Sqft (One Sqft)			
14	3	Charges for supply of CABIN TABLE, made up of 25mm thick pre laminated exterior grade particle board confirming IS.12823, for the table top and 18mm for the modesty, legs, CPU, keyboard, drawer and cupboard. All the cutting edges are duly sealed with 2mm thick PVC edge banding for the top, legs, drawer and door and 0.5mm thick PVC for all the visible edges. the Table has the provision for one drawer and one cupboard with telescopic channel for the drawer and keyboard, including all necessary accessories for fixing. Size:W 1500 x D 600 x H 750. / side Table: W 900 x D 450 x H 750.	Special	1 No (One No)			
15	38	Charges for supplying and fixing of Conference Chair/ Visitor chair, Made up of 25mm round 14 guage MS pipe for the "S" type leg, and 12mm thick hot pressed molded ply with 40 density molded PU foam upholstered with fabric for the seat, for the back single piece Nylon / ABS back with nylon netted fabric. P.P. arm rest, including all necessary accessories for fixing.	Special	1 No (One No)			

S.No	Qty	Description of work	T.N.B.P. Specification Number	Unit	Rate		Amount
					Rs.in.Figure	Rs.in Words	(Rs.)
1	2	3	4	5	6		7
16	7	Charges for supplying and fixing of Conference high back Chair, Made up of 25mm round 14 guage MS pipe for the "S" type leg, and 12mm thick hot pressed molded ply with 40 density molded PU foam upholstered with fabric for the seat, for the back single piece Nylon / ABS back with nylon netted fabric. P.P. arm rest, including all necessary accessories for fixing.	Special	1 No (One No)			
17	16	Charges for supplying and fixing of WORKSTATION CHAIR, Made up of 25mm round 14 guage MS pipe for the "S" type leg, and 12mm thick hot pressed molded ply with 40 density molded PU foam upholstered with fabric for the seat , for the back single piece Nylon / ABS back with nylon netted fabric. P.P. arm rest , including all necessary accessories for fixing.	Special	1 No (One No)			
18	800	Charges for supply of Documentation room cupboard, made up of 18mm thick pre laminated exterior grade particle board confirming 12823, for the top, legs, horziontal self 9mm thick for the back. All the cutting edges are duly sealed with 2mm thick PVC edge banding for the top, shelf and 0.5mm thick PVC for all the visible edges, including all necessary accessories for fixing. Size:W 900 x D 400 x H 2400. (33 nos)	Special	1 Sqft (One Sqft)			
19		Charges for supplying and fixing of store room slotted angle rack, Made up of 14 guage angle with 18 guage CRC sheet for the shelf duly powder coated with 60 to 70 micron, including all necessary for fixing. Size:W 900 x D 450 x H 1800.		1 No (One No)			
Total Rs.in Figure							
Total Rs.in Words							