



## सी.एस.आई.आर.-राष्ट्रीय वनस्पति अनुसंधान संस्थान

(वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद) राणा प्रताप मार्ग, लखनऊ-२२६००१

## C.S.I.R-NATIONAL BOTANICAL RESEARCH INSTITUTE

(Council of Scientific & Industrial Research) Rana Pratap Marg, Lucknow-226001

## कम्पोजिट ई-निविदा

**COMPOSITE E-TENDER** 

Name of work: Construction of VVIP suit cum meeting hall on second floor of dining hall building at Guest House 21, Gokhale Marg, Lucknow.

## ENEVELOPE-I TECHNICAL BID

निविदा संख्या: 1/WKS/44/20-Gl Tender No. : 1/WKS/44/20-Gl

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(Council of Scientific & Industrial Research) Rana Pratap Marg, Lucknow-226001

Name of Work: Construction of VVIP suit cum meeting hall on second floor of dining hall building at Guest House 21, Gokhale Marg, Lucknow.

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Note: 1. Tenderer should confirm that they have received/downloaded all the above papers.

Note: 1. Tenderer should commit that they i	lave received/downhoused an the day	
Name of bidder:		
Address:		
Telephone No.	Mobile No.	E-mail ID:

Signature of tenderer

# PART-A

## सी.एस.आई.आर.-राष्ट्रीय वनस्पति अनुसंधान संस्थान

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### C.S.I.R-NATIONAL BOTANICAL RESEARCH INSTITUTE

(Council of Scientific & Industrial Research)
Rana Pratap Marg, Lucknow-226001

#### **NOTICE INVITING E-TENDER**

1. Item rate e-tender in two envelope systems are invited through the e-tendering portal "https://etenders.gov.in" for the composite work "Construction of VVIP suit cum meeting hall on second floor of dining hall building at Guest House 21, Gokhale Marg, Lucknow." from reputed registered contractors in appropriate class of CPWD, MES, Railways, Post & Telegraph, State PWD's, Semi government organizations and/or from those who have successfully carried out \*similar works for CSIR or its laboratories, govt. or Semi government organization. The tenderers should have successfully completed at least three similar composite works amounting to 40 % (Rs.19.58 lakhs) or two similar composite works of 50 % (Rs.24.47 lakhs) or at least one composite work amounting to 80 % (Rs. 39.15 lakhs) value of the estimated cost or above in a single contract during the last Seven years. The contractor should have valid 'A' class electrical license (either firm should have 'A' class electrical license or submit a undertaking for engaging 'A' class license holder agency for execution of electrical work and will provide their details and copy of 'A' class electrical license). The contractors may apply with proof of fulfilling the above conditions along with copies of PAN, GST registration number, satisfactory completion of similar works certificates.

\*Similar work shall mean the contractor having experience of composite RCC framed building construction works of required amounts.

SI No.	Tender No.	Estimated Cost (Rs.)	Duration of Contract	Earnest Money Deposit (Rs.)	Publish date	Bid document download / Sale Start date	Bid submission end date	Bid opening date
1.	1/WKS/44/20-G	48,92,628/- (Civil Work: 40,54,832/- and Electrical Work: 8,37,796/-)	120 days	97,853/-	09.02.2021	09.02.2021 from 06:45 PM	01.03.2021 Up to 03:00 P.M.	02.03.2021 at 03:30 P.M.

- 1. The estimated cost of work is Rs. 40,54,832/- (civil work) + Rs. 8,37,796/- (Electrical work), Total = Rs. 48,92,628/- which is based for scheduled items on CPWD, DSR-2018 for civil and electrical work and on market rates for non-scheduled items.
- 2. The last date of online submission of bid is 01.03.2021 up to 03:00 P.M.
- 3. The date of opening of Technical Bid is 02.03.2021 at 03:30 P.M.
- 4. The time for carrying out the work is 120 days.

- 5. The tender document cost of Rs.590/= (500.00 +90.00 GST @ 18%) (Non refundable) shall be deposited through RTGS/NEFT or through bank challan in NBRI bank account or in the form of DD/ Pay order/Banker's cheque in favor of Director, CSIR-NBRI, Lucknow. The scanned copy UTR No./bank challan/ DD/ Pay order/ Banker's cheque of tender document cost deposited in CSIR-NBRI Lucknow account, shall be uploaded with the technical bid.
- 7. EMD of Rs 97,853/- shall be deposited in the form of Demand Draft/Pay Order/Banker's cheque drawn in favor of Director, CSIR-NBRI, Lucknow or UTR receipt of EMD deposited through RTGS/NEFT in NBRI, Lucknow bank account. The scanned copy of EMD deposited in the form of Demand Draft/Pay Order/Banker's cheque/ UTR receipt of RTGS/NEFT shall be scanned and uploaded along with Technical Bid to the e-tendering website by the bidder within period of bid submission. The original tender fee & EMD receipts in specified mode should be dropped in tender box placed in the Room of Security Officer at main gate or by post, latest by the last date & time of submission of bid, failing which their offer shall be rejected and CSIR-NBRI will not be responsible. It may by noted that even after opening of price bid, the credential submitted found to be false / forged, the offer submitted shall be rejected out rightly.
- 8. Online bids shall be available on **e-portal**: <a href="http://etenders.gov.in">http://etenders.gov.in</a> between 09.02.2021 to 01.03.2021 up to 03:00 P.M. and bidder shall upload their bids within given dates and time in two separate envelopes, <a href="mailto:Envelope-1">Envelope-1 as Technical Bid</a> and <a href="Envelope-2">Envelope-2 as Price Bid</a> with the following documents:

#### A. Technical Bid (Envelope-1)

The bidders shall upload the Technical Bid in Envelope-1 along with the scanned copy of following documents (pdf. only) to e-tendering website within the period of bid submission and advised to take in to account corrigendum/Instructions/Information's published if any in respect of tender document before/submitting their bids.

- I. Bank Challan/Demand Draft/Pay Order/Banker's Cheque or UTR receipt of RTGS/NEFT against deposit of Tender document cost.
- II. Demand Draft/Pay Order/Banker's Cheque or UTR receipt of RTGS/NEFT against deposit of EMD.
- III. Self certified copy of Enlistment order of contractor in appropriate class in composite category.
- IV. Certificate of registration under GST.
- V. Self certified copy of work completion/experience certificates of required value of composite works done.
- VI. PAN Card.
- VII. Valid 'A' class Electrical License issued by Department Of Electrical Safety, Govt. of U.P (either firm should have 'A' class electrical license or submit a undertaking for engaging 'A' class license holder agency for execution of electrical work and will provide their details and copy of 'A' class electrical license).
- VIII. Partnership deed, in case of partnership firm.
- IX. The entire tender document of Technical Bid must be uploaded duly signed and stamped by the bidder.
- X. Scanned copy of signed & stamped Undertaking by the Bidder for unconditional acceptance of conditions and any other papers ask for in the biding documents.

Note: The acceptance / rejection of their bids will be intimated to the bidders/ firms through e-tendering portal.

#### B. Price Bid (Envelope-2)

The price bid shall be uploaded with following document in Envelope-2:

I. All rates shall be quoted in the format provided (xls. Only) and no other format is acceptable. If the price bid has been given as a standard BOQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BOQ file, open it and complete the (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the file name. If the BOQ file is found to be modified by the bidder, the bid will be rejected.

Note: Uploading of bid documents in location other than specified above shall not be considered. The bid documents received in hard copy will stand rejected.

- 9. The Original eligibility documents shall have to be produced by the bidders, if required by the department.
- 10. The enlistment of the contractors should be valid on the last date of submission of bids.
- 11. Agreement shall be drawn with successful bidders on prescribed form.
- 12. After submission of bid the contractor can resubmit revised bid any number of times but before last date and time of submission of bid as notified.
- 13. Online bids submitted by intending bidders shall be opened only of those bidders who have deposited the tender fee & EMD in said manner and have uploaded the required scanned copies of self certified documents along with Technical Bid. The bank details for depositing tender fee and EMD in the account of "National Botanical Research Institute, Lucknow is SBI NBRI Lucknow Branch, Saving Bank Account No. 30267652846, IFSC code: SBIN0010173, MICR code: 226002051."
- 14. Rates quoted by contractor shall be for complete work including labour cess, GST and all other taxes & duties etc. nothing extra shall be payable other than quoted rates.
- 15. The tenderer shall not be permitted to tender for works in the concerned unit of CSIR in which a relative is posted in the grade between Sr. Controller of Administration and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or subsequently employed by him and who relatives are as mentioned above.

NOTE: A person shall be deemed to be a relative of another if , and only if , (a) they are members of Hindu undivided family; or (b) they are husband and wife; or (c) the one is related to the other in the following manner; Father, Mother (including step mother), Son (including step son) , Father's father, Son's son , Son's wife , Son's daughter, Son's daughter's husband , Daughter's husband, Daughter's son, Daughter's son's wife, Daughter's daughter, Daughter's Daughter's husband Brother (including step brother), Brother's wife, Sister (including step sister), sister's husband.

- 16. Tender submitted shall remain valid for 90 days from the date of opening for the purpose of acceptance and award of work, validity beyond 90 days from the date of opening shall be by mutual consent.
- 17. The tenderer shall quote rates both in figures and words; He shall also workout the amount for each item of work and write in both figures and words. On check if there are differences between the rates quoted by the tenderer in words and in figures or in the amount worked out by him the following procedure shall be followed:-

- (a) When there is difference between the rates in figures and in words, the rates which correspond to the amounts worked out by the tenderer shall be taken as correct.
- (b) When the amount of an item is not worked out by the tenderer or it does not correspond with the rate written either in figures or in words, the rate quoted by the tenderer in words shall be taken as correct.
- (c) When the rate quoted by the tenderer in figures and in words tallies but the amount is not worked out correctly the rate quoted by the tenderer shall be taken as correct and not the amount.
- 18. The tenderer should see drawings and in case of doubt obtain required particulars, which may in any way influence his tender from the Engineer as no claim whatsoever will be entertained for any alleged ignorance thereof.
- 19. Before tendering, the tenderer shall inspect the site to fully acquaint himself about the condition in regard to accessibility of site, nature and extend of ground working condition of site and locality including stacking of materials, installations tools and plants (T&P) etc., conditions affecting accommodations and movement of labour and type of maintenance work etc. required for the satisfactory execution of the work contract. No claim whatsoever on such account shall be entertained by the Employer in any circumstances.
- 20. Earnest Money will be forfeited if the contractor fails to commence the work as per the letter of award.
- 21. Except writing rates and amount, the tenderer should not write any conditions or make any changes, additions, alterations and modifications in the printed form of tenders. Tenderers who are desirous to offer rebate, the same should be brought out separately in the covering letter and submitted along with the tender. Conditional rebate shall not be considered.
- 22. Some of the provisions of General Conditions of Contract are given below. Interpretation however shall be as given in the General Conditions of Contract.
  - i) DEFECTS LIABILITY PERIOD: Twelve months from the date of completion as certified by the Employer.
  - ii) MINIMUM VALUE OF WORK FOR THE INTERMEDIATE CERFICATE: Rs. 30.0 Lakh for civil work and Rs 10.0 Lakh for Electrical work. Intermediate certificate for a lesser amount can be admitted for payment at the discretion of the Engineer in-charge of respective works.
  - iii) SECURITY DEPOSIT: A sum @ 10% of the gross amount of the bill shall be deducted from each running bill of the contractor till the sum along with the sum already deposited as earnest money, will amount to security deposit of 5% of the tendered value of the work. In addition, the contractor shall be required to deposit an amount equal to 5% of the tendered value of the contract as Performance Security within the period prescribed for commencement of work in the letter of award issued to him.
  - iv) COMPENSATION: Contractor shall pay as compensation an amount equal to one percent or such smaller amount as the Employer (whose decision in writing shall be final) may decide on the amount of the estimated cost of the whole work as shown in the agreement for every week that the work remains un-commenced or unfinished or due quantity of the work remains incomplete after the proper dates. Compensation to be paid shall not exceed ten percent of the estimated cost of the work as shown in the agreement.
- 23. All material, labour, tools and plants required for this work will be procured / arranged by the contractor at his own cost. The department will not supply any materials which are to be used in the work.

- 24. The tenderer shall have to ensure to quote rates in rate column of Bill of Quantity. In case of leaving the rate blank of any item of work, the same shall be taken as Zero "0". And the total responsibility in this regard will be of the tenderer. The bidder is bound to execute the full quantity of this item of work at "zero payment" for the work done against this item of work.
- 25. The Employer does not bind himself to accept the lowest or any tender and reserves to himself the right of accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at the rates quoted.
- 26. If it is found that the tender is not submitted in proper manner or contains too many corrections or absurd rates of item, it would be open for the department to take suitable action.
- 27. All fittings, fixtures and material to be used in this work shall be got approved by the Engineer in charge before arrangement.

#### 28. For Composite Bids:

- I. For the composite work the bid document will include following three components:
  - Part- A: e-NIT, Article of Agreement, Standard GCC of the work and its all annexure.
  - Part- B: Technical Specifications and Schedule of Quantities (online mode) for Civil Work.
  - Part- C: Scope of work, Technical Specifications and Schedule of Quantities (online mode) for Electrical Work.
- II. The bidder must associate himself with other agencies working in the building.
- III. After acceptance of the bid by competent authority, the contractor will have to enter into an agreement engineer in-charge of civil work and has to sign one more copy of agreement for engineer in-charge of electrical work. One such signed set of agreement shall be handed over to Engineer in-charge of electrical works. Engineer in-charge of civil work will operate Part A and Part B of the agreement. The engineer in-charge of electrical works shall operate Part C along with Part A of the agreement. Entire work under composite bid including civil and electrical works shall be executed under one agreement.
- IV. Security Deposit will be worked out separately for civil and electrical works corresponding to the estimated cost of respective components of works.
- V. Running payment for civil works shall be made by Engineer in-charge of civil works and running payment for electrical works shall be made by Engineer in-charge of electrical works directly to the contractor.
- VI. The composite work shall be treated as complete when all civil and electrical components are completed. The completion certificate of composite work shall be recorded by Engineer in-charge of major component after record of completion certificate of all other components of electrical work by engineer in-charge of electrical work.
- VII. Final bill of whole work shall be finalized and paid by the Engineer in-charge of major component. Engineer in-charge of minor component(s) will prepare and pass the final bill for their component of work and pass on the same to the Engineer in-charge of major component for including in the final bill for composite contract.
- 29. The latest CPWD specifications shall be followed, if any discrepancy in regard to specification etc. is noticed.
- 30. All safety measures to be followed during execution of work. For any misshaping / incident etc. the contractor alone will be solely responsible.
- 31. Director, CSIR-NBRI, Lucknow reserves the right to reject any or all the tenders without assigning any reason thereof.

Signature of tenderer

# सी.एस.आई.आर.-राष्ट्रीय वनस्पति अनुसंघान संस्थान (वैज्ञानिक एवं औद्योगिक अनुसंघान परिषद) C.S.I.R.-NATIONAL BOTANICAL RESEARCH INSTITUTE,

(Council of scientific & Industrial Research)

#### **Appendix**

1.	Defect liability period	Twelve Months from the date of Virtual completion as certified by the engineer-in-Charge.
2.	Time of completion	120 Days Only
3.	Minimum value of work	15.00 Lakhs. Or less Bill at the discretion of the Engineer -
	interim certificate	In-Charge.
4.	Earnest Money	Rs.97,853/- (Rs. Ninety Seven Thousand Eight Hundred
		Fifty Three Only)
5.	Performance Security	5% of the tendered value of work to be deposited by
		successful tenders before execution of agreement.
6.	Liquidated dames for	1% per week of the total cost of the work awarded subject
	insufficient progress of	to a maximum of 10% of the gross value of the work done
	work (Clause 23-B)	or cost of work awarded whichever is more.
7.	Subsequent retention	Sufficient sum to make up 10% of the value of work done
		inclusive of earnest money subject to maximum of 5% of
		the tendered value are gross value of work done,
		whichever is more.
8.	Time of submission of final	Three months from the date of virtual completion.
	bill by the contractor.	

## सी.एस.आई.आर.-राष्ट्रीय वनस्पति अनुसंधान संस्थान (वैज्ञानिक एवं औद्योगिक अनुसंधान परिषद)

#### C.S.I.R.-NATIONAL BOTANICAL RESEARCH INSTITUTE,

(Council of scientific & Industrial Research)

#### Particulars of Contractor

Name of Contractor	: Mr
Firm of Contractor	: M/s
Telephone No. (office)	· ·····
Office Address	:
Residential Address	:
As the firm limited	: YesUse/No
Give name and address of	partners:-
<u>Name</u>	Address
a)	
b)	
c)	
d)	
Partnership deed	: Please enclose with tender
Name of Bankers	: M/s
Power of attorney	: Enclosed attested copy/original power of attorney in case of firm.
State: Name and address o	f person holding power of attorney:
Name	:
Address	· · ··································
Registration particulars	·
a) Registered with	·
b) Registered No.	· ····································
c) Financial limit upto	
which registered	.,.,,
d) Trade for which registra	tion:

**Signature of Contractor** 

#### ARTICLES OF AGREEMENT

ARTI	CLES OF AGREEMENT MADE ATthisthis
of _	BETWEEN the Council of Scientific & Industrial Research, New
Delhi	, a society registered under the Societies Registrations Act 1860 (Hereinafter
	red to as the Employer, which expression shall include its successor and assignees
	authorized officers of the Society) of the one part and
	ng in the name and style of (herein after referred to as the
	actor(s) which expression shall include his/ their respective heirs, executors,
admi	nistrators and permitted assignees) of the other part.
WHE	REAS the Employers is desirous of getting the work ofdone
and h	nas caused drawings, schedule of Quantities and Specifications describing the work
to be	prepared.
AND	Whereas the said specifications and the schedule of quantities and other
docur	ments have been signed by on behalf of the parties.
Now	it is hereby agreed and declared by and between the parties hereto as
follo	ws:
1. ]	In consideration of the payments to be made to them as hereinafter provided the
	Contractor shall upon and subject to the conditions hereinafter contained executed
ā	and complete, the work at the rates specified in the attached schedule of
(	quantities and with such materials as are provided for and in accordance in all
r	respect with specifications, designs, drawings and instructions in writing. Time for
(	carrying out the work will beand the date of commencement be
r	eckoned from the ( <b>tenth day</b> of issue of award letter)
2. 1	The Employer shall pay to the Contractors such sum as shall become payable
ł	nereunder at the items and in the manner specified in the said conditions.
3. T	his agreement contains the following documents in addition to pages of Articles of
	greement.
(i)	General Conditions of Contract Page No to
(ii)	Special Conditions Page No to
(iii)	Additional Conditions Page No to
(iv)	Indenture for Secured Advance and format of Performance Guarantee Page No
(° - )	to
(v)	
(vi)	
(vii)	

(viii)
In witness whereof the parties hereto have set their respective hands the day and year in above written.
Signed by, for and on behalf of Employers
In the presence of
(1)
(2)
Signed by the said contractor In the presence of
(1)
(2)

#### **GENERAL CONDITIONS OF CONTRACT**

#### 1. Interpretation

- (a) In constructing these conditions, the Specifications, the Schedule of Quantities, Tender, Special Conditions and Agreement, the following words shall have the meaning herein assigned to them except where the subject or context otherwise requires.
  - (b) This contract shall comprise of the Articles of Agreement, General Conditions of Contract, Special Conditions. Additional Special Conditions, the Schedule of Quantities, Specifications, letter of acceptance of tender and other documents mentioned in the contents sheet attached hereto and including these to which only reference is made herein.

**Work or Works:** Shall mean all work or works defined in schedule of quantities, specification and such other work or works as the contractor may be entrusted with for carrying out under this contract.

**Employer:** Shall mean Director-General, CSIR or any officer authorized by Director-General for the purpose. .

**Engineer:** Shall mean the Engineer designated by the Employer to superintend and perform other duties as indicated in the contract.

**Contractor(s):** Shall mean the individual or Firm or Company, whether incorporated or not. Undertaking the work and shall include the legal personal representative or such individual or the persons composing such Firm or Company or the successors of such Firm or Company and the permitted assignees of such individual or Firm or Firms or Company.

**Site:** Shall mean the site of the contract works including any buildings and erections thereon and any other land adjoining thereto (inclusive) as aforesaid allotted by the Owner/Employer or Engineer/ PMC for the contractor's use.

**Compensation**: Shall mean all sum payable by way of compensation under any of the conditions shall be considered as reasonable compensation without reference to the actual loss or damage sustained and whether or not any damage sustained and whether or not any damage shall have been sustained.

Words imputing persons include firms and corporations; Words imputing the singular only also include the plural and vice versa where the context so required.

The headings are given to the clauses for convenience and they will not limit the meaning or scope of the clauses in any way.

#### 2. Drawings and Specifications

The Contractor shall execute whole and every part of the work in the most substantial and workmanlike manner both as regards material and otherwise in every respect in accordance with the specifications. The contractor shall also confirm exactly and faithfully to the design, drawings and instructions given in the respect of the work by the Engineer. The contractor shall be furnished free of charge one- copy of such specifications and all such designs, drawings and instructions as are not included in the printed publications.

#### 3. Contractor to Provide Everything Necessary

- The contractor shall provide at his own cost all materials (except such (a) materials, if any as may in accordance with the contract be supplied by the Employer) plants, tools, appliance, implements, ladders, scaffolding, temporary works, etc. requisite or proper for the execution of the work whether original, altered or substituted and whether included in the specifications or other documents forming part of the contract or which may be necessary for the purpose of satisfying or complying to the requirements of Engineer, as to any manner as to which under these conditions he is entitled to be satisfied together with carriage therefore to and from the work. The bidder shall have to make his own arrangement for making approach roads for movement of vehicles, men & materials, plants & equipment, tools & tackles etc. to & from the work site. The contractor shall also supply without charge the requisite number of persons with means and materials necessary for the purpose of setting out works and counting, weighing and assisting in the measurement or examination at any time and from time to time of the work or materials. Failing his so doing, the same may be provided by the Engineer at the expense of the contractor and the expenses may be deducted from any money due to the contractor under the contract and I or from his Security Deposit.
- (b) The contractor shall provide himself with requisite quantity and quality of water for carrying out the works at his own, if, however piped water is supplied by the Employer, the contractor shall pay for the water at **one percent of** the total of the work done except on Electrical Work, Airconditioning work and Furniture work. The contractor shall make own arrangement for water connection and laying of further pipelines from the source of supply of the Employer. It should be clearly understood that the Employer does not guarantee to maintain uninterrupted supply of water and it will be incumbent on the part of the contractor to make alternative arrangement for water at his own cost in the event of any temporary breakdown in the water mains so that the progress of work is not held up

for want of water. No claim as damages or refund of water charges will be entertained on account of such breakdowns. However, if the contractor is permitted to make his own arrangement to draw water from a well, handpump, or natural river or pond of the Employer, no charges will be made for the water drawn from the same, but the contractor will make good any damage done to the installations and ensure that the quality of water used in the work is conforming to BIS codes and provide for any treatment at his own cost.

- (c) The contractor shall be allowed to construct temporary wells in Employer's land for taking water for construction purpose only after he has permission of the Employer in writing. No charges shall be recovered from the contractor on this account but the contractor shall be required to provide necessary safety arrangement to avoid any accident or damage to adjacent buildings, roads and service lines. He shall be responsible for any accident or damage caused due to construction and subsequent maintenance of the wells and shall restore the ground to its original condition after the wells are dismantled on completion of the work.
- (d) The Employer on no account shall be responsible for the expenses incurred by the contractor for hired ground or water obtained for elsewhere.
- (e) Subject to availability the Employer may supply power at only one point from where the Contractor shall make his own arrangement for distribution including provision of electric meters, switches, fuses etc. at his own cost. These shall be in the custody of the Employer. If there is any hindrance caused to other works the contractor shall reroute or remove such temporary lines without any extra cost. Such temporary lines shall be removed after the completion of work. The cost of power consumed by the contractor shall be payable to the employer at rates fixed by the Employer, which would be deducted from the running account bills. However the Employer does not guarantee the supply of power and no compensation for any failure or short supply of power shall be entertained.

#### 3 A. Sufficiency of Tender

The contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiently of the tender the works and the rates and the prices quoted in the schedule of items, which rates and the prices shall, except as otherwise provided, cover all his obligation under the contract and all matters and things necessary for the proper completion and maintenance of the works.

#### 4. Authorities, Notice & Patents

(a) The contractor shall confirm to any regulations and bye-laws of any

corporation and of any electricity supply company and authorities with whose systems the structure is proposed to be connected, and shall before making any variations from the drawing and specifications that may be necessitated for so conforming by giving written notice to the Engineer specifying the **variations proposed** to be made, the reasons for making it and apply for instructions thereon. If the compliance with this clause involves any extra work not included in this contract, he shall specify these items of work and the allowance of extra payment required on their account.

(b) The contractor shall give all notices required by the said regulations or bye-laws to be given to any Authority and pay to such Authority or to any public office all fees that may be chargeable in respect of the works and lodge the receipts with the bill to the Engineer for reimbursement.

#### 5. Rates to include all Taxes

- (a) Rates quoted by the contractor shall include GST, sales tax / VAT (except service tax), purchase tax, turnover tax, labour cess, duties, octroi, toll tax, realties and all other taxes in respect of this contract and the Employer shall not entertain any claim whatsoever in this respect. However, in respect of service tax, same shall be paid by the contractor to the concerned department on demand and it will be reimbursed to him by the department after satisfying that it has been actually and genuinely paid by the contractor. The applicable and eligible service tax shall be reimbursed preferably 7 days but not later than 30 days of submission of documentary proof of payment provided same are in order. Tendered rates are inclusive of all taxes levies payable under the respective statutes. However pursuant to the Constitution (Forty Sixth Amendment) Act; 1982 if any further tax or levy is imposed by Statutes, after the date of receipt of tenders and the contractor there upon necessarily and properly pays such taxes/levies the contractor shall be reimbursed the amount as per the rules on producing proof of payment so made provided such payments, if any, is not in the opinion of the Employer (whose decision shall be final and binding) attributable to delay in execution of work within the control of the contractor.
- (b) The contractor shall keep necessary books of accounts and other documents for the purpose of this condition as may be necessary and shall allow inspection of the same by a duly authorized representative of the Employer and further shall furnish such other information and documents as the Employer may require.
- (c) The contractor shall within a period of thirty days of imposition of any **further tax** or levy pursuant to the Constitution (Forty Sixth Amendment) Act, 1982 give a written notice thereof to the Employer that the same is

given pursuant to this condition together with all necessary information relating thereto.

#### 6. Materials

- If the specifications of schedule of items provide for the use of any (a) material to be supplied by the Employer's stores or if it is required that the contractor shall use certain stores to be provided by the Employer as shown in the schedule of materials hereto annexed, the contractor shall be bound to procure and shall be supplied such materials and stores as are from time to time required to be used by him for the purpose of the contract only and value of the materials so supplied at the rates specified in the said schedule of materials and of the quantities incorporated in the work may be set of or deducted from any sums then due, or thereafter to become due to the contractor under the contract or otherwise or against or from the Security deposit. All materials so supplied to the contractor by the Employer shall remain the absolute property of the Employer and the contractor shall be the trustee of the materials so supplied procured and the said materials shall not be removed/disposed off from the site of the work on any account and shall be at all times open for inspection by the Engineer or Employer. The contractor shall bear all incidental charges for cartage, storage and safe custody of all materials and against damage due to 'dampness, rain, sun, fires and theft and be fully responsible for their storage and maintenance. Any such material unused and in perfectly good condition in the opinion of the Employer at the time of the completion of work or termination of the contractor or earlier shall be returned to the Employer at a place directed by the Engineer at contractor's cost and at rates stipulated in the said schedule but in case the Employer decides not to take back the materials the contractor shall have no claim for compensation on account of any such materials supplied to him as aforesaid being unused by him or for any wastage or damage to any such materials.
- (b) If for any reason there is delay or non-supply of material as shown in the schedule, the contractor shall procure the same and complete the work in time after due intimation and approval of the Employer. The difference in price (between his procurement price and price shown in the schedule) shall be paid to the contractor. However, in case approval of the Employer is not given, only suitable extension of time would be considered and no other claim of compensation/damages shall be payable by the Employer.
- (c) After completion of the work or on determination/termination of the contract, the theoretical quantity of cement to be used in work shall be calculated on the basis of statement showing quantity of cement to be used in different items of work provided in current Schedule for the purpose printed by CPWD. In case any item is executed for which the

standard contents for the consumption of cement are not available in the above mentioned statement or cannot be derived from this statement, the same shall be calculated on the basis of standard formula to be laid down by the Engineer. Over this theoretical quantity of cement shall be allowed a variation up to 3% plus/minus for works estimated cost of which as put to tender is not more than Rs.10 lakhs and up to 2% plus/minus for works estimated cost of which as put to tender is more than Rs. 10 lakhs. The difference in the quantity actually issued to the contractor and the theoretical quantity including authorized variation if not returned by the contractor, shall be recovered at twice the issue rate, without prejudice to the provision of other conditions regarding return of material governing the contract. In the event of its beings discovered that the quantity of cement which is less than the quantity ascertained as herein before provided (allowing variation on minus side as stipulated above) the cost of quantity of cement not so used, shall be recovered from the contractor on the basis of stipulated issue rates and cartage to site.

- (d) The provisions of foregoing sub-clause shall apply Mutatis-Mutandis in the case of steel reinforcement structural steel sections (each diameter/section or category shall be considered separately) except that the theoretical quantity of the steel be taken as the quantity required as per design or as authorized by the Engineer, including lappages, plus 3% wastage due to cutting into pieces. Over this theoretical quantity 2% plus/minus shall be allowed as variation due to wastage.
- (e) The provision of foregoing sub-clause shall apply Mutatis-Mutandis in the case of cables; (other than under-ground cables) wires, conduits/GI pipes, GI/MS sheets used in various items of work shall be calculated on the basis of measurements recorded in the measurement books for the purpose of payment and for assessing the Consumption of materials used in the works. Over this quantity a variation of 5% plus shall be allowed for wastage of materials during execution in case of cables (other than underground cables), wires, conduits GI pipes, and 10% plus in case of GI/MS Sheets.
- (f) The provisions made above are without prejudice to the right of the Employer to take action against the contractor under the conditions of the contract for not doing the work according to the prescribed specifications.
- (g) In case of easy availability of approved quality of cement and steel in the open market it will be Employer's discretion to make these items as contractor's supply.

#### 7. Testing of Materials

The contractor shall provide assistance, instruments, materials, labour and any other arrangement normally required for testing, checking of materials and workmanship as stipulated in the specifications and by statutory authority at his own cost. The Employer has the right to appoint the testing authorities. The contractor shall pay for the cost of test samples, its packing, transportation including testing fees. Failings his so doing, the same shall be provided by the Engineer at the expense of the contractor and the expenses may be deducted from any money due to the contractor under the contract and/or from the Security Deposit or proceeds thereof or of a sufficient portion thereof.

#### 8. Contractor's Engineers/Foreman & Workman

- (a) The contractor shall give all necessary personals superintendence during the execution of the (work and as long thereafter as the Engineer may consider necessary until the expiration of the Defects Liability Period. The contractor shall employ competent Site-Engineer/Foreman as per CPWD norms and as approved by the Engineer whose qualification must conform to the requirement specified by the Engineer who shall be constantly in attendance of the work while the men are at work. Any directions, explanations, instructions or notices given by the Engineer to such Site-Engineer or Foreman or any other authorized agent shall be held to be given to the contractor. (refer Annexure III)
- (b) The contractor shall on the request of the Engineer immediately dismiss from the work any person employed thereon who may in the opinion of the Engineer be unsuitable or incompetent or who may in opinion of the Employer misconduct himself.

#### 9. Access

- (a)The Engineer, and the Employer or its representatives shall at all reasonable time have free access to the works and/or workshops, factories or other places the materials are being prepared or constructed for the contract and also to any place where the materials are lying or from which they are being obtained and the contractor shall give every facility to them for inspection. Except the representatives of statutory authorities and those mentioned above no other person shall be allowed on the works at any time without the permission of the Engineer.
- (b)If any work is to be done at a place other than the site of works, contractor shall obtain written permission of the Engineer.

#### 10. Variation & Price for Variation

(a) The Engineer with the approval of the Employer shall have powers to make any alterations/ omissions/additions and/or substitutions from the originals specifications, drawings, designs and written instructions of such alterations, omissions, additions, substitutions shall not invalidates the contract and any altered, additional or substituted work which the contractor may be directed to do in the manner specified above as part of the work shall be carried out by the contractor on the same conditions in all respects on which he agreed to do the main work. The rates for such altered, additional or substituted work under this clause shall be worked out in accordance with the following provisions in their respective order.

- (b) If the rates for the altered, additional, or substituted work are specified in the contract for the work, the contractor is bound to carry out the altered, additional, or substituted work at the same rates as are specified in the contract for the work.
- (c) If the rates for the altered, additional, or substituted work are specified in the contract for the work, the contractor is bound to carry out the altered, additional, or substituted work at the same rates as are specified in the contract for the work.
- (d) If the rates for the altered, additional, or substituted work cannot be determined in the manner specified in sub-clause (b) and (c) above, then the contractor shall, with 10 working days from the date of receipt of the order to carry out the work through notice in writing; inform the Engineer of the rate which it is his intention to charge for such class of work, supported by analysis of the rate claimed which shall be based on actual cost of work plus 10% as contractor's profit and overheads except in case of departmental materials for which contractors profit and over-heads shall be 2.5%. When such notice has been given, the Engineer with1he consent of the Employer may agree to such a rate but if the Engineer does not agree to the contractor's rate the Engineer may cancel his order to carry out such class of work and arrange to' carry out in such a manner as he may consider advisable.
- (e) Under no circumstances, the contractor shall suspend d the work on the plea of non-settlement of rates of items falling under the clause.
- (f) "Deviation limits"

Building work	30%
Maintenance/emergency woks	50%
Foundation works	100%
Services works	30%

#### 11. Faulty Materials, Workmanship & Defects After Completion

(a) The Engineer shall have powers to require the removal from the site of all materials and work which in his opinion are not in accordance with specifications and in case of default, the Engineers shall be at liberty to employ other persons to remove the same without being answerable or accountable for any loss or ,damage that may happen or arise to such materials to be substituted thereof and in case of default the Engineer may cause the same to be supplied and all costs which may attend such removal

and/or substitution are to be borne by the contractor.

- (b) If it shall appear to the Engineer or to the Employer based on audit/technical examination that any work has been executed with unsound, imperfect, or unskillful workmanship or with materials of any inferior description, or that any materials or articles provided by him for the execution of the work are unsound or of a quality inferior to that contracted for or otherwise not in accordance with the contract, any defects, shrinkage or other faults which may appear within the defects liability period of 12 months from the date of completion arising in the opinion of the Engineer, the contractor shall on demand in writing which shall be made within 12 months of the completion of the work from the Engineer specifying the work, materials, articles defects or other faults complained of notwithstanding that the same may have been passed, certified and paid for, forthwith rectify, or remove and reconstruct the work so specified in whole or in part, as the case may requires or as the case may be, remove the materials or articles so specified and provide other proper and suitable materials or articles at his own cost. In case of any such failures, the Engineers may rectify or remove or re-execute the work or remove and replace with others, the material or articles complained of as the case may be at the risk and cost in all respects of the contractor.
- (c) In lieu of rectifying the work not done in accordance with the contract, the Employer may, allow such work to remain, and in that case make allowance for the difference in value, together with such further reduction as in his opinion may be reasonable.
- (d) Provided always that nothing in this clause shall relieve the contractor from his liability to execute the works in all respects in accordance with the terms and conditions of this contract, or from his liability to make good all defects.

#### 12. Works to Be Open for Inspection

- (a) All work under or in course of execution or executed in pursuance of the contract shall at all times be open to the inspection and supervision of the Engineer and the contractor shall at all times, during the usual working hours, and at all other times at which reasonable notice of the intentions of the Engineer to visit the works shall have been given to the contractor, either himself be present to receive order and instruction or have a responsible agent duly accredited in writing present for that purpose.
- (b) The contractor shall give not less than seven days notice in writing to the Engineer before covering up or otherwise placing beyond the reach of measurement any work in order that the same may be measured and correct dimensions thereof be taken before the same is so covered up or placed beyond the reach of measurement and shall not cover up and place beyond the reach of measurement, any work without the consent in writing of the Engineer and the Engineer shall within the aforesaid period of seven days inspect the work, and if any work shall be covered up or placed beyond the reach of measurement without such notice having been or the Engineer's

consent obtained the same shall be uncovered at the contractors expense or in default thereof no payment or allowance shall be made for such work or the materials with which the same was executed.

#### 13. Assignment or Sub-Letting

- (a) The contract shall not be assigned or sublet without the written approval of the Employer. And if the contractor shall assign or sub-let his contract or attempt to do so or become insolvent or commence any insolvency proceedings or make any composition with his creditors or attempt to do so or if any bribe, gratuity or gift, loan, perquisite, reward or advantage pecuniary or otherwise, shall either directly or indirectly, be given, promised or offered by the contractor or any of his servants or agents to any person in the employment of the Employer in any way relating to his office or employment, or if any such employee or person shall become in any way directly or indirectly interested in the contract, the Employer shall have the power to adopt any of the courses specified under clause-23 as may be best suited to the interest of the Employer and in the event of any of the courses being adopted the consequences specified in the said clause shall ensure.
- (b) Where the contractor is a partnership firm, the approval in writing of the Employer shall be obtained before any changes in the constitution of the firm. Where the contractor is an, individual or a Hindu undivided family business concern such approval as aforesaid shall likewise be obtained the contractor enters into any partnership agreement hereunder the partnership firm would have the right to carry out the work hereby undertaken by the contractor. If previous approval as aforesaid is not obtained, the contract shall be deemed to have been assigned or sublet in contravention of clause 13 (a) and the same action may be taken and the same consequences shall ensue as provided in the said clause 13 (a).

#### 14. Indemnifying Against Damages to Persons, Property & Statutes

The contractor shall take all precautions to avoid all accidents by exhibiting necessary caution boards day and night, speed limit boards, red flags. red lights and providing barriers. He shall be responsible for all damages and accidents caused due to negligence on his part. No hindrance shall be caused to traffic during the execution of work.

(a) The contractor shall be responsible for all injury to persons, animals or things, and for al damage, whether such injury or damage arises from carelessness or accident in any way connected therewith. This clause shall be held to include inter-alia any damage due to causes is aforesaid to work, building (whether immediately adjacent or otherwise) and to roads, streets, foot paths, bridges or ways as well as all damage caused to the buildings and works forming the subject of this contract by inclemency of weather. The contractor indemnifies the Employer and holds him harmless in respect of all expenses arising from such

- injury or damage as aforesaid and also in respect of any award of compensation or damage consequent upon such claim including legal costs.
- (b) The contractor shall reinstate all damage of every sort mentioned in this clause, so as to deliver the whole of the contracted works complete and perfect in every respect and so as to make good and otherwise satisfy all claims for damage as aforesaid to the property of third parties.
- (c) The contractor also indemnifies the Employer against all claims which may be made upon the Employer for acts during the currency of this contract by any employee or representative of an employee of the contractor or any subcontractors, employed by him, for any injury to or loss of life, of such employees, or for compensation payable under any law for the time being in force to any workmen or to the representative of any deceased or incapacitated workmen.
- (d) The contractor also indemnifies the Employer against all claims which may be made upon the Employer for acts during the currency of this contract by the Central/State Government or local Municipal authorities for the noncompliance of any laws, regulations, rules pertaining to wages act, safety act in force and any amendments thereof in respect of all labour and apprentices directly or indirectly employed in the work under this contract.
- (e) The Employer shall be at liberty and is hereby empowered to deduct the amount of any damages, compensation costs, charges and/or expenses arising or accruing from or in respect of any such claim and/or damages as aforesaid from any sum or sums due or to become due to the contractor or security deposit.
- (f) The contractor shall indemnify the employer against any action, claim or proceedings relating to infringement or sue of any patent or design or any alleged patent or design rights and shall pay any royalties which may be payable in respect of any article or part thereof included in the contact. In the event of any claims made under or action brought against the Employer in respect of any such matters as aforesaid the contractor shall be immediately notified thereof and the contractor shall be at liberty, at his own expense, to settle any dispute or to conduct any litigation that may arise therefrom. Provided that the contractor shall not be liable to indemnify the Employer if the infringement of the patent or design or any alleged patent or design right is the direct result of an order passed by the said Employer or his authorised representative.

#### 15. Lien in Respect of Claim in Other Contracts

(a) Any sum of money due and payable to the contractor including the security deposit under the contract may be withheld or retained by way of lien by the Employer or Government or any other contracting person or persons against any claim of the Employer or Government or such other persons in respect of

- payment of a sum of money arising out of or under any other contract made by the contractor with the Employer or Government or with such other persons.
- (b) It is agreed term of the contract that the sum of money so withheld or retained under this clause by the Employer will be kept withheld or retained as such by the Employer or till his claim arising out of in the same contract or any other contract is either mutually settled or determined by the Arbitrator if the contract is governed by arbitration clause or by the competent court as the case may be, and that the contractor shall have no claim for interest or damages whatsoever on this account or any other ground in respect of any sum of money withheld or retained under this clause and duly notified as such to the contractor.

#### 16. Withholding & Lien in Respect of Sums Claimed

(a) Whenever any claim or claims for payment of a sum of money arises out of or under the contract against the contractor, the Employer shall be entitled to withhold arid also have a lien to retain such sum or sums in whole or in part from the security deposit if any deposited by the contractor and for the purpose aforesaid, the Employer shall be entitled to withhold the security deposit, if any, furnished as the case may be and also have a lien over the same pending finalization or adjudication of any such claim. In the event of the security deposit being insufficient to cover the claimed amount or amounts or if no security deposit has been taken from the contractor, the Employer shall be entitled to withhold and have a lien to retain to the extent of such claimed amount or amounts referred to above, from any sum or sums found payable or which at any time thereafter may become payable to the contract under the same or any other contract, with the, Employer or any contracting person pending finalization or adjudication of any such claim.

It is an agreed terms of the contract that the sum of money so withheld or retained under the lien referred above, by the Employer will be kept withheld or retained as such by the Employer till the claim arising out of or under the contract is determined by the Arbitrator (if the contract is governed by the arbitration clause) or by the competent court as the case may be and that the contractor will have no claim for interest or damages whatsoever on any account in respect of such withholding or retention under the lien referred to above and duly notified as such to the contractor. For the purpose of this clause, where the contractor is a partnership firm or a limited company the Employer shall be entitled to withhold and also have a lien to retain towards such claimed amount or amounts in whole or In part from any sum payable to any Partner/Limited company as the case may be, whether in his individual capacity or otherwise.

(b) The Employer shall have the right to cause an audit and technical examination of the works and the final bills of the contractor including all supporting vouchers, abstract etc., to be made after payment of the final bill and if as a

result of such audit and technical examination any sum is found to have been over paid in respect of any work done by the contractor under the contract or any work claimed by him to have been done by him under the contract and found not to have been executed, the contractor shall be liable to refund the amount of over payment and it shall be lawful for the Employer to recover the same from him in the manner prescribed in sub-clause (a) of this clause or in any other manner legally permissible; and if it is found that the contractor was paid less than what was due to him under the contract in respect of any work executed by him under it, the amount of such under-payment shall be duly paid by the Employer to the contractor.

Provided that the Employer shall not be entitled to recover any sum over-paid, nor the contractor shall be entitled to payment of any sum paid short where such payment has been agreed upon between the Employer on the one hand, and the contractor on the other hand under any term of contract permitting payment for work after assessment by the Employer.

#### 17. In-Case of Death of Contractor

Without prejudice to any of the rights of remedies under this contract, if the contractor dies, the Employer shall have the option of terminating the contract without compensation to the contractor.

#### 18. Sub-Contractors

The Employer reserves the right to use the premises and any portion of the site for the execution of any work not included in the contract. The contractor is to afford all reasonable facilities to all sub-contractor, specialists, merchants, tradesmen and others who may at any time be appointed by the Employer for executing any work or supplying any goods relating to the construction, servicing, equipping or furnishing of the work under this contract.

#### 19. Compliance to Labour Laws & Apprentice Act

The contractor shall comply with an the provisions of the Minimum Wages Act, 1948, Contract Labour (Regulation and Abolition) Act, 1970, and rules and orders framed there under and other labour laws affecting contract labour and Apprentice Act, 1961 and the rules and orders framed there under that may be in force or brought into force from time to time.

Contractor shall obtain a valid license under Contract Labour (R&A) Act 1970 and Contract Labour (R&A) Central Rules 1971 before commencing work and which should be valid till the completion.

#### 20. Compensation for Delay

- (a) The time for carrying out the work as entered in the tender shall be strictly observed by the contractor and shall be deemed to be essence for the contract on the part of the contractor. The work shall throughout the stipulated period of the contract be proceeded with all due diligence and the contractor shall pay as compensation an amount equal to ONE PER CENT OR such smaller amount as the employer (whose decision in writing shall be final) may decide on the amount of the whole work as shown in the agreement, for every week that the work remains un-commenced or unfinished after the proper dates.
- (b) And further to ensure good progress during the execution of the work, the contractor shall be bound in all cases in which the time allowed for any work exceeds one month (say for special jobs) to complete one-eighth of the whole of the work before one-fourth of the whole time allowed under the contract has elapsed: three-fourths of the work before three-fourths of such time has elapsed. However for special jobs if a time schedule has been submitted by the contractor and the same has been accepted by the Employer, the contractor shall comply with the said time schedule. In the event of the contractor failing to comply with this condition he shall be liable to pay as compensation an amount equal to one per cent or such smaller amount as the Employer (whose decision in writing shall be final) may decides on the said cost of the work for every week that the due quantity of work remains incomplete. Provided that the entire compensation to be paid under the provisions of this clause shall not exceed ten percent on the estimated cost of the work as shown in the tender.

#### 21. Damage to Works in Consequence of Hostilities or War-Like Operation

(a) The work (whether fully constructed or not) and all materials, machines, tools and plants, scaffolding, temporary buildings and others things connected therewith shall be at the risks of the contractor until the work has been delivered to the Employer and a certificate from him to that effect obtained. In the event of the works or any materials properly brought to the site for incorporation in the work being damaged or destroyed in consequence of hostilities or war-like operations, the contractor shall, when ordered in writing by the Employer, remove any debris from the site, collect and properly stored or remove from store all serviceable materials salvaged from the damaged work and shall be paid at the contract rates in accordance with the provision of this agreement for the work of clearing the site 9f debris, stacking, removal of serviceable materials and for the reconstruction of all works ordered by the Employer such payment being addition to compensation upto the value of the work originally executed before being damaged or destroyed and not paid for. In case of works damaged or

destroyed but not already measured and paid for the damage/destruction suffered and for restoring the material at the rates based on the analysis of rates tendered for in accordance with the provision of this agreement. The certificate of the Employers regarding the quality and quantity of materials and the purpose for which they were collected shall be final and binding on the contractor.

- (b) Provided always that no compensation shall be payable for any loss in consequence of hostilities or war-like operations (i) unless the contractor had taken all such precautions against Air Raid as are deemed necessary by the A. R. P. Officers or the Employer, (ii) for any materials etc., not on the site of the work or for any tools and plant, machinery, scaffolding, temporary buildings and other things not intended for the work.
- (c) In the event on the contractor having to carry out reconstruction as aforesaid, he shall be allowed such extension of time for its completion as is considered reasonable by the Employer.

#### 22. Extension of Time

- (a) If the contractor shall desire an extension of time for the completion of the work on the grounds of his having been unavoidably hindered in its execution or any other ground he shall apply in writing to the Employer within thirty days of the date of hindrance on account of which he desires extension-as aforesaid, and the Employer shall, if in his opinion (which shall be final) reasonable grounds shown therefore, authorize such extension of time if any, which may, in his opinion, be necessary or proper.
- (b) In the event, the value of work exceeds the value of the Bill of Quantities owing to variations, the contractor shall be entitled to ask for extension of time in proportion to the increased value of work.

#### 23. Suspension of Work by Contractor

- (a) The Employer may without prejudice to his right against the contractor in respect of any delay or inferior workmanship or otherwise or to any claims for damages in respect of any breaches of the contract and without prejudice to any rights or remedies under any of the provisions of this contract or otherwise and whether the date for completion has elapsed by notice absolutely determine the contract in any of the following cases:
  - (i) If the contractor having been given by the Engineer to rectify, reconstruct or replace any defective work or that the work is being performed in any inefficient' or otherwise improper or unworkman-like manner shall omit to comply with the requirements of such notice for a period of seven days thereafter or if the contractor shall delay or suspend the execution of the

- work so that in the judgment of the Employer (which shall be final and bindings) he will be unable to ensure completion of the work by the date for completion or he has already failed to complete the work by that date.
- (ii) If the contractor being a company shall pass a resolution or the court shall make an order that the company shall be wound up or if a receiver or a manager on behalf of a creditors shall be appointed or if circumstances shall arise which entitle the court of creditor to appoint a receiver or a manager or which entitle the court to make a winding up of order.
- (iii) If the contractor commits breach of any of the terms and conditions of this contract.
- (iv) If the contractor commits any acts mentioned in clause-13th thereof.
- (b) When the contractor has made himself liable for action under any of the cases aforesaid, the Employer shall have the following powers:
  - (i) To determine or rescind the contract as aforesaid (of which termination or rescission notice in writing to the contractor under the hand of the Employer shall be conclusive evidence). Upon such determination or recession the security deposit of the contractor shall be liable to be forfeited and shall be absolutely at the disposal of the Employer.
  - (ii) The Engineer may employ labour paid by the Employer and to supply materials to carry out the work or any part of the work debiting the contractor with the cost of the labour and the price of the materials (of the amount of which cost and price certified by tile Engineer shall be final and conclusive against the contractor) and crediting him with the value of the work done in all respects in the same manner and at the same rates as if it had been carried out by the contractor under the terms of his contract. The certificate of the Engineer as to the value of the work done shall be final and conclusive against the contractor, provided always that action under the sub-clause shall only be taken after giving notice in writing to the contractor. Provided also that if the expenses incurred by the Employer are less than amount payable to the contractor at his agreement rates, the difference should not be paid to the contractor.
  - (iii) After giving notice to the contractor to measure up the work of the contractor and to take such part thereof as shall be unexecuted out of his hands and to give it to another contractor to complete in which case any expenses which may be incurred in excess of the sum which would have been paid to the original contractor if the whole work had been executed by him (of the amount of which exceed the certificate in writing of the Engineer shall be final and conclusive) shall be borne and paid by the original contractor and may be deducted from any money due to him by the Employer under this contract or any other account whatsoever or from his security deposit.
  - (iv)In the event anyone or more of the above courses being adopted by the Employer the contractor shall have no claim to compensation for any loss

sustained by him by reason of his having purchased or procured any materials or entered into any engagement or made any advances on account or with view to the execution of the work or the performance of the contract. And in case action is taken under any of the provisions aforesaid, the contractor shall not be entitled to recover or be paid any sum for any work thereof or actually performed under this contract unless and until the Engineer has shall certified in writing the performance of such work and the value payable in respect thereof and he shall only be entitled to be paid the value so certified.

#### 24. Secured Advance

The contractor on signing an indenture in the form specified by the Employer during the progress of the execution of the work may be paid if agreed by the Employer up to 75 percent of the estimated value which shall take into account the market value and contractor tendered rates for the finished item of any material which in the opinion of the Engineer is likely to be incorporated in the work within next three months, are non-perishable and are in accordance with the contract and which have been brought on the site in connection therewith and are adequately stored and protected against damage by weather or other causes, which have not at the time of advance been incorporated in the works. When materials on account of which an advance has been made under this clause are incorporated in the worth the amount of such advance shall be deducted from the next payment made under any of the clause of clauses of this contract.

#### 25. Certificates & Payments

(a) No payments shall be made for a work estimated to cost Rupees ten thousand or less till the whole of the work shall have been completed and certificate of completion given. But in the case of a work estimated to cost more than Rupees ten thousand, the contractor shall, on submitting the bill entitled to receive a monthly payment proportionate to the part of the work executed and to the satisfaction of the Engineer, whose certificate of the" sum so payable shall be final and conclusive against the contractor, provided the amount of work done is as per the value of intermediate certificate or for a lesser amount at the discretion of the Engineer as mentioned in the NIT. All such intermediate payments shall be regarded as payments by way of advance against the/final payment only and not as payments for work actually done and completed and shall not preclude the requiring of bad, unsound, imperfect or unskilled work to be removed and taken away and reconstructed, or recreated or be considered as an admission of the due performance of the contract, or any part thereof in any respect or the accruing of any claim nor shall it conclude, determine, or affect in any way

the powers of the Employer under these conditions or any of them as to the final settlement and adjustment of the accounts or in any other way affect the contract. The final bill shall be submitted by the contractor within two months of the date fixed for the completion of work or of the date of the certificate of completion furnished by the Employer and payments shall be made within three months if the value of the completed works is upto Rupees Two lakhs and in six months if the same exceeds Rupees Two lakhs of the submission of such bill. If there shall be any dispute about any item or items of the work then the undisputed item or items only shall be paid within the said period of three months or six months as the case may be.

- (b) Whenever there is likely to be delay in recording detailed measurements for making a running payment, advance payment without detailed measurements for work done worked out at 75 percent of the tendered rates for assessed quantities may be made in running account bills by the Employer on the basis of a certificate from the Engineer. The advance payments so allowed shall be adjusted in the subsequent running bills by taking detailed measurements thereof. Final payments shall be made only on the basis of detailed measurements.
- (c) A bill shall be submitted by the contractor each month on or before the date fixed by the Engineer on printed forms obtainable from the Engineer's office. The Engineer shall take or cause to be taken the requisite measurements for the purpose of having the same verified and the claim, as far as admissible, adjusted as far as possible, before the expiry of ten days from the presentation of the bills. If the contractor does not submit the bill within the time fixed as aforesaid the Engineer may take action within seven days of the date fixed as aforesaid, an authorized representative to measure up the said work in the presence of the contractor whose signature to the measurement will be sufficient warrant and the Engineer may prepare the bill from such measurements.
- (d) Before taking any measurement of any work the Engineer or his authorized representative deputed by him shall give reasonable notice to the contractors. If the contractor fails to attend after such notice or fails to sign or to record the difference within a week from the date of measurement in the manner required by the Engineer then in any such event the measurements taken by the Engineer or by the authorized representative deputed by him as the case may be, shall be final binding on the contractor and the contractor shall have no right to dispute the same.
- (e) The charges in the bills shall always be entered at the rates specified in the agreement or in the case of any extra work ordered in pursuance of these conditions and not mentioned or provided for in the agreement at the determined as per-clause-10. However in case of partially executed items of

work, the Employer at his discretion allows proportionate rates for such items of work as determined by the Engineer whose certificate of the sum so payable shall be final and conclusive against the contractor.

#### 26. Security Deposit

- (a) A sum @ 10% of the gross amount of the bill shall be deducted from each running bill of the contractor till the sum along with the sum already deposited as earnest money, will amount to security deposit of the 5% tender value of the work. In addition, the contractor shall be required to deposit an amount equal to 5% of the tendered value of the contract as Performance Security within the period prescribed for commencement of work in the letter of award issued to him.
- (b) In case a fixed deposit receipt of any scheduled bank is furnished by the contractor to the Employer as part of the Security deposit and the bank goes Into liquidation or for any reason is unable to make payment against the said fixed deposit receipt,. the loss caused thereby shall fall on the contractor and the contractor shall forthwith on demand furnish additional security to the Employer to make good the deficit of such sum from the running bill as mentioned above. Such deductions will be held by the Employer by way of security deposit, provided always that the Employer for this purpose shall be entitled to recover the said percentage of the amount from each running bill till the balance of the amount of security deposits is realised. All compensation or the other sums of money payable by the contractor under the terms of this contract may be deducted from the security deposit or from the interest arising therefrom or from any sums which may be due to or may become due to the contractor by the Employer on any account whatsoever and in the event of his security deposit being reduced reason of any account whatsoever and in the event of his security deposit being reduced reason of any such deductions aforesaid, the contractor shall within ten days make good in cash or further fixed deposit receipt pledged in favour of the Employer. The security deposit shall be collected from the running bills of the contractor at the rates mentioned above and the earnest money if depositedat the time of tenders will be treated as part of the security deposit.
- (c) The contractor if he so desires may furnish fixed deposit receipt in advance towards the security deposit. Such fixed deposit receipt shall be of a minimum value of Rs. 25,000/- each. (The last such fixed deposit receipt could be of a lower value on the basis of the amount) In case any recovery is effected from running account bills, such recovered amount shall not be replaced with fixed deposit receipt. It is in the contractor's interest to keep a ward about the adequacy of the fixed deposit receipt submitted.
- (d) No partial refund of security deposit shall be made during the defect liability period. In case the final bill is not settled within stipulated period for reasons

beyond control and the Employer is satisfied that the security deposit is not required for adjustment of Employer dues or whatsoever dues either in this or any other contract then this security deposit either in full or in part could be refunded at the sole discretion of the Employer. However, release of security deposit would be only after written clearance of Labour Officer regarding no dues or claims is received.

(v) In case of termination of contract, this security deposit shall be forfeited and amount necessary to makeup this amount shall be recovered from money due to the contractor under this contract, or any Contract with the Employer.

#### 27. Completion Certificate

Within ten days of the completion of the work, the contractor shall give notice of such completion to the Employer and within ten days of the receipt of such notice the-Engineer shall inspect the work. It there is no defect in the work the Employer shall furnish the contractor with certificate of completion otherwise a certificate of completion indicating defects shall be issued but the work shall not, considered to be completed until the contractor shall have removed from the premises on which the work shall be executed an the scaffolding, surplus material, rubbish, and all the huts and sanitary arrangements required for his work, people on the site in connection with execution of the works as shall have been erected or constructed by the contractor and cleaned of the dirt, splashes, droppings of finishing items from all wood work, doors, windows, walls, floors or other parts of any building, in upon or about which the work is to be executed or of which he may have had possession for the purpose of the execution thereof. If the contractor shall fail to comply with requirements of this clause on or before the fixed for the completion of the work, the Employer may at the risk and cost of the contractor take action as he may think fit and the contractor shall have no claim except for any sum actually realized by the sale thereof.

#### 28. Escalation

(a) If the prices of materials not being supplied by the Employer and/or wages of labour required for execution of the works increase, the contractor shall be compensated for such increase as per provisions detailed below and the amount of the contractor shall accordingly be varied, subject to the condition that compensation for escalation in prices shall be available only for the work done during the stipulated period of the contract including such period for which the contract is validly extended under the provisions of Clauses-22 of General Conditions of Contract without levy of compensation under Clause-20 of General Conditions of Contract and also subject to the condition that no such compensation shall be payable for a work and also which the stipulated period of completion is eighteen months or less. Such compensation for escalation in the prices of materials and labour when due shall be worked out based on the following provisions.

- (i) The base date for working out such escalation shall be the last date on which the tenders were stipulated to be received.
- (ii) The cost of work on which escalation will be payable shall be reckoned as 85% of the cost of the work as per the bills, running or final, and from this amount the value or material supplied by the Employer and proposed to be recovered in the particular bill shall be deducted before the amount of compensation for escalation is worked out. In case of materials bought to site for which secured advance is included in the bill full value of such materials as assessed by the Engineer in charge (and not the reduced amount for which secured advance has been paid) shall be included in the cost of work done for operation of this clause. Similarly when such materials are incorporated in the work, the secured advance is deducted from the bill full assessed value of the materials originally considered for operation of this clause shall be deducted from the cost of work shown in the bill running or final. Further the cost of work shall not include any work for which payment is made for any item at prevailing market rates.
- (iii) The compensation for escalation for materials &labour shall be worked out as per the formula given below:

VM = W X A/100 X (MI-MI<sub>0</sub>)/MI<sub>0</sub>.

VM = Variation in material cost Le. increase or decrease in the amount in rupees to be paid or recovered

W = Cost of work done worked out as indicated in sub para (ii) above.

Component of materials expressed as percent of the total value of work and is predetermined as 75

Index numbers of Wholesale Prices in India for all commodities

MI = published by the Reserve Bank of India for the period under reckoning

Index numbers of Wholesale prices in India for all commodities

 $MI_0$  = published by the Reserve Bank of India and valid on the stipulated date of receipt of tenders

VL = W X B/100 X (LI-LI<sub>0</sub>)/LI<sub>0</sub>

VL = Variation in labour cost, that is, increase or decrease in the amount in rupees to be paid of recovered

W = Value of work done, worked out as indicated in sub para (ii) above.

B = Component of labour expressed as percent of the total value of work and is predetermined as 25

All India consumer price index numbers for workers published by

L1 = the Reserve Bank of India for the period under reckoning as for the period under consideration

 $L1_0 = \frac{\text{All India consumer price index numbers for industrial workers}}{\text{published by the Reserve Bank of India and valid on the stipulated}}$ 

date of receipt of tenders.

- (b) The following principle shall be followed while working out indices mentioned in sub para (iii) above.
  - (i) The compensation for escalation shall be worked out at yearly intervals and shall be with respect to the cost of work done during the six calendar months of the said work. The first such payment shall be made at the end of the six months after the month (excluding) in which the tenders was accepted and thereafter at six monthly intervals. At the time of completion of work, the last period for payment might become less than six months, depending on the actual date of completion
  - (ii) The index (MI or LI) relevant to any six months for which such compensation is paid shall be the arithmetical average of the indices relevant to the six calendar months. If the period upto date of completion after the six months covered by the last such installment of payment, is less than six months the index MI or LI shall be the average of indices for the months falling within that period.
  - (iii)The base index (MI or LI) shall be the relating to the months in which the tender was stipulated to be received.
- (c) In the event the price of materials and/or wages of labour required for execution' of the work decreases there shall be downward adjustment of the cost of work so that the price of materials and/or wages of labour shall be deductable from the cost of work under this contract and in this regard formula herein before stated under this clause shall mutatis mutandis apply, provided that no such adjustment for the decrease in the prices of materials and/or wages of labour aforementioned would be made in case of contracts in which the stipulated period of completion of the work is six months or less.
- (d) Employer shall have the discretion to permit the IEEMA (Indian Electrical & Electronics Manufacturers' Association) Clause for escalation in case of specialized works e.g. lifts and electrical and mechanical installations etc. where the price variation is not similar to building works.

#### 29. Arbitration

a. Except where otherwise provided in the contract, all questions and dispute relating to the interpretation of the specification, designs, drawings and instructions, herein before mentioned, and as to the quality or workmanship or materials used in the work or as to any other question, claim, right, matter or thing whatsoever in any way arising out of or relating to the

contract, designs, specifications, estimates, instructions, orders on these conditions or otherwise concerning the works, or the execution or failure to execute the same, whether arising during the progress of the work or after the completion or abandonment thereof, shall be referred to the sole arbitration of the person appointed by the **Delhi International Arbitration Centre (DIAC)**, **Delhi High Court**, **New Delhi**. The arbitrator shall be appointed within 30 days from the receipt of a request by any party. The arbitrator, to whom the matter is originally referred, being unwilling or unable to act for any reason, the **Delhi International Arbitration Centre (DIAC)**, **Delhi High Court**, **New Delhi** shall appoint another person to act as arbitrator in accordance with the terms of the contract. Such person shall be entitled to proceed with the reference from the stage at which it was left by his predecessor. The arbitrator shall give speaking award. The Award of the Arbitrator shall be final and binding on the parties. The cost of the Arbitrator shall be borne equally by both the parties.

- (b) It is also a term of the contract that the party invoking arbitration shall specify the dispute or disputes to be referred to arbitration under this clause together with the amount or amounts claimed in respect of each such dispute.
- (c) It is also a term of the contract that if the contractor does not make any demand for arbitration in respect of any claim in writing within 90 days of receiving the intimation from the Employer that the bill is ready for payment, the claim of the contractor will be deemed to have been waived and absolutely barred and the Employer shall be discharged and released of all liabilities under the contract in respect of these claims.
- (d)Subject as aforesaid the provisions of the Arbitration and conciliation Act, 1996, or any statutory modification or re-enactment thereof and the rules made there under and for the time being in force shall apply to the arbitration reference under this clause.

#### 30. Dismantled Material:

The contractor shall treat all material obtained during dismantling of a structure, services sub systems/ installations, excavation of the site for a work etc., as employer's property and such material shall be disposed of to the best advantage of the Employer according to the instructions issued in writing by the Engineer.

#### 31. Performance Guarantee

Performance Guarantee may be taken from the contractor before the award of work, by the officer authorized to award the contract, if and where considered necessary, to ensure that a part or whole of the contract is completed by the contractor. In case of non-performance this guarantee could be encashed.

#### ANNEXURE-I

#### I. SPECIAL CONDITIONS

- 1. These special conditions are meant to amplify the general specifications and general conditions of contract.
- 2. Work shall be done as per latest CPWD specifications.

In case of any discrepancy, the order of precedence in interpretation shall be as under:

- (i) Schedule of quantities
- (ii) Drawings
- (iii) Additional conditions
- (iv) General conditions of contract
- (v) Special conditions
- (vi) Additional Technical Specifications
- (vii) CPWD latest Civil and Electrical Specifications
- (viii) IS Codes
- (ix) International Codes
- (x) Best Engineering Practice.

#### 3. Steel

Supply of the approved quality of steel/ reinforcement steel to use in the execution of work shall be in the scope of contractor.

#### 4. Cement

Supply of the approved quality of cement to use in the execution of work shall be in the scope of contractor.

- 5. Unless otherwise provided in the schedule of quantities the rates tendered by the contractor shall apply for all heights, lifts, leads and depths of the work and nothing extra shall be payable on this account.
- 6. The surplus excavated earth which is beyond the requirement of the Employer's work may be allowed by the Employer to be disposed off by the contractor on his own or sell the surplus excavated earth to private parties at his discretion but nothing extra will be paid for the carriage or disposal of surplus earth if the same is not required for any other work of the Employer.

#### **ANNEXURE-II**

#### II. ADDITIONAL CONDITIONS

- 1. The structural and architectural drawings shall at all time be properly correlated before executing any work. However, is case of any discrepancy in the item given in the schedule of quantities appended with the tender and drawings relating to the relevant item the former shall prevail unless and otherwise given in writing by the Engineer.
- 2. No payment shall be made to the contractor for any damage caused by rain snowfall, floods or any other natural cause whatsoever during the execution of work. The damage to work will be made good by the contractor at his own cost and no claim on this account shall be entertained.
- 3. All materials used shall be as per specifications and ISI marked wherever applicable. ISI marking referred relates to latest BIS code as published by Bureau of Indian Standards up to 30 days before the date of opening the tender.
- 4. The contractor shall give a performance test of the entire installation(s) as per standard specifications and/or as directed by the Engineer and will also submit test certificates as are required by Municipal, Electrical authority or any other authority. Nothing extra shall be payable for the same other than the fees paid to such authorities which shall be reimbursed on production of receipts.

#### **ANNEXURE-III**

#### III. Contractor's Site Superintendence

Staff to be employed by contractor on works: The contractor shall employ the following technical staff during execution of works:

## a) For building and road works

- i) One Graduate Engineer, when the tendered cost of work exceeds Rs. 10 lakhs
- ii) One qualified Diploma holder (overseer) with experience not less than 3 years when the tendered cost of work exceeds Rs. 5 lakhs but is less than Rs.10 lakhs.
- iii) One qualified Diploma holder when the tendered cost of work is more than RS.2 lakhs but less than Rs.5 lakhs.

# b) For sanitary and water supply works

One qualified diploma holder with experience of not less than 5 years, out of which one year should be in sanitary and water supply works when the tendered cost of work is more than Rs.50,000.

#### c) For electrical works

- One qualified Graduate Engineer possessing Degree in Electrical Engineering from recognized university with an experience of not less than 3 years or a Diploma holder in Electrical Engineering with an experience of not less than 7 years when the tendered cost of the work is not less than RS.1.5 lakhs.
- ii) One Graduate Electrical Engineer with two years experience or a Diploma holder in Electrical Engineering with experience of not less than 3 years when the tendered cost of the work is more than RS.75,000 but less than Rs. 1.5 lakhs.
- iii) One Diploma holder in Electrical Engineering with experience of not less than 3 years when tendered cost of work is more than Rs. 37,000, but less than Rs.75,000.
- iv) One licensed Supervisor with experience of not less than 3 years when the tendered cost of work is more than Rs.7,500and less than Rs.37,000.
- In case the contractor fails to employ the technical staff as aforesaid, he shall be liable to pay reasonable amount not exceeding the amount shown below for each month of default. These recoveries are subject to modification, from time to time by IITR/ CSIR based on CPWD.
  - i) In case when a Graduate Engineer is to be employed Rs. 3,000/-
  - ii) In case when a qualified Diploma holder is required to be employed Rs. 1,500/-
  - iii) In case when a technical Supervisor is required to be employed Rs. 750/-

#### **ANNEXURE - IV**

#### IV. ADDITIONAL CONDITIONS FOR CEMENT AND STEEL

#### **CONDITIONS FOR CEMENT**

- 1. The contractor shall procure 33 grade (conforming to IS:269) or 43 grade (conforming to IS:8112) ordinary portland cement, as required in the work, from reputed manufacturers of cement, having a production-capacity of one million tones per annum or more, such as ACC, L & T, J.P. Rewa, Vikram, Shri Cement, Birla Jute and Cement Corporation of India etc. as approved by Ministry of Industry, Government of India, and holding license to use ISI certification mark for their product whose name shall be got approved form Engineer-in-charge. Supply of cement shall be taken in 50 Kg. Bags bearing manufacturer's name and ISI marking, samples of cement arranged by the contractor shall be taken by the Engineer-in-charge and got tested in accordance with provisions of relevant BIS code. In case test results indicate that the cement arranged by contractor does not conform to the relevant BIS codes, the same shall stand rejected and shall be removed from the site by the contractor at his own cost within a week's time of written order from the Engineer-in-charge to do so.
- 2. The cement shall be brought at site in bulk supply of approximately 50 tonnes or as decided by the Engineer-in-charge.
- 3. The cement godown of the capacity to store a minimum of 2000 bags of cement shall be constructed by the contractor at site of work for which no extra payment shall be made. Double lock provisions shall be made to the door of the cement godown. The keys of one lock shall remain with the Engineer-in-charge or his authorized representative and the key of the other lock shall remain with the contractor. The contractor shall be responsible for the watch and ward and safety of the cement godown. The contractor shall facilitate the inspection of the cement godown by the Engineer-in-charge at any time.
- 4. The contractor shall supply free of charge the cement required for testing. The cost of tests shall be borne by the contractor.
- 5. The actual issue and consumption of cement on work shall be regulated and proper accounts maintained as provided in Clause 6 of the contract. The theoretical consumption of cement shall be worked out as per procedure prescribed in Clause 6 of the contract and shall be governed by conditions laid therein.
- Cement brought to site and cement remaining unused after completion of work shall not be removed from site without written permission of the Engineer-incharge.

#### CONDITIONS FOR STEEL

- 1. The contractor shall procure steel reinforcement bars conforming to relevant BIS codes from reputed manufacturers as approved by the Engineer-in-charge. The contractor shall have to obtain and furnish test certificates to the Engineer-in-charge in respect of all supplies of steel brought by him to the site of work. Samples shall also be taken and got tested by the Engineer-in-charge as per the provisions in this regard in relevant BIS codes. In case the test results indicate that the steel arranged by the contractor does not conform to BIS codes, the same shall stand rejected and shall be removed from the site of work by the contractor at his own cost within a week's time from written orders from the Engineer-in-charge to do so.
- 2. The steel reinforcement shall be brought to the site in bulk supply of 10 tonnes or more as decided by the Engineer-in-charge.
- 3. The steel reinforcement shall be stored by the contractor at site of work in such a way as to prevent distortion and corrosion and nothing extra shall be paid on this account. Bars of different sizes and lengths shall be stored separately to facilitate easy counting and checking.
- 4. For checking nominal mass, tensile strength, bend test, re-bend test etc., specimen of sufficient length shall be cut from each size of the bar at random at frequency not less than that specified below:

Size of bar	For consignment below For consignment over 100 tones 100 tones
Under 10 mm dia	One sample for each 25 One sample for each 40 tonnes or part thereof.
10 mm to 16 mm dia	One sample for each 35 One sample for each 45 tonnes or part thereof
Over 16 mm dia	One sample for each 45 One sample for each 50 tonnes or part thereof tonnes or part thereof.

- The contractor shall supply free of charge the steel required for testing. The cost of tests shall be borne by the contractor.
- 6. The actual issue and consumption of steel on work shall be regulated and proper accounts maintained as provided in clause 6 of the contract. The theoretical consumption of steel shall be worked out as per procedure in clause 6 of the contract and shall be governed by conditions laid therein.
- 7. Steel brought to site and steel remaining unused shall not be removed from site without the written permission of the Engineer-in-charge.

## ANNEXURE -V (PROFORMA)

## V. INDENTURE FOR SECURED ADVANCE

This indenture made the		day of	20	betweer
where the context so ad administrators and permit Industrial Research, New Act 1860 (hereinafter calle and assignees and authorities)	_ (hereinafter called lmits or implies be itted assignees) of Delhi, a Society re- ed the Employer whi	the contractor of the deemed to include the the the deemed the the deemed under the lich expression shall be the deemed the lich expression shall be the deemed the lich expression shall be the deemed the lich expression shall be the lich expression	which exprese his heirs, of Societies Related include its second	sion shalexecutors cientific 8 egistration
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1. That the said sum of contractor as aforesal shall be employed by said works and for no	hid and all or any fur of the contractor in or	ther sum or sums towards expeditin	advanced as a	aforesaid

2. That the materials detailed in the said account of secured advance which have been offered to and accepted by the Employer as security are absolutely the contractor's own property and free from encumbrance of any kind and the contractor will not make any application for or receive a further advance on the security of materials which are not absolutely his own property and free from encumbrances of any kind and the contractor indemnifies the Employer against all claims to any materials in respect of which an advance has been made to him as aforesaid.

- That the materials detailed in the said account of secured advances and all other materials on the security of which any further advance or advances may hereafter be made as aforesaid (hereinafter called the said materials) shall be used by the contractor solely in the execution of the said works in accordance with the directions of the Engineer and in the term of the said agreement.
- 4. That the contractor shall make at his own cost all necessary and adequate arrangements for the proper watch, safe custody and protections against all risks of the said materials and that until used in construction as aforesaid the said materials-shall remain at the site of the said works in the contractor's custody and on his own responsibility and shall at all times be open to inspection by the Employer or any officer authorized by him. In the event of the said materials or any part thereof being stolen destroyed or damaged or becoming deteriorated in a greater degree than is due to reasonable use and wear thereof the contractor will forthwith replace the same with other materials of like quality or repair and make good the same as required by the Engineer.
- 5. That the said materials shall not on any account be removed from the site of the said works except with the written permission of the Employer or any officer authorized by him on that behalf.
- 6. That the advances shall be repayable in full when or before the contractor receives payments from the Employer of the price payable to him for the said works under the terms and provisions of the said agreement. However if any intermediate payments are made to the contractor on account of work done then on the occasion of each such payment the Employer will be at liberty to make a recovery from the contractor's bill for such payment by deducting there from the value of the said materials then actually used in the construction and in respect of which recovery has not been made previously the value for this purpose being determined in respect of each description of materials at the rates at which the amount of the advances made these presents were calculated.
- 7. That if the contractor shall at any time make any default in the performance or observance in any respect of any of the terms of provisions of the said agreement or of these presents the total amount of the advance or advances that may still owing to the Employer shall immediately on the happening of such default be repayable by the contractor to the Employer together with interest thereon at twelve percent per annum from the date or respective dates or such advance or advances to the date off repayment and with all costs charges, damages and expenses incurred by the Employer in or for the recovery thereof or the enforcement of this security or otherwise by reason of the default of the contractor and the contractor hereby covenants and agrees with the Employer to repay and pay the same respectively to him accordingly.

8. That the contractor hereby charges all the said materials with the repayment to the Employer of the said sum of Rs and any further sum or sums advanced as aforesaid and all costs charges, damages and expenses payable under these presents PROVIDED ALWAYS AND it is hereby agreed and declared that notwithstanding anything in, the said agreement and without prejudice to the powers contained therein if and whenever the convenient for payment and repayment herein before contained shall become enforceable and the money owing shall not be paid in accordance therewith the Employer may at any time thereafter adopt all or any of the following courses as he may deem best:;-
(a) Seize and utilize the said materials or any part thereof in the completion of the said works on behalf of the contractor in accordance with the provisions in that behalf contained in the said agreement debiting the contractor with the actual cost of effecting such completion and amount due in respect of advances under these presents and crediting the contactor with the value of work done as if he had carried out in accordance with the said agreement and at the rates thereby provided. If the balance is against the contractor he is to pay same to the Employer on demand.
(b) Removed and sell by public action the seized material or any part thereof and out of the money arising .from the sale retain all the sums aforesaid repayable or payable to the Employer under these presents and pay over the surplus (if any) to the contractor.
(c) Deduct all or any part of the money owing out of the security deposit or any sum due to the contractor under the said agreement.
9. That except in the event of such default on the part of the contractor as aforesaid interest on the said advance shall not be payable.
In witness whereof the said and by the order and under the direction of the Employer have hereunto set their respective hands the day and year first above written.
Signed sealed and delivered
By the said contractor:
In the presence of
Signature:
Name:

Address:
Signed by
By the order and direction Of the Employer:
In the presence of
Signature:
Vame:
Address:
Signed by

# ANNEXURE - VI (PROFORMA)

# VI. PERFORMANCE GUARANTEE

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Council of Scientific and Industrial Research

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the said contract is for any reason extended and upon such extension if the Contractor fails, before the terms of this guarantee expires, to furnish a fresh or renewed guarantee for the extended period, the Bank shall pay to Council the said sum of Rs.

guarantee for the extended period, the Bank shall	1 7			)! I/2
<del></del>				
5. This guarantee shall not be affected by any chan of the Contractor.	ge in th	e constitution	of the Ba	nk o
6. Notwithstanding anything hereinafter contained, guarantee is restricted to	the lial	bility of the E	Bank unde	r this
		bility of the E only)	Bank unde and	r this
guarantee is restricted to				

# PART B

# **Technical Specifications for Civil Work**

ALL MATERIALS SHALL BE OF QUALITY AS SPECIFIED IN TENDER DOCUMENT AND APPROVED BY THE ENGINEER IN-CHARGE OF CIVIL WORK:

- 1. Coarse sand and fine sand shall be conforming to grading zones III and IV, respectively.
- 2. Stone aggregate shall be crushed stone grit of specific grade as approved by the Engineer In-charge.
- 3. All materials, fixture and fittings, required for this work, which are available with ISI certificate mark, will be of that quality, even if not specified in the item.
- 5. The contractor shall have to arrange sample of granite stone for approval before using at site. The granite stone shall be of natural uniform colour and approved quality.
- 6. All anodised aluminium fittings & fixtures of doors and windows available in market have to be powder coated in similar quality, colour & shade of aluminium section used in work. Nothing shall be paid extra for powder coating of door/ window fittings & fixtures, therefore bidders are requested to quote their rates accordingly.
- 7. Vitrified tiles shall be used minimum double charge range/ series of vitrified tiles as per IS: 15622 2017 or other relevant latest IS code as applicable in the entire building and nothing shall be paid extra, therefore bidders are advised to quote their rates accordingly for vitrified tile items.
- 8. Building rubbish received from dismantling work shall be removed from site and to be disposed off at an authorised municipal dumping yard is the contractor's responsibility at his own cost.
- 9. Contractor is bound to make sufficient arrangements for safety of his men power & material and also to make a dust free safety barrier around the work site to avoid any accident. Nothing shall be paid extra for making these essential arrangements.
- 10. Best quality of bricks as mentioned in schedule of quantity shall be used in construction work. The contractor has to submit sample of bricks for approval, before arranging the bricks in bulk quantity.
- 11. For cement and steel specification please refer enclosed annexure-IV.

Signature of tenderer

# LIST OF APPROVED MAKES OF ITEMS FOR CIVIL WORK

SI No.	Description of material	Make and Manufacture's Name				
1	Ceramic glazed wall/floor Tiles	Johnson/Kajaria/Somany or eqvt. approved make				
2	Vitrified Tiles (double charge)	Johnson/Kajaria Somany or eqvt. approved make				
3	Flush door shutter	Centuary/Archid/Greenply or eqvt. approved make.				
4	Glass	Modi Guard/Saint Gobin/Asahi or eqvt. approved.				
5	CP Lock	Link/Godrej/Harrison or eqvt. approved.				
6	Hydraulic Door Closer	Godrej/Dorma/Ozone or eqvt. approved make				
7	Steel railing	Jindal/Ozone or eqvt. approved make				
8	Commercial board/Ply 19mm	Centuary/Archid/Greenply or eqvt. approved make.				
9	Sanitary Items: wash basin, pedestal & urinal	Perryware/Cera/Hindware or eqvt. approved make.				
10	Sanitary CP Fitting	Plumber/Jaguar/ Hindware/ Kubix /Kohler or eqvt. approved make.				
11	GI Pipe-	Jindal/Tata/QST or eqvt. approved make				
12	Steel Sink-	Nirali/Jaina/Neelkamal or eqvt. approved make				
13	PVC water tank	Syntax/Supreem/Tuff/Polyplast or eqvt. approved make				
14	APP Membrane 3mm	Dr. Fixit/Pidilite/Fosroc/Sika or eqvt. approved make.				
15	Bitumen Primer	Dr. Fixit/Pidilite/Fosroc/Sika or eqvt. approved make.				
16	Putty	JK/Birla or eqvt. approved make.				
17	Paint Items-	Asian/Berger/Nerolac or eqvt. approved make				
18	Other items	Approved make/as per CPWD specification/BOQ.				

Signature of tenderer

# PART - C

# SCOPE OF WORK (Electrical work)

Under the scope of electrical work, contractor shall carry out complete electrical work as per as per technical specifications given in tender document in compliance to relevant IS code and specifications and in accordance with this contract and with directions and to the satisfaction of Employer. The contract shall include labour, materials, tools & plants required for execution of work and for testing the electrical installation after completion and transportation up to the site etc which may be required for full execution and completion of the work. Contractor shall dismantle and remove all the existing old electrical wiring components, electrical fittings and fixtures, switch boards, MS conduit & DBs etc from the building and after the deduction/adjustment of quoted buy back cost of salvage value of all these dismantled electrical fixtures and fittings from contractor's running bill, these dismantled electrical items, fittings and fixtures shall be handed over to the contractor on as is where is basis and contractor shall remove all the dismantled items from the building to outside the campus.

The electrical work shall be carried out as per technical specifications given in tender document and in case of any discrepancy, work shall be executed as per CPWD general specification for Electrical Works Part-1 (Internal) 2013, Part-IV Sub station and Indian Standards amended up to date and as per direction of Engineer In-charge electrical work. The additional specifications shall be read with above and in case of any variations, specifications given along with tender shall apply.

The contractor shall provide everything necessary for the proper execution of the works according to intent and meaning of the specifications and drawings taken together. Under scope of this work, complete new electrical wiring with copper wire for light point/fan point/exhaust fan point/call bell point/mirror light points are to be done in the PVC conduit/ PVC Trunking /Cable management system with modular switches. Wiring for power points, internet points, telephone points shall be to be done in PVC trunking/cable management system with modular switch, sockets, modular telephone & internet jacks which shall be suitable for fitting in the PVC trunking /cable management system given in tender document. If there are varying or conflicting provisions made in tender document forming part of the contract, in that case Employer shall be sole deciding authority with regard to intention and interpretation of the document and his decision in this respect shall be final and binding.

The contractor shall test the complete electrical installation as CPWD guidelines after the wiring work has been completed.

Signature of Contractor

# Technical Specifications for Electrical wiring work

#### 1. General

- Technical specifications in this section cover the internal wiring installation comprising of :
- Wiring for lights/fan points/ fan points/exhaust fan points in concealed/surface PVC conduit/ UPVC trunking/raceway with modular boxes, switch and sockets as required.
- Wiring for telephone/internet points in concealed/recess PVC conduit/ UPVC trunking/ raceways with modular telephone and internet boxes.
- Wiring for submain wiring in concealed /surface PVC conduit/UPVC trunking/raceway.
- Power point wiring in concealed /surface PVC conduit/UPVC trunking/raceway with modular boxes, modular switch/socket suitable for fixing in UPVC trunking/raceway as required.

#### 2. Standards and Codes

The following IS specifications and codes of practice will apply to the equipments and the work covered under the scope of this contract. In addition the relevant clauses of the Indian Electricity Act 1910 and Indian Electricity Rules 1956 as amended upto date shall also apply.

BIS certified equipments shall be used as part of the contract. Necessary test certificates in support of the certification shall be submitted prior to supply of the the equipment.

It is to be noted that updated and current Standards shall be applicable irrespective of those listed below:

650/1100 V, AC grade PVC insulated wires	IS 694:1990
Switch socket outlets	IS 4615:1990
Code of practice for electrical wiring installations	IS 732:1989
PVC conduit pipe and accessories	IS 2509-1973 &
	IS 3419-1989

#### 3. Wiring System

Wiring shall be done only by looping system. Phase/live conductors shall be looped at the switch box. For point wiring, neutral wire/ earth wire looping for the first point shall be done in the switch box and neutral/earth looping of subsequent points will be made from point outlets.

In wiring no joints in wiring will be permitted anywhere except in switch box or point out lets, where jointing of wires will be allowed with use of suitable connector. Wiring throughout the installation shall be such that there is no break in the neutral wire except in the form of linked switchgear. Switches controlling lights, fans, socket outlets shall be connected only in the phase wire of the final sub circuit. At all bolted terminals brass flat washers of large area and steel spring washers shall be used. Only experienced and valid license holder wireman shall be employed to do wiring work.

Following colour coding shall be followed in wiring work:

PHASE : Red/yellow/Blue (three phase wiring)

Live (phase) : Red (single phase wiring)

Neutral : Black Earth : Green

Termination of circuit into switchboard:

Circuit will consist of phase/neutral/earth wire. Circuit will terminate in a switch board i.e. the first tapping point, where from point wiring starts. The switch board will have phase, neutral and earth terminal connector blocks to receive phase/neutral/earth wire.

Above mentioned colour code of conductors shall be maintained for the entire wiring installation.

# 4. PVC Trunking cable management system/raceways/wireways

- (i) Adaptable pvc trunking shall be of uniform thickness throughout its length and shall be of factory finish of approved make. Trunking will be used for laying power point wires, data and telephone cables to run parallel in two different compartments with partition/separator. Trunking cover shall be clip on type with double grooving and trnking shall be with pill off cover for protection against dust. Pill off cover shall be removed only after painting of walls. The trunking should be equipped with rail on its surface on which clip on partition/separator can be clipped and it should accept pvc boxes, frames/plates for wiring devices of required modules. PVC trunking cable management system used for distribution of voice data and power cables should accept pvc boxes, frames and plates for fixing modular switch-sockets for power, RJ45 data socket and RJ 11 telephone socket
- (ii) Wiring for power convenience sockets, internet outlets and telephone outlet sockets over work tables in laboratories/offices shall be carried out in 100mmx50mm PVC trunking /raceways in surface on wall just above the laboratory tables top as directed by Engineer incharge. The PVC trunking/raceway shall be of standard approved make and shall be complete with all standard accessories like couplers, end caps, bents, tees, corners, separators, mounting frames and pvc boxes suitable for fixing modular wiring accessories such as switch sockets, internet and telephone outlets etc. The trunking/race way and accessories shall be described in the schedule of quantities.
- (iii) The trunking shall be fixed directly on wall or ceiling by means of suitable screws to approved type of fiber fixing plugs at interval—such that the weight of the trunking and cable hold firmly on the wall or ceiling surface Wiring up to trunking/raceways shall be brought in medium class PVC conduit in recess/surface and with approved adapter box to connect the conduit to the trunking/raceway shall be provided. Modular switch sockets, modular internet and telephone outlets shall be provide on trunking/raceway at regular interval or as indicated in layout drawing or as directed by engineer incharge. Installation of trunking /raceway wiring system shall be carried out in consultation with engineer incharge as per manufacturer's recommendation/ CPWD guidelines.
- (iv) The trunking cable management system/race ways/wire ways in straight run should be in single piece as far as possible so as to avoid joints. PVC trunking shall be of 2 meter or 3 meter standard length for the ease of installation. Trunking should have insulation rating of five mega ohm.
- (v) All joints shall be scar fed and shall be smoothed down by filing to make the joints a very close fit and without burrs. Joints arising out of bends or diversion shall be done using standard accessories like internal/external angles, flat angle, elbows, flat junction/coupler and end caps. For separation of power and data cables there shall be partition in both trunking and accessories. PVC trunking shall be in white colour.
- (vi) When conductors passed through floors/walls, the same shall be carried out in approved

#### 5. Switch Box Modular Type

Switch boxes modular type shall be hot dip galvanized factory fabricated of approved make suitable to house modular type switches of required ratings shall be provided. In case the number of switches in one box is not tallying with that available in standard manufacturer, the box accommodating the next higher number of switches shall be provided without any extra cost. The blank space left in switch box shall be covered with blanking plate of the same make as that of switches without any extra cost. Moulded modular front covers shall be fixed by means of counter sunk chromium plated brass machine screws wherever required. Switch boxes shall be located with bottom at 1250 mm above floor level or as per direction of the engineer incharge. An earth terminal with stud and two metal washers and terminal block shall be provided in each MS box for termination of protective conductors.

# 6. Modular Type Boxes for power socket/telephone/Internet outlets

PVC outlet boxes of approved make of required modules sizes for power sockets/telephone/internet outlets suitable for fixing on PVC trunking/raceway shall be fixed on trunking/raceway at required interval as per lay out drawings or as per direction of engineer incharge of electrical work.

#### 7. Cross Section

The conduit shall be of ample cross sectional area to facilitate simultaneous drawing of wires as per CPWD general specification for Electrical Works Part-1 (Internal) 2013.

#### 8. Wires

Wiring shall be carried out with PVC insulated 650/1100V, grade unseathed single core copper conductor wire conforming to IS: 694/1990 of approved make. All wire rolls shall be ISI marked bearing manufacturer's label and shall be brought to the site in new and original packages.

#### 9. PVC conduit

PVC conduit along with all accessories shall be laid either in recess or on surface on walls and ceiling or partly recessed and partly on surface as required as per site conditions or as directed by the engineer in-charge of electrical work. Same rates shall apply for recesse and surface conduiting in this contract. Copper wire of required size as per schedule of quantities shall be provided for loop earthing in entire conduiting work of electrical wiring. Recessed conduit shall be laid in chases to be cut in plastered wall by electrical contractor. The chases shall be cut by chase cutting electric machine of sufficient width to accommodate the required nos. of conduits and of sufficient depth to permit full thickness of plaster over conduits. Suitable flexible joints shall be provided at all locations where conduit cross expansion joints in the building. Wherever so desired conduit shall be laid in surface over finished /plastered brick work suitable spacer saddles of approved make and finish shall be fixed to the finished structural surface along the conduit route at regular interval as per standard.

## 10. Earthing requirement

A protective (loop earthig) conductor shall be drawn inside the pvc conduit/pvc trunking cable management system between the metallic switch boxes and distribution switch boards and terminated into proper earth lugs/terminals. Only pvc insulated copper conductor cable of specified size, green-yellow in colour shall be used. Earth pin of socket outlets shall be earthed with loop earthing. These shall be terminated on the earth terminal in the switch boxes and/or earth terminal blocks at the DBs.

#### 11. Testing of installation

The following tests shall be conducted in the completed work of internal electrification work before commissioning:

- -Insulation resistance test
- Polarity test of switch
- -Earth continuity test
- -Earth electrode resistance test

Testing shall be carried out by the contractor in the presence of and to the satisfaction of engineer incharge of electrical work. Besides the above, any other test specified by the local authority shall also be carried out. All tested and calibrated instruments and trained testing engineer, labour and incidentals necessary to conduct the above tests shall be provided by the electrical contractor at his own cost. All tests reading should comply to the limits mentioned in relevant IS / CPWD general specifications for electrical works: Part-I (Internal), 2013.

#### 12. Test and test reports

Contractor shall furnish the test reports and completion electrical drawings to the department. Any test certificates of material/equipment used in this work etc as required by the department/by local inspectors or any authority shall be provided by the contractor without any extra payment.

# List of approved Makes of Items for Electrical work

- Modular switches, sockets, modular RJ45 computer
   RJ 11 Telephone jacks suitable for fixing in PVC Trunking.
- 2. Electrical and telephone copper wire
- 3. PVC conduit
- 4. MCBs,MCCBs and DBs
- PVC trunking cable management system and its accessories such as coupler, Tee, joint cover, angles, End Cap, divider, PVC mounting box etc
- 6. PVC insulated,pvc sheathed /XLPE
  Aluminium conductor armoured power cable
- 7. Wall fan
- 8. Exhaust Fan
- 9. Cat 6, UTP Internet cable/wire
- 10. LED Light fitting size 2'x2' with inbuilt PIR type motion sensor.
- 11. 9 watt/12 watt/15watt/18 watt surface/recess mounting LED light fittings/Down lighter/ Mirror lights
- 12. ACBs
- 13. Panel Indicating lamps
- 14. Panel Volt meter/ Ammeter
- 15. Current Transformer
- 16. Selector switches
- 17. Cable Glands/ Lugs
- 18. Armoured industrial Telephone Cables
- 19. PIR Occupancy/Motion Sensor & accessories for Controlling LED lights.

- : MK Honeywell/Roma Anchor
- : Anchor/Havells/Polycab/RR Kabel
- : Cap/AKG/ISI
- : Havells/Indo Asian/Hager/Crompton Greaves/ L & T.
- : MK Honeywell
- : Havells/Gloster/Polycab/RR Kabel/KEI/Grandley.
- : Crompton Greaves Hi Flo or eqv. of Bajaj Midea/Usha/Havells.
- : Crompton Greaves/Havells /Usha.
- : D Link/Digi Link/Polycab
- : Philips/Bajaj/C & S/Havells/Crompton Greaves/Wipro.
- : Philips/Bajaj/C & S/Havells/Crompton Greaves/Wipro
- : L & T Havells/GE/ABB/Crompton Greaves.
- : L & T/ Seimens/Vaisno.
- : L & T/ Seimens/Secure
- : Kappa/L & T/Seimens
- : L & T/ Seimens/Vaisno.
- : Jainson/Dowells
- : Havells/Gloster/Polycab/RR Kabel/KEI/Grandley.
- : ABB/Havells/Philips/Wipro/Hager/MK Honeywell or eqv. approved.

Signature of Contractor

# UNDERTAKING BY THE BIDDER

File No.: 1/WKS/44/20-Gl.

Date:

Name of Work: - Construction of VVIP suit cum meeting hall on second floor of dining hall building at Guest House 21, Gokhale Marg, Lucknow.

I/We, the bidder(s) have read/gone through the contents of the NOTICE INVITING TENDERS/TENDER DOCUMENT carefully and accordingly hereby giving undertaking to abide by the same terms and conditions of tender documents and are fully acceptable to me.

Department reserves the right of Non-consideration of Tender documents of the agencies who are not fulfilling the NIT stipulations and / or having adverse report on the works carried out by them in the past.

Signature with Seal and date





# सी.एस.आई.आर.-राष्ट्रीय वनस्पति अनुसंधान संस्थान

(वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद) राणा प्रताप मार्ग, लखनऊ-२२६००१

# C.S.I.R-NATIONAL BOTANICAL RESEARCH INSTITUTE

(Council of Scientific & Industrial Research) Rana Pratap Marg, Lucknow-226001

Name of work: Construction of VVIP suit cum meeting hall on second floor of dining hall building at Guest House 21, Gokhale Marg, Lucknow.

# ENEVELOPE-II PRICE BID

Bill of Quantity (ONLINE MODE in xls. sheets only) (Civil, Electrical and air conditioning works)

निविदा संख्या: 1/WKS/44/20-Gl Tender No.: 1/WKS/44/20-Gl







#### Item Rate BoQ

Tender Inviting Authority: < Director, C.S.I.R. - National Botanical Research Institute, Rana Pratap Marg, Lucknow.>

Name of Work: < Construction of VVIP suit cum meeting hall on second floor of dining hall building at Guest House 21, Gokhale Marg, Lucknow.>

Contract No: <1/WKS/44/20-GL>

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#### PRICE SCHEDULE

(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant colu

NUMBER#	TEXT #	NUMBER#	TEXT #	NUMBER#	NUMBER#	TEXT #	
SI. No.	Item Description	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT in Rs. P		
1	2	4	5	7	8	10	
1.0	Civil Work:				-		
1.1	Dismantling of existing water proof membrane/tarfelts including cleaning the surface and disposal the same up to dumping ground within 50m lead as directed.	220.00	Sqm		0.00	INR Zero Only	
2	Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 metres lead.	28.00	Sqm		0.00	INR Zero Only	
3	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer - in- charge.	0.90	Cum		0.00	INR Zero Only	
4	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in :Cement mortar 1:4 (1 cement : 4 coarse sand).	57.50	Cum		0.00	INR Zero Only	
	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level. Cement mortar 1:4 (1 cement :4 coarse sand).	142.00	Sqm		0.00	INR Zero Only	
	12 mm cement plaster of mix :1:4 (1 cement: 4 coarse sand).	476.00	Sqm		0.00	NR Zero Only	
7	15 mm cement plaster on rough side of single or half brick wall of mix:1:4 (1 cement: 4 coarse sand).	335.00	Sqm		0.00	NR Zero Only	
	6 mm cement plaster of mix :1:3 (1 cement: 3 fine sand)	159.00	Sqm		0.00 I	NR Zero Only	
	Add for plaster drip course/ groove in plastered surface or moulding to R.C.C. projections.	30.00 г	mt.		0.00	NR Zero Only	
	Supply & filling in cinder in sunken portion of roof including ramming etc.	89.15	Cum		0.00	NR Zero Only	

4.5	M 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		12			
11	Providing and laying in position cement	1	Cum		0.00	INR Zero Only
	concrete of specified grade excluding the	1				
	cost of centering and shuttering - All work					
	up to plinth level:1:5:10 (1 cement: 5 fine					
	sand: 10 graded stone aggregate 40 mm					
	nominal size).					
12.0	Centering and shuttering including					
	strutting, propping etc. and removal of					
	form for all heights:					
12.1	(a) Suspended floors, roofs, landings,	63.00	Sqm		0.00	INR Zero Only
	balconies and access platform	05.00	J CGM		0.00	114K Zelo Oliv
12.2	(b) Lintels, beams, plinth beams, girders,	187.00	Sam		A AA	IND Zoro Only
	bressumers and cantilevers	107.00	Sdm		0.00	INR Zero Only
12.3	(c) Columns, Pillars, Piers, Abutments,	54.50	Can		Λ ΛΛ	NID 7 O.1
14.5	Posts and Struts	34.30	Sqm		0.00	INR Zero Only
13		22.10				
13	Reinforced cement concrete work in		Cum		0.00	INR Zero Only
	beams, suspended floors, roofs having					
	slope up to 15° landings, balconies,					
	shelves, chajjas, lintels, bands, plain		<u> </u>			
	window sills, staircases and spiral stair					
	cases above plinth level up to floor five					<u> </u>
	level, excluding the cost of centering,					
	shuttering, finishing and reinforcement,					
	with 1:1.5:3 (1 cement : 1.5 coarse sand					
	(zone-III): 3 graded stone aggregate 20					
	mm nominal size).					
14	Reinforced cement concrete work in walls	5.20	Cum		0.00	INR Zero Only
	(any thickness), including attached	5.20	Cum		0.00	INC Zelo Only
	pilasters, buttresses, plinth and string					
	1 -1					
	courses, fillets, columns, pillars, piers,					
	abutments, posts and struts etc. above					
	plinth level up to floor five level,					
	excluding cost of centering, shuttering,	İ				
	finishing and reinforcement :1:1.5:3 (1)					
	cement: 1.5 coarse sand(zone-III): 3					
	graded stone aggregate 20 mm nominal					
	size)					
15	Steel reinforcement for R.C.C. work	4981.00	Kg		0.00	INR Zero Only
	including straightening, cutting, bending,		-			
	placing in position and binding all					
	complete upto plinth level.Cold twisted					
	bars.					
16	Providing and laying water proofing	47.60	Sam		0.00	ND Zana Carta
10	1	47,00	Sqiii		0.00	INR Zero Only
	treatment in sunken portion of WCs,					
	bathroom etc., by applying cement slurry	ļ				
	mixed with water proofing cement	ĺ				
	compound consisting of applying: (a)					
	First layer of slurry of cement @ 0.488					
	kg/sqm mixed with water proofing cement					
	compound @ 0.253 kg/ sqm. This layer					
	will be allowed to air cure for 4 hours. (b)	<b> </b>				
	Second layer of slurry of cement @ 0.242					
	kg/sqm mixed with water proofing cement	l				
	compound @ 0.126 kg/sqm. This layer	l				
	will be allowed to air cure for 4 hours					
	followed with water curing for 48 hours.					
	(The rate includes preparation of surface,					
	treatment and sealing of all joints, corners,					
	junctions of pipes and masonry with					
;	polymer mixed slurry.)					
	, ,,				1	
		<del></del>		A CONTRACTOR OF THE CONTRACTOR	<del></del>	

17	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.		00 Sqm	0.00 INR Zero Only
18	Providing and laying Ceramic glazed floor tiles of size 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS: 15622 of approved make in colours such as White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick cement mortar 1:4 (1 Cement: 4 Coarse sand), Jointing with grey cement slurry @ 3.3 kg/sqm including pointing the joints with white cement and matching pigment etc., complete.		00 Sqm	0.00 INR Zero Only
19	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622, of approved make, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement: 4 coarse sand), jointing with grey cement slurry @ 3.3 kg/ sqm including grouting the joints with white cement and matching pigments ctc., complete. Size of Tile 600x600 mm		Sqm	0.00 INR Zero Only
20	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels. Granite of any colour and shade Area of slab over 0.50 sqm.	29.50	Sqm	0.00 INR Zero Only
21	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately). Second class teak wood	0.850	Cum	0.00 INR Zero Only
	Fixing chowkhats in existing opening in brick / RCC wall with dash fasteners/Chemical fasteners of appropriate size (3 nos on each vertical member of door chowkhats and 2 nos on each vertical member of window chowkhats), including Cost of dash fasteners/ chemical fastener.	21	Nos	0.00 INR Zero Only

00						
23	Providing and fixing ISI marked flush	17.	50 Sqm		0.	00 INR Zero Only
	door shutters conforming to IS: 2202 (Part					
	I) non-decorative type, core of block board					
	construction with frame of 1st class hard					
	wood and well matched commercial 3 ply					
	veneering with vertical grains or cross					
	bands and face veneers on both faces of					
	shutters: 35 mm thick including ISI		ļ			
	marked Stainless Steel butt hinges with		Ì			
	I		ļ			
	necessary screws.	,,,,,,,,				
24	Extra for providing lipping with 2nd class	17.5	50 Sqm		0.0	00 INR Zero Only
	teak wood battens 25 mm minimum depth				• • • • • • • • • • • • • • • • • • • •	with Early Only
	on all edges of flush door shutters (over all					
	area of door shutter to be measured).		ł			
25	Providing and fixing wire gauge shutters	21.0	00 5 000			
		21.0	00 Sqm		0.0	0 INR Zero Only
	in door, windows, clerestory window in					
	existing pattern and design using stainless					
	steel grade 304 wire gauge with wire of		İ			
	dia 0.56 mm and average width of					
	aperture 1.4 mm in both directions for		ĺ			
	doors, windows and clerestory windows		ļ			
	with necessary screws: 35 mm thick					
	shutter using teak wood. 35 mm thick					
	shutters.		ĺ			
26						
40	Providing and fixing panelled or panelled	12.50	0 Sqm		0.0	0 INR Zero Only
	and glazed shutters for doors, windows					
	and clerestory windows fixing with butt		İ			
	hinges of required size with necessary					
	screws, excluding panelling which will be		1			
	paid for separately, all complete as per					
	direction of Engineer-in-charge. (Note:-		1			
	Butt hinges and necessary screws shall be					
	paid separately) Second class teak wood.		] }			
	35 mm thick shutters.					
ps. 194						
27	Providing and fixing panelling or	9.00	Sqm		0.00	INR Zero Only
	panelling and glazing in panelled or					
	panelled and glazed shutters for doors,					
	windows and clerestory windows (Area of					
	opening for panel inserts excluding					
	portion inside grooves or rebates to be					
	measured). Panelling for panelled or					İ
	panelled and glazed shutters 25 mm to 40					
	mm thick: Float glass panes: 4 mm thick	1	İ			
	glass pane (weight not less than 10 kg per					
0	sqm)					
28.0	Providing and fixing IS: 12817 marked					
	stainless steel butt hinges with stainless		[			1
	steel screws etc. complete:		}			
28.1			3.7	\$100 may 200 m		
	a.125x64x1.90 mm		Nos		0.00	INR Zero Only
28.2	b.100x58x1.90 mm	126	Nos			INR Zero Only
28.3	c.75x47x1.80 mm	16	Nos			INR Zero Only
29	Providing and fixing chromium plated	4	Nos			INR Zero Only
	brass 100 mm mortice latch and lock with				V•00	- 11 May
	6 levers and a pair of lever handles of					
	approved quality with necessary screws					
	etc. complete.					
30			```			
ŞΨ	Providing and fixing chromium plated	4]	Nos		0.00	INR Zero Only
	brass night latch of approved quality	Ī				· · · · · · · · · · · · · · · · · · ·
	including necessary screws etc. complete.					
31.0	Providing and fixing chromium plated					
	brass handles with necessary screws etc.				ļ	
	complete:	j				
31.1				NAME OF THE PARTY	-144	
	a.125mm	20 1			0.00	INR Zero Only
31.2	b.100mm	36	Moc		0.00	TNID (7 O )
31.3	c.75mm	7017	INOS		0.001	INR Zero Only

32	Providing and fixing chromium plated brass 50 mm cupboard or wardrobe knobs with nuts complete.	10	Nos	0.00	INR Zero Only
33.0	Providing and fixing bright finished brass tower bolts (barrel type) with necessary screws etc. complete:				
33.1	a.125mm	40	Nos	0.00	INR Zero Only
33.2	b.100mm		Nos		INR Zero Only
33.3	c.75mm		Nos		INR Zero Only
34.0	Providing and fixing CP brass sliding door bolts, with nuts and screws etc. complete:			V.00	INVICEZATO Only
34.1	a.300x16mm	10	Nos	<u></u>	INR Zero Only
34.2	b.250x16mm		Nos		INR Zero Only
35	Providing and fixing CP brass hanging floor door stopper, with necessary screws etc. complete. Twin rubber stopper	······································	No		INR Zero Only
36	Providing & fixing hydraulic door closer Godrej (Product code 1938) or eqvt. make of heavy quality complete with necessary accessories and screw etc. comp.	10	Nos	0.00	INR Zero Only
37	Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners, stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-incharge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).	50.00			INR Zero Only
38	Providing and fixing 600x450 mm beveled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	4	Nos	0.00	NR Zero Only
3 <del>9</del>	Providing and fixing PVC rigid foam sheet  I mm thick on existing door shutters (bathroom and W.C. doors) using synthetic rubber based adhesive.	5.00 \$	dm	0.00	NR Zero Only

40	Summler foliantion 0 4	1			
70	Supply, fabrication & fixing in position wooden cupboard shutter under kitchen		Sqm	0.0	00 INR Zero Only
	platform of size 3.00 (L) x0.75m (D)				
Î	x0.75m (Ht.) Approx. made out of				
	Malaysia sal wood frame of section				
	65x40mm and shutter of commercial				
	board 19mm century/Archid or eqvt. make				
	fixed/screwed in proper position divided				
	in five parts with vertical sal wood				
	members and board of same size & one	5 I			
	Horizontal shelf with same board of same				
	size in one parts of cup-board. In central				
	parts a provision of one drawer will also				
	be made will same boards with runners	,			
	etc. complete. The front shutter shall be				
	provided with 1mm thick Marino/Century				
	or eqvt. make mica pasted over board and				
	hinged with parliamentary hinges of full				
	ht. With teak wood lipping on edges of				
	shutter complete including all fittings such				
	as chapka magnet wooden knobs. The entire assembly shall be painted with syn.				
	enamel paint over a coat of primer on				
	exposed wooden surface in desired shade.				
	The job will be completed to entire	†			
	satisfaction of Engineer-In-charge (Front				
	area will be measured for payment.)	į			
41	Supply, fabrication and erection of	1 00	6		
	wooden racks over kitchen platform of	1.00	Sqm	0.00	INR Zero Only
	size 2.44m (L) x0.30m (d)x0.60(ht.)				
	(approx) with 19mm thick commercial				
	board Century/archid or eqvt. make. The				
	rack will be divided in three equal parts	-			
ļ	vertically and two equal parts horizontally				
	with same board the shutter will be hinged				
	by means of parliamentary hinges				
	complete with teak wood lipping i/c				
	fittings such as aluminum chapka, wooden				•
	knob, clip in each shutter. The frontage				
	shall be glued over board with 1mm thick				
	mica Marino/Century make in approved				
	shade. The entire paint of				
	desired/matching shade over primer	İ			
	complete. The job will be completed to				
	entire satisfaction of Engineer-In-				
1	Charge.(Front area will be measured for				
	payment).	ļ			
42	Providing and fixing horizontal shelf in	6.00 Sq	m	an n	INR Zero Only
	cupboards made out of 19mm thick	1		0.00	
	commercial board Century/archid or eqvt.	-			
	make, to be supported over sal wood				
	buttons of section 35x25mm duly screwed				i i
	on wall. The front of the shelf will have				
	teak wood lipping of size 19x6mm duly				
	pasted and screwed. The surface will be				
	painted with enamel paint of approved		Ÿ.		
	shade and make over wood primer.			ļ	
43	French spirit polishing: Two or more	67.00 Sqr	m	0.00	INR Zero Only
	coats on new works including a coat of	-			
	wood filler.				
44	Providing and applying white cement	970.00 S	qm	0.00	INR Zero Only
	based putty of average thickness 1 mm, of	[		1	
	approved brand and manufacturer, over				
	the plastered wall surface to prepare the			THE COLOR	
	surface even and smooth complete.	ļ			

45	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface : Water	635.00	Sqm	0.00	INR Zero Only
46	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade: Two or more coats on	635.00	Sqm	0.00	INR Zero Only
47	Finishing walls with Acrylic Smooth exterior paint of required shade: New work (Two or more coat applied @ 1.67 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/10 sqm)	335.00 5	Sqm	0.00	INR Zero Only
48	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :Two or more coats on new work	35.00 S	Sqm	0.00	INR Zero Only
49	Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS: 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required: W.C. pan with ISI marked white solid plastic seat and lid	1 N	los	<b>0.00</b> I	NR Zero Only
50	Providing and fixing white vitreous china extended wall mounting water closet of size 780x370x690 mm of approved shape including providing & fixing white vitreous china cistern with dual flush fitting, of flushing capacity 3 litre/ 6 litre (adjustable to 4 litre/ 8 litres), including seat cover, and cistern fittings, nuts, bolts and gasket etc complete.	I N	os	0.00 I	NR Zero Only
51	Providing and fixing white vitreous china flat back half stall urinal of size 580x380x350 mm with white PVC automatic flushing cistern, with fittings, standard size C.P. brass flush pipe, spreaders with unions and clamps (all in C.P. brass) with waste fitting as per IS: 2556, C.I. trap with outlet grating and other couplings in C.P. brass, including painting of fittings and cutting and making good the walls and floors wherever required: Range of two half stall urinals with 5 litre P.V.C. automatic flushing cistern.	2 No	OS .	0.00	NR Zero Only
52	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require: White Vitreous China Wash basin size 550x400 mm with a pair of 15 mm C.P. brass pillar taps each	1 No	S	0.00 IN	R Zero Only
53	Providing and fixing white vitreous china pedestal for wash basin completely recessed at the back for the reception of pipes and fittings.	3 Nos		0.00 IN	R Zero Only

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54	Providing and fixing colored China		2 Nos		0.0 Thurston
	vitreous ovel shaped Wash Hand Basin of		2 1408	0.	.00 INR Zero Only
	size 550x400mm PERRY-WARE/CERA				
			ļ		
	or eqvt. make including PVC connection				<u> </u>
	450x15mm, C.P. waste coupling 32mm,				
	PVC waste pipe 40mm, water supply &				
	drainage connection complete.				
Fr					1
55	Providing and fixing CP brass wasin mixer of approved quality and make.		3 Nos	0.	00 INR Zero Only
56	Providing and fixing Stainless Steel A ISI		1 3 7		
	304 (19/8) kitchen sink as non 70.12002		1 Nos	0.0	00 INR Zero Only
	304 (18/8) kitchen sink as per IS:13983				
	with C.I. brackets and stainless steel plug				
	40 mm, including painting of fittings and		İ		İ
	brackets, cutting and making good the				
	walls wherever required :Kitchen sink with		ĺ		
	drain board 510x1040 mm bowl depth 225		ļ		
	min				
57	Providing and fixing CP Brass 32mm size		5 Nos	0.0	MAINT Z O. I
	Bottle Trap of approved quality & make			0.0	0 INR Zero Only
	and as per the direction of Engineer-in-				
	charge.				
58	Providing and fixing CP Brass Single		1 No.		
	lever telephonic wall mixer of quality &		1 Nos	0.0	0 INR Zero Only
	make as approved by Empires 1				
	make as approved by Engineer in charge.				
	(a) 15 mm nominal dia.				
59.0	Providing and fixing P.V.C. waste pipe for		Í		
	sink or wash basin including P.V.C. waste		]		
	fittings complete.Semi rigid pipe		Ī		
59.1	a. 32 mm dia		Nos	0.00	INR Zero Only
59.2	b. 40 mm dia		Nos		
60.0	Providing and fixing G.I. Pipes complete		11105	9.00	INR Zero Only
	with G.I. fittings and clamps, i/c making				
	good the walls etc. concealed pipe,		}		
	including painting with anti corrosive				
	bitumastic paint, cutting chases and		<u> </u>		
	making good the wall:				
60.1			ļ		<u> </u>
60.2	a.15 mm dia nominal bore. b.20 mm dia nominal bore.	50.00			INR Zero Only
61.0		30.00	Mtr	0.00	INR Zero Only
01.0	Providing and fixing G.I. pipes complete		]		
	with G.I. fittings including trenching and		Ī		
	refilling etc. External work				ļ
61.1	a.15 mm dia nominal bore.	20.00	Mtr	0.00	INR Zero Only
61.2	b.20 mm dia nominal bore.	15.00	Mtr		INR Zero Only
61.3	c.25 mm dia nominal bore.	10.00	Mtr		INR Zero Only
62	Making connection of G.I. distribution		Nos		INR Zero Only
	branch with G.I. main of following sizes			0.00	THIR ZEIO OTHY
	by providing and fixing tee, including				
	cutting and threading the pipe etc.				
	complete :25 to 40 mm nominal bore.				
63	Providing and fixing 8 mm dia C.P. / S.S.		NT:		
- <del>-</del>	Jet with flexible tube upto1 metre long	2	Nos	0.00	INR Zero Only
	with SS triangular aleta to E	}			
	with S.S. triangular plate to Eureopean		İ		
	type W.C. Of quality and make as				
	approved by Engineer - in - charge.	·			
64	Providing and fixing toilet paper holder:	2	Nos	0.00	INR Zero Only
	C.P. Brass.			0.00	word Ollay
65	Providing and fixing uplasticised PVC	7	Nos	ያ ህህ	INR Zero Only
	connection pipe with brass unions :30 cm	. ].		v.0v	ANK ACIO OMY
	length45 cm length. 15 mm nominal bore.	İ		ļ	
	State of the state				
66	Providing and fixing C.P. brass angle		Ta -		
	valve for basin miver and comment of	5]]	Nos	0.00	INR Zero Only
	valve for basin mixer and geyser points of	Ī			
	ignormand availer and the interest in the contract		L.		
	approved quality conforming to IS:8931:			İ	

67						
	Providing and fixing C.P. Brass extension		5 Nos		0.	00 INR Zero Only
	nipple (size 15mmx50mm) of approved					
	make and quality as per direction of		ļ			
	Engineer-in-charge.		İ			
68	Providing and fixing C.P. brass stop cock		4 Nos		A.	M BID 7 0 1
	(concealed) of standard design and of				0,1	00 INR Zero Only
	approved make conforming to IS:8931:15					
	min nominal bore.					
69	Providing & fixing brass towel ring		4 37			
	150mm.		4 Nos		0.0	00 INR Zero Only
70	Providing and fixing C.P. brass shower					
. •	rose with 15 or 20 mm inlet: 100 mm		2 Nos		0.0	0 INR Zero Only
	I					
74	diameter					
71	Providing and fixing on wall face	42.	00 mtr		0.0	0 INR Zero Only
	unplasticised Rigid PVC rain water pipes					
	conforming to IS: 13592 Type A,		İ			
	including jointing with seal ring					1
	conforming to IS: 5382, leaving 10 mm					
	gap for thermal expansion, (i) Single		İ			
	socketed pipes.110 mm diameter.		ļ			
72.0	Providing and fixing on wall face					
	unplasticised - PVC moulded fittings/		ĺ			
	accessories for unplasticised Rigid PVC		}			
	rain water pipes conforming to IS: 13592					
	Type A, including jointing with seal ring		İ			
	conforming to IS : 5292 leading 10					
	conforming to IS: 5382, leaving 10 mm					
TO 4	gap for thermal expansion.					
72.1	(a) Single tee with door:110x110x110 mm		4 Nos		0.00	INR Zero Only
					V*0 5	The Zero only
72.2	(b) Bend 87.5°: 110 mm bend.		8 Nos		ስ ስስ	INR Zero Only
72.3	(c) Shoe (Plain):110 mm Shoe.		4 Nos			——————————————————————————————————————
73	Providing and fixing unplasticised -PVC	1	2 Nos			INR Zero Only
	pipe clips of approved design to				0.00	INR Zero Only
	unplasticised - PVC rain water pipes by					•
	means of 50x50x50 mm hard wood plugs,					
	screwed with M.S. screws of required					1
	length, including cutting brick work and					
	fixing in cement mortar 1:4 (1 cement : 4)					
	coarse sand) and making good the wall		ļ			
	etc. complete. 110 mm					
74	Providing and fixing 100 mm sand east	1	Nos		0.00	INR Zero Only
	Iron grating for gully trap.				5.00	mar Zoro Only
75.0	Providing and fixing soil, waste and vent					
	pipes:					
75.1	(a) 100 mm dia: Sand cast iron S&S pipe	40.00	Mtr			OTD C
	as per IS: 1729.	10,00	1-1-4		Δ ΔΔ1	and the second of the form
75.2	7101		1		0.00	INR Zero Only
	(b) 75 mm diameter :Sand cast iron S&S	20.00	NA+-			
	(b) 75 mm diameter :Sand cast iron S&S pipe as per IS: 1729.	20.00	Mtr			INR Zero Only
76.0	pipe as per IS: 1729.	20.00	Mtr			
76.0	pipe as per IS: 1729.  Providing and filling the joints with spun	20.00	Mtr			
76.0	Providing and filling the joints with spun yarn, cement slurry and cement mortar 1:2	20.00	Mtr			
76.0	Providing and filling the joints with spun yarn, cement slurry and cement mortar 1:2  ( 1 cement : 2 fine sand) in S.C.I./ C.I.	20.00	Mtr			
	Providing and filling the joints with spun yarn, cement slurry and cement mortar 1:2 ( 1 cement : 2 fine sand) in S.C.I./ C.I. Pipes :	- trit.				
76.1	pipe as per IS: 1729.  Providing and filling the joints with spun yarn, cement slurry and cement mortar 1:2  ( 1 cement : 2 fine sand) in S.C.I./ C.I.  Pipes :  (a) 75 mm dia pipe	- trit.	Mtr		0.00	INR Zero Only
76.1 76.2	pipe as per IS: 1729.  Providing and filling the joints with spun yarn, cement slurry and cement mortar 1:2  ( 1 cement : 2 fine sand) in S.C.I./ C.I.  Pipes :  (a) 75 mm dia pipe  (b) 100 mm dia pipe	7			0.00	INR Zero Only  NR Zero Only
76.1	pipe as per IS: 1729.  Providing and filling the joints with spun yarn, cement slurry and cement mortar 1:2  ( 1 cement : 2 fine sand) in S.C.I./ C.I.  Pipes :  (a) 75 mm dia pipe  (b) 100 mm dia pipe  Providing and fixing bend of required	7	Nos		0.00	INR Zero Only
76.1 76.2	pipe as per IS: 1729.  Providing and filling the joints with spun yarn, cement slurry and cement mortar 1:2 ( 1 cement : 2 fine sand) in S.C.I./ C.I. Pipes : (a) 75 mm dia pipe (b) 100 mm dia pipe  Providing and fixing bend of required degree with access door, insertion rubber	7	Nos		0.00	INR Zero Only  NR Zero Only
76.1 76.2	pipe as per IS: 1729.  Providing and filling the joints with spun yarn, cement slurry and cement mortar 1:2  ( 1 cement : 2 fine sand) in S.C.I./ C.I.  Pipes :  (a) 75 mm dia pipe  (b) 100 mm dia pipe  Providing and fixing bend of required	7	Nos		0.00	INR Zero Only  NR Zero Only
76.1 76.2	pipe as per IS: 1729.  Providing and filling the joints with spun yarn, cement slurry and cement mortar 1:2 ( 1 cement : 2 fine sand) in S.C.I./ C.I. Pipes : (a) 75 mm dia pipe (b) 100 mm dia pipe  Providing and fixing bend of required degree with access door, insertion rubber	7	Nos		0.00	INR Zero Only  NR Zero Only
76.1 76.2	Providing and filling the joints with spun yarn, cement slurry and cement mortar 1:2 (1 cement : 2 fine sand) in S.C.I./ C.I. Pipes : (a) 75 mm dia pipe (b) 100 mm dia pipe  Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.	7	Nos Nos		0.00	INR Zero Only NR Zero Only NR Zero Only
76.1 76.2 77.0	Providing and filling the joints with spun yarn, cement slurry and cement mortar 1:2 ( 1 cement : 2 fine sand) in S.C.I./ C.I. Pipes : (a) 75 mm dia pipe (b) 100 mm dia pipe Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts	7	Nos		0.00	INR Zero Only  NR Zero Only
76.1 76.2 77.0	pipe as per IS: 1729.  Providing and filling the joints with spun yarn, cement slurry and cement mortar 1:2  (1 cement : 2 fine sand) in S.C.I./ C.I.  Pipes :  (a) 75 mm dia pipe  (b) 100 mm dia pipe  Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.  (a) 100 mm dia: Sand cast iron S&S as per IS - 1729.	7 14	Nos Nos		0.00 0.00 0.00 I	INR Zero Only NR Zero Only NR Zero Only
76.1 76.2 77.0	pipe as per IS: 1729.  Providing and filling the joints with spun yarn, cement slurry and cement mortar 1:2  (1 cement : 2 fine sand) in S.C.I./ C.I. Pipes :  (a) 75 mm dia pipe  (b) 100 mm dia pipe  Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.  (a) 100 mm dia: Sand cast iron S&S as per IS - 1729.  (b) 75 mm dia: Sand cast iron S&S as per	7 14	Nos Nos		0.00 0.00 0.00 I	INR Zero Only NR Zero Only NR Zero Only
76.1 76.2 77.0 77.1	pipe as per IS: 1729.  Providing and filling the joints with spun yam, cement slurry and cement mortar 1:2  (1 cement : 2 fine sand) in S.C.I./ C.I. Pipes :  (a) 75 mm dia pipe  (b) 100 mm dia pipe  Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.  (a) 100 mm dia: Sand cast iron S&S as per IS - 1729.  (b) 75 mm dia: Sand cast iron S&S as per IS - 1729.	7 14	Nos Nos		0.00 0.00 0.00 I	INR Zero Only NR Zero Only NR Zero Only
76.1 76.2 77.0	pipe as per IS: 1729.  Providing and filling the joints with spunyam, cement slurry and cement mortar 1:2  (1 cement : 2 fine sand) in S.C.I./ C.I.  Pipes :  (a) 75 mm dia pipe  (b) 100 mm dia pipe  Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.  (a) 100 mm dia: Sand cast iron S&S as per IS - 1729.  (b) 75 mm dia: Sand cast iron S&S as per IS - 1729.  Providing and fixing plain bend of	7 14	Nos Nos		0.00 0.00 0.00 I	INR Zero Only NR Zero Only NR Zero Only
76.1 76.2 77.0 77.1 77.2	pipe as per IS: 1729.  Providing and filling the joints with spun yarn, cement slurry and cement mortar 1:2  (1 cement : 2 fine sand) in S.C.I./ C.I. Pipes :  (a) 75 mm dia pipe  (b) 100 mm dia pipe  Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.  (a) 100 mm dia: Sand cast iron S&S as per IS - 1729.  (b) 75 mm dia: Sand cast iron S&S as per IS - 1729.  Providing and fixing plain bend of required degree.	7 14	Nos Nos Nos		0.00 0.00 0.00 I	INR Zero Only NR Zero Only NR Zero Only
76.1 76.2 77.0 77.1 77.2	pipe as per IS: 1729.  Providing and filling the joints with spun yarn, cement slurry and cement mortar 1:2  (1 cement : 2 fine sand) in S.C.I./ C.I. Pipes :  (a) 75 mm dia pipe  (b) 100 mm dia pipe  Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.  (a) 100 mm dia: Sand cast iron S&S as per IS - 1729.  (b) 75 mm dia: Sand cast iron S&S as per IS - 1729.  Providing and fixing plain bend of required degree.  (a) 100 mm dia: Sand cast iron S&S as per IS - 1729.	7 14	Nos Nos		0.00 O.00 I	INR Zero Only NR Zero Only NR Zero Only NR Zero Only
76.1 76.2 77.0 77.1 77.2 78.0	pipe as per IS: 1729.  Providing and filling the joints with spun yarn, cement slurry and cement mortar 1:2  (1 cement: 2 fine sand) in S.C.I./ C.I. Pipes:  (a) 75 mm dia pipe  (b) 100 mm dia pipe  Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.  (a) 100 mm dia: Sand cast iron S&S as per IS - 1729.  (b) 75 mm dia: Sand cast iron S&S as per IS - 1729.  Providing and fixing plain bend of required degree.  (a) 100 mm dia: Sand cast iron S&S as per IS - 1729.	7 14	Nos Nos Nos		0.00 O.00 I	INR Zero Only NR Zero Only NR Zero Only
76.1 76.2 77.0 77.1 77.2 78.0	pipe as per IS: 1729.  Providing and filling the joints with spun yarn, cement slurry and cement mortar 1:2  (1 cement : 2 fine sand) in S.C.I./ C.I. Pipes :  (a) 75 mm dia pipe  (b) 100 mm dia pipe  Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.  (a) 100 mm dia: Sand cast iron S&S as per IS - 1729.  (b) 75 mm dia: Sand cast iron S&S as per IS - 1729.  Providing and fixing plain bend of required degree.  (a) 100 mm dia: Sand cast iron S&S as per IS - 1729.	7 14 2	Nos Nos Nos		0.00 0.00 I 0.00 I 0.00 I	INR Zero Only NR Zero Only NR Zero Only NR Zero Only

79.0	Providing and fixing sand cast iron S&S off sets as per IS: 3989;					
79.1	(a) 75 mm off sets: With 75 mm dia pipe					
79.2	(b) 100 mm of sets: With 100		2 Nos		0.00	INR Zero Only
79.2	(b) 100 mm off sets: With 100 mm dia pipe		2 Nos			INR Zero Only
80.0	Providing and fixing sand cast iron S&S					
	off sets as per IS: 3989:					1
80.1	(a) 100 mm		8 Nos		0.00	INR Zero Only
80.2	(b) 75 mm		4 Nos			INR Zero Only
81.0	Providing and fixing gun metal gate valve					
	with C.I. wheel of approved quality		ļ			
014	(screwed end):					
81.1	(a) 20 mm nominal bore		2 Nos		0.00	INR Zero Only
81.2	(b) 25 mm nominal bore		2 Nos			INR Zero Only
81.3 82	(c) 50 mm nominal bore		2 Nos			INR Zero Only
04	Providing and fixing trap of self cleansing		12 Nos			INR Zero Only
	design with screwed down or hinged		-			
	grating with or without vent arm complete,					
	including cost of cutting and making good the walls and floors:100 mm inlet and 75				;	
	mm outletSand Cast Iron S&S as per IS-1729.					
83			·····			
03	Constructing brick masonry manhole in		2 No		0.00	INR Zero Only
	cement mortar 1:4 (1 cement: 4 coarse		ļ			-
	sand) with R.C.C. top slab with 1:1.5:3		ļ		į	
	mix (1 cement :1.5 coarse sand (zone- III) : 3 graded stone aggregate 20 mm nominal				[	
	size), foundation concrete 1:4:8 mix (1					
	cement: 4 coarse sand (zone- III): 8					
	graded stone aggregate 40 mm nominal				Ī	
	size), inside plastering 12 mm thick with				1	
	cement mortar 1:3 (1 cement : 3 coarse					
	sand) finished with floating coat of neat					
	cement and makingchannels in cement					
	concrete 1:2:4 (1 cement : 2 coarse sand :					
	4 graded stone aggregate 20 mm nominal		ĺ		f	
	size) finished with a floating coat of neat				ļ	
	cement complete as per standard design :					
	Inside size 60x60 cm and 100 cm deep					
	including C.I. cover with frame (light)					
	duty) 650x650 mm internal dimensions,					
	total weight of cover and frame to be not		1			
	less than 38 kg (weight of cover 23 kg and		]		İ	
	weight of frame 15 kg): With common		Ì			
	burnt clay F.P.S. (non modular) bricks of					
	class designation 7.5.					
			ĺ			
84	Providing and placing on terrace (at all	2000.00				
	floor levels) polyethylene water storage	2000.00	Litre		1 00.0	VR Zero Only
	tank, IS: 12701 marked, with cover and		<b>.</b>			
	suitable locking arrangement and making				-	
	necessary holes for inlet, outlet and		}			
	overflow pipes but without fittings and the		ĺ	- 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10	-	
	base support for tank.					
85	Providing gola 75x75 mm in cement	60.00				
	concrete 1:2:4 (1 cement : 2 coarse sand :	60.00	rmt.		0.00 IN	IR Zero Only
	4 stone aggregate 10 mm and down				]	
	gauge), including finishing with cement				Î	
ĺ	mortar 1:3 (1 cement : 3 fine sand) as per		ſ		į	
ļ	standard design: In 75x75 mm deep	1			ľ	
	chase.	ļ	1		1	
			É			

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86	Making Ishuma 45-46					
00	Making khurras 45x45 cm with average minimum thickness of 5 cm cement		6 Nos		(	.00 INR Zero Only
			İ			
	concrete 1:2:4 (1 cement : 2 coarse sand :		}			
	4 graded stone aggregate of 20 mm		J			
	nominal size) over P.V.C. sheet 1 m x1 m					1
	x 400 micron, finished with 12 mm					ļ
	cement plaster 1:3 (1 cement : 3 coarse					
	sand) and a coat of neat cement, rounding		ĺ			
	the edges and making and finishing the					
	outlet complete.					İ
87		380	200			
•	175.1	220	.00 Sqm		0.	00 INR Zero Only
	Polypropylene Polymer) modified					
	prefabricated five layer 3 mm thick water		İ			
	proofing membrane, black finished					
	reinforced with non-woven polyester matt					1
	consisting of a coat of bitumen primer for		}			
	bitumen membrane @ 0.40 litre/sqm by		ļ			
	the same membrane manufacture of					ļ
	density at 25°C, 0.87-0.89 kg/ litre and		İ			
	viscocity 70-160 cps. Over the primer coat					
	the layer of membrane shall be laid using		ļ			
	Butane Torch and sealing all joints etc,					
	and preparing the surface complete. The		}			
	vital physical and chemical parameters of					
	the membrane shall be as under: Joint		İ			
	strength in longitudinal and transverse					
	direction at 23°C as 650/ 450N/5cm. Tear					1
			ĺ			
	strength in longitudinal and transverse		}			į į
	direction as 300/250N. Softening point of					1
	membrane not less than 150°C. Cold		ĺ			
	flexibility shall be upto -2°C when tested					1
	in accordance with ASTM, D - 5147. The					
	laying of membrane shall be got done		ĺ			ĺ
	through the authorised applicator of the		1			
	manufacturer of membrane: 3 mm thick.		ļ			
88			<u></u>			
*** <del>***</del>	Electrical Work:					
89.0	Supplying and fixing of following pvc	-1111	T-***			J
	Conduit		İ			İ
89.1	25 mm	200	MTR			···
90.0	Supplying and drawing following sizes of		WIIK		0.00	INR Zero Only
	FRLS PVC insulated copper conductor,		1			
	single core cable in the existing surface/		]	]		
	recessed steel/ DVC conduit on market					1
00.1	recessed steel/ PVC conduit as required.					
90.1	3 x 2.5 sq. mm	650	MTR		0.00	INR Zero Only
90.2	3 x 4.0 sq. mm	450	MTR			INR Zero Only
90.3	3 x 6.0 sq. mm	-1111	MTR			7
91.0	Supplying and fixing following size/				0.00	INR Zero Only
	modules, GI box alongwith modular base		ļ			
	& cover plate for modular switches in					
	recess etc. as required.		ļ		:	
91.1	3 Module (100mmX75mm)		)			****
91.2	6 Module (200mmX75mm)	<del></del>	NOS		0.00	INR Zero Only
71.4	To miodule (#00mmit/ )mm)		NOS			INR Zero Only
<del></del>	12 Modula (200 V150	201	NOS			INR Zero Only
91.3	12 Module (200mmX150mm)	20				
<del></del>	Supplying and fixing following modular	20				
91.3	Supplying and fixing following modular switch/ socket on the existing modular					
91.3	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections	20				
91.3	Supplying and fixing following modular switch/ socket on the existing modular	20			*	
91.3	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections				***	
91.3	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as					
91.3 92.0	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.  5/6 A switch	60	NOS			INR Zero Only
91.3 92.0 92.1 92.2	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.  5/6 A switch  3 pin 5/6 A socket outlet	60	NOS NOS			INR Zero Only INR Zero Only
91.3 92.0 92.1	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.  5/6 A switch	60 30 30	NOS		0.00	<del></del>

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93	Supplying and fixing two module stepped		10 NO	OS S	0	.00 INR Zero Only
	type electronic fan regulator on the		İ			
	existing modular plate switch box		ļ			
	including connections but excluding		ļ			
94	modular plate etc. as required.					İ
74 <del>1</del>	S/F of 34Watt recess mounted 2' X 2'		20 NO	S	0.	00 INR Zero Only
	LED Light, Aesthetically designed, LED		ļ		•	2010 Omy
	flat panel for surface mounting which					
	provides soft-light and glare free					
	symmetrical illumination complete.		İ			
	MAKE - Havells/Orient/		- }	7,798,600 1		
-***	CG/Compact/Wipro		ļ			
95	S/F of 15Watt recess mounted 1' X 1'	····	18 NO	S		M N.D. 7 O-1
	LED Light, Aesthetically designed, LED				0.0	00 INR Zero Only
	flat panel for surface mounting which		-			
	provides soft-light and glare free					
	symmetrical illumination complete.		ĺ			
	MAKE - Havells/Orient/		ļ			
	CG/Compact/Wipro					į.
96	S/F of 7.5 W A60 LED Filament Lamp	<del></del>	3 NOS			0.000
	Gold, Decorative, surface mounted				0.0	0 INR Zero Only
	conical shape fixture availabe in gold					
	finish. Model No. Penelope		ĺ			
	LHFXAFP1TN1D007of Havells or		1			1
	equavalent.		ļ			
97	S/F of Decorative, wall mounting, SS		2 NOS		A 0.	
	finish fixture with opal glass diffuser		2,1103		0.00	INR Zero Only
	suitable for 4 W LED filament candle					
	lamp E14 base. Model No. Aristo -					
	LHJE01106499 of Havells or					
	equavalent.		ļ			
98	S/F of Decorative wall light, gold finish		2 NOS			
	fixture with white glass diffuser suitable	2	.2]1403		0.00	INR Zero Only
	for 7.5 W LED filament lamp E27 base.					
	Model No. Gobleto WL 1LS E27 GLD -		1			
	LHFOAKD1TZ1D060 of Havells or		}			]
	equavalent.					
99	S/F of Decorative, wall mounting, 17-Watt		6 NOS			
	Wall Light (Cool White, Round). Model		onos		0.00	INR Zero Only
	No. Philips Ultron or equavalent.					
100	Supplying and fixing 20 A, 240 V, SPN	1.	2 NOS		A 44	
	Industrial type socket outlet, with 2 pole				0.00	INR Zero Only
	and earth, metal enclosed plug top		ĺ			
	alongwith 20 A "C" curve, SP, MCB, in		}			
	sheet steel enclosure, on surface or in		]			
	recess, with chained metal cover for the					
	socket out let and complete with				ļ	
	connections, testing and commissioning		]			
	etc. as required.		1			
101.0	Wiring for light point/ fan point/ exhaust	7111	<del> </del>		<del></del>	<del></del>
	fan point/ call bell point with 1.5 sq.mm				Ì	
	FRLS PVC insulated copper conductor					
	single core cable in surface / recessed					
	medium class PVC conduit, with modular				ŀ	
	switch, modular plate, suitable GI box and					
	earthing the point with 1.5 sq.mm FRLS		1			
	PVC insulated copper conductor single	1				
	core cable etc. as required.					
	John one as required.		E .		ļ	
ΙΛ1 1	CROUD	<del></del>	· · · · · · · · · · · · · · · · · · ·			
102.1	GROUP A	50	NOS		0.00 1	NR Zero Only
102	Supply of 70Sqmm, 4Core Aluminium	150	MTR			NR Zero Only
	conductor, Armoured, XLPE power cable, 1.1KV grade.	1				<del></del>
	KA LIN V DESIGNA			N. B. A. S. S. S. S. S. S. S. S. S. S. S. S. S.	I .	

103.0	Laying of one number PVC insulated and		]			
	PVC sheathed / XLPE power cable of 1.1					
	KV grade of following size direct in					
	ground including excavation, sand		İ			
	cushioning, protective covering and		}			<b>E</b>
	refilling the trench etc as required.					i i
103.1	Above 35 sq. mm and upto 95 sq. mm		20/MTD			
104	Supply and fixing of Distribution panel	1	30 MTR		0.	00 INR Zero Only
	OUTDOOR type, Wall mounted		I NOS.		0.	00 INR Zero Only
	comprising of ( FOR GENERAL		1			
	POWED Incomer MCCD 1004		-			
	POWER) Incomer MCCB - 100Amp, FP,		ļ			
	25KA - 01No., Outgoing - MCCB		-			
	63Amp, FP, 25KA - 02Nos, LED phase					
	indicators, Metering on incomer and		}			
	suitable rating of required busbars.		ļ			
105	Fabrication of wall mounted Shed fro		1 JOB			
	protection of LT Panel.		1,300		0.0	0 INR Zero Only
106.0	Supplying and fixing following way,		<del></del>		<del></del>	
	horizontal type three pole and neutral,		}			
	sheet steel, MCB distribution board, 415		ļ			
	V, on surface/ recess, complete with		1			
	tinned copper bus bar, neutral bus bar,					
	earth bar, din bar, interconnections,					
	powder painted including earthing etc. as		ĺ			
	1 4 1					
	required. (But without MCB/RCCB/Isolator)		<u> </u>			
1000						•
106.1	4 way (4 + 12), Double door		NOS		Λ 0.0	NID Z O. I
106.2	4 pole MCCB, 100A, 36KA		NOS			INR Zero Only
107.0	Supplying and fixing 5 A to 32 A rating,	···	1			INR Zero Only
	240/415 V, 10 kA, "C" curve, miniature		1			
	circuit breaker suitable for inductive load					1
	of following poles in the existing MCB		]			
	DB complete with connections, testing					
	and commissioning etc. as required.		•	·		
107.1	SINGLE POLE					
108	······································	<del></del>	NOS		0.00	INR Zero Only
	S/F of Ceiling Fan 1200MM, Model -	12	NOS			INR Zero Only
	Modern Leaf of Crompton or		ĺ			
109	equavalent.					
107	S/F of Wall mounted Fan 12" 3 Blade.	8	NOS		0.00	INR Zero Only
110	Make - Crompton/Bajaj/Orient				0100	1 W 2610 Olly
110	S/F of 25Liter water storage Gyser Make -	3	NOS		0.00	IND Zone Out
	Recold/ Crompton/ Bajaj	ļ			0.00	INR Zero Only
111	Supply/Fixing of 2KVA True Online UPS	1	NOS		0.00	D.D. Z
	System with 30Minutes Battery backup	- 1			0.00	INR Zero Only
	complete in all respect. Make	ĺ			1	
	Emerson/Numeric/APC	}			ŀ	
112	Supply/Fixing of 250MM Fresh Air Fan		NICOC			****
	PVC body with louver. Make - Havells	4	NOS		0.00	NR Zero Only
	FHVVEDXOWH10 Ventil Air Dx 35-	ļ			ļ	•
	Watt or or equavalent.	ļ				
113					•	
113	Earthing with copper earth plate 600 mm	1 5	SET		0.00	NR Zero Only
	X 600 mm X 3 mm thick including				0.00	rac zero Omy
	accessories, and providing masonry	J	ĺ		[	
	enclosure with cover plate having locking		<u>[</u>		<b>!</b>	
ĺ	arrangement and watering pipe of 2.7				ļ	
	metre long etc. with charcoal/ coke and					
]	salt as required.	J	12			
	Supplying and laying 25 mm X 5 mm					
1	conner strip at 0.50 maters below 1	5 N	ITR		0.00 I	NR Zero Only
	copper strip at 0.50 metre below ground as	]				
	strip earth electrode, including connection/	-			[	
ĺ	terminating with nut, bolt, spring, washer		×.		1	
16	etc. as required. (Jointing shall be done by	ĺ	į.			
	overlapping and with 2 sets of brass nut	ļ				
Įŧ	bolt & spring washer spaced at 50mm)	ļ				
4		ı	j.∵		ļ	
		ı		********************** <b>*</b>		

wied Mate in A	ADLGS		INR Zero		К
tal in Figures oted Rate in V	<u> </u>			0.00	INR Zero Only
tal in Ciauses	of all Taxes, GST etc.				
117	Note:- Rates should be quoted inclusive				
	spaced at 50mm)				
	sets of G.I. nut bolt & spring washer	<b> </b>			
	shall be done by overlapping and with 2				
	spring, washer etc. as required. (Jointing				
	connection/terminating with G.I. nut, bolt,				
	earth electrode, including	į			
	strip at 0.50 metre below ground as strip	JULIK		0.00	INR Zero Only
116	Supplying and laying 25 mm X 5 mm G.I	5 MTR		0.00	D.D. 02
	salt as required.	ĺ			
	metre long etc. with charcoal/ coke and	]			
	arrangement and watering pipe of 2.7				
	enclosure with cover plate having locking				
	accessories, and providing masonry				
	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including	1 SET		0.00	INR Zero Only

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