

# **TENDER DOCUMENT**

## **For Construction of Work Shed for Focus Incubation Center at NITRA, Sector-23, Ghaziabad.**

**Tender No. Nitra/Pur/P-6085**

<b>Sale of Tender Document &amp; Downloading up to</b>	<b>: 05.01.2016 (05.30 PM)</b>
<b>Last date &amp; time for acceptance of Tender</b>	<b>: 06.01.2016 (12.00 PM)</b>
<b>Tender opens on</b>	<b>: 06.01.2016 (03.00 PM)</b>

**NORTHERN INDIA TEXTILE RESEARCH ASSOCIATION  
( Linked to Ministry of Textiles, Govt. of India)  
SECTOR-23, RAJ NAGAR, GHAZIABAD-201 002 (U.P.), INDIA**

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# **TENDER DOCUMENT**

## **VOLUME-1**

### **TECHNICAL BID**

**Name of the Work- Construction of Work Shed for Focus Incubation Center at NITRA, Sector-23, Ghaziabad.**

**Time of Completion** – 4 (Four) months.

**Submitted By:** (Name of Bidder / Contract Company)

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**SIGNATURE OF EMPLOYER**

**SIGNATURE OF CONTRACTOR**

## **VOLUME-1 : TECHNICAL BID**

### **Name of the Work- Construction of Work Shed for Focus Incubation Center at NITRA, Sector-23, Ghaziabad.**

## **CHAPTER-1**

### **SCOPE OF WORK, IMPORTANT INSTRUCTIONS & QUALIFICATION CONDITIONS FOR SUBMISSION OF TENDER**

#### **A. WORK AND SITE**

The work consists of construction of *WORK SHED FOR FOCUS INCUBATION CENTER* at Northern India Textile Research Association (NITRA), Sector-23, Raj Nagar, Ghaziabad (U.P.).

The tenderers are advised to inspect the site/ work before tendering the rates so that they may fully acquaint themselves with the nature of the work to be done, the means of communications and availability of materials and water required for the work.

The tenderer must complete the work in accordance with the specifications and to the entire satisfaction of the NITRA within the specified period.

The drawings regarding this work are attached with tender document and clarifications can be dealt in the office of the NITRA.

The prospective contractor in whose favour the tender would be awarded has to execute a separate and distinct agreement with the NITRA notwithstanding any thing contained herein.

#### **B. SCOPE OF WORK**

The Scope of work consists of construction of pre-engineered *WORK SHED FOR FOCUS INCUBATION CENTER* in NITRA campus. The work consists of complete civil works with materials, from excavation, RCC foundation to Colour Coated Metal Sheet roofing with MS trusses, MS shutters, aluminum framed glazed ventilators as per the Specifications and drawings (Drg-1 to 6/WS-NITRA/2015) given with the tender document.

Shed construction includes Supply, fabrication and erection in position at site of all structural sections of the required sizes, labour, materials and use

of equipment required for all operations of fabrication, hoisting, erection, painting the structural steelwork and down take rain water pipes and satisfactory completion of the item of work.

In addition to the Work shed, the contract shall include the following works inside the shed, as mentioned in Specifications (Chapter-5)-

- 1) providing and fixing of PVC conduits concealed in walls, at different locations as per instruction of NITRA.
- 2) providing and laying of HDPE conduits, concealed in floor and Chambers at different locations as per drawing Drg-6/WS-NITRA/2015.

### **C. RATES**

The tenderers should fill in the schedule in ink and the ***rates should be written in words as well as in figures.***

The contract shall be a **Lump Sum rate contract based on Rs.per sq.M.of Covered Area**. The Contractor shall be paid for the actual Covered Area as measured at site, at *the rates finalized in the agreement* (to be signed during award of work). *The entrance Ramps, steps, HDPE & PVC pipes and chambers shall not be counted as separate covered area, the rate shall include these works.*

*That rates quoted shall include* labour, materials, tools and plants, equipments, applications, transports, taxes, charges, levies, contractor's supervision, overheads, pollution, PF, ESI and other legislations and all charges necessary for the satisfactory completion of the work. *Rates for the work should include all such expenses.*

Rate in Rupees shall be quoted and the tender shall remain good and open for acceptance for a period of 90 days from the date of opening of tender.

The tenderer/contractor shall make his own arrangement in regard to *electricity and water supply* required for the execution of the works as well as for drinking water for his own people and he shall pay all charges in this connection and include in his rate an adequate amount to allow for these requirements.

The rates given by the tenderer/ contractor shall be for complete items of work covering all materials, labours, carriages, royalties, sovereignty, fees, rents, sale tax, octroi, wastage, tools, plants, equipments, transports, temporary constructions, WCT (*Work Contract Tax*), *Labour Cess* and other taxes as applicable, overhead charges and profits as well as general liabilities, obligations and risks arising out of the conditions of the contract or carrying the work in parts or under/ across/ along drains, etc., complete

and shall apply to all weather, heights, depths, leads and lifts , without any extra charge whatsoever.

**C. ELIGIBILITY / QUALIFICATION CONDITIONS**

**1)** Bidder/Contractor must have valid Registration for WCT (*Work Contract Tax*) and Service Tax.

**2)** Bidder/Contractor must have Experience in Construction of *Textile industry shed or Educational institute*. The value of similar completed work should be at-least Rs.1.00Crore (Rs One Crore only) or more. List and Certificate of such work(s), should be submitted with the Tender in the format given below. NITRA may see these works, if required.

The tenders, which do not fulfill this requirement, may be rejected.

Sl. No.	Detail of Work – Name and Address	Covered Area (sq. M)	Cost (Rs.)	Year of Completion
1				
2				

**D. SPECIFICATIONS TO BE FOLLOWED**

All works executed or materials supplied under this contract unless otherwise specified in these specifications shall comply with the SPECIFICATIONS mentioned in **Chapter-5** of this document in respect of Civil works, piping and Electrical works. For the items not covered by above, latest C.P.W.D. Specifications and relevant ISI specifications shall be followed. These specifications, as they are applicable shall be deemed to be incorporated in this contract.

**E. MATERIALS**

Materials specified by the NITRA from time to time and brought on site of work shall be got tested at the cost of the contractor and the material rejected shall be removed by the contractor within 24 hours, failing which the rejected material shall be removed by the NITRA at the risk & cost of the contractor.

All materials supplied by the contractor and brought on the site shall be got tested frequently to check up to conform to the specifications. All tests as may be necessary shall be performed at the contractor's expenses and he shall make all necessary arrangements for conducting the tests in the approved laboratories or as directed by the NITRA.

**F. TIME OF COMPLETION AND DEFECT LIABILITY PERIOD**

All works, specified herein, shall be completed in all respects to the entire satisfaction of the NITRA and handed over to it or any person nominated by it to take within the period of **4(four) months** from the date of letter for commencement of work.

The **contractor's responsibility** shall, however, not end till the maintenance **period of 12 months** from the date of completion is over. If any defect during this period is notified, he shall rectify the same, failing which the same shall be rectified at his risk & cost.

**G. ACCEPTANCE OF TENDERS**

The Contractor must sign all the pages of the tender document Volume-1 (Technical Bid) and Volume-2 (Price Bid) and submit the same to NITRA before due date of submission. Tenders should be properly packed, marked and sealed and submitted in originals with supporting documents. Tender shall be submitted in two separate sealed cover e.g. "Price Bid" & "Technical Bid".

The acceptance of tender shall rest with the NITRA, which does not bind itself to accept the lowest tender and reserves to itself the authority to reject any or all the tenders received without assigning any reasons thereto. All tenders, in which any of the prescribed conditions are not full- filled or are incomplete in any respect, are liable to be rejected. The NITRA also reserves the right of accepting the whole or any part of the tender and the Contractor shall be bound to perform the same at the quoted rates.

**H. REJECTION OF TENDERS**

The tenders received after due date of submission shall be rejected.

The contractor should fill in the rates in figures as well as in words. The tenders, which do not fulfill this requirement, are liable to be rejected.

No alterations be made by the Contractor in the notice to the tender, instructions to the contractors, the contract form, conditions of contract, the specifications or the quantities accompanying the same shall be recognized and if any such alterations are made or any special conditions are attached, the tender is liable to be rejected.

**I. CHECK RATES AND FIGURES**

If on checking and verification, differences are found between the rates given by the contractor in words and in figures or in the amounts worked out by him, the following procedure shall be followed.

- 1) Where there is a difference between the rate in figure and in words, the rate which corresponds to Total amount worked out by the contractor, shall be taken as correct.
- 2) Where amount is not worked out by the or it does not correspond with the rate written either in figure or in words, then the rate quoted by the Contractor in words shall be taken as correct.
- 3) Where rate quoted by the Contractor in figure and in words tallies but the amount is not worked out correctly, the rate quoted by the Contractor shall be taken as correct and not the amount.

**J. COMPETENCE**

If the tender is made by an individual, it shall be signed with his full name and his complete address, both present and permanent. If it is made by a firm, it shall be signed by a member of the firm who shall sign his own name and give the name and address of the each member of the firm and submit with the tender the power of attorney authorizing him to do so on their behalf. Certified copy of the Registered Partnership Deed shall also be submitted along with the tender. In case the tender is made by or on behalf of a company incorporated under the companies Act (1 of 1956), it shall be signed by its Managing Director duly authorized on their behalf and shall bear the official seal of the company. Tender is to be in a sealed cover.

**K. RETENTION MONEY**

Retention amount shall be calculated and deducted at the rate of 10% (Ten percent) on the bill amount and shall not carry any interest. The retention amount may be released (before defect liability period) by submitting Bank Guarantee of any Scheduled Bank. The contractor will furnish to the NITRA, the Bank Guarantee of for equal amount of any scheduled Bank which shall be released after the completion of defect liability period.

**SIGNATORY OF CONTRACTOR**

**SIGNATORY OF NITRA**

DATE : \_\_\_\_\_



## **CHAPTER-2**

### **FORM OF TENDER**

**The Director General  
NITRA**

Sub: Tender for the construction of WORK SHED FOR FOCUS INCUBATION  
CENTER

Dear Sir,

I/ We hereby tender for the execution of the work specified in the tender written memorandum within the time specified, at the rate specified therein on **Lump Sum rate basis** and in all respects in accordance with the specifications, drawings, designs, and the instructions supplied in writing and with such materials as are provided for and in all respect in accordance with such conditions so far as possible.

1. **MEMORANDUM**

GENERAL DESCRIPTION -  
CONSTRUCTION OF PROPOSED WORK SHED FOR FOCUS INCUBATION  
CENTER AT SECTOR-23, RAJNAGAR, GHAZIABAD – 201 002 (U.P.).

TOTAL RETENTION MONEY-10% of Contract Value.

BANK GUARANTEE - Amount equal to Retention Money to be submitted  
later.

PERIOD OF COMPLETION- 4(Four) Clear Calendar months from the date of  
written order to commence the work.

2. I/We hereby distinctly and expressively declare and acknowledge that before the submission of my/our tender, have carefully followed the general

instructions and read detailed specifications and clearly understood all conditions of the contract.

I/We have seen the location where the said work is to be done and investigated the works required in regard to materials required so as to enable me/us to complete the work successfully, should this tender be accepted in whole or in part.

I/We hereby agree, to abide by and fulfil all the terms and conditions annexed hereto, to execute all the works referred to in the tender documents / drawings / specifications upon the terms and conditions contained or referred to therein and carry out such deviations as may be ordered in future by the NITRA.

If I /We fail to commence the work by the specified date as per the Memorandum, I/We agree that my/our contract may be cancelled. I /We fulfill to start the work, the retention money shall be kept by NITRA towards retention/security deposit which shall be calculated and deducted as per clauses of general directions subject to a maximum amount specified above. I / we agree to keep the offer open for 90 days from the date of opening of the tender.

I/We /am/ are ----- (position in the Company).

Yours faithfully,

Signature\_\_\_\_\_

In the capacity of \_\_\_\_\_ duly authorized to sign the tender for and on behalf of M/s\_\_\_\_\_

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**WITNESS:**

Address \_\_\_\_\_

Signature\_\_\_\_\_

## **CHAPTER-3**

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### **GENERAL**

#### **CLAUSE – 1 : CONTRACT**

The '**Contract**' means the documents forming the tender and acceptance thereof and the formal agreement executed between NITRA and the Contractor, together with the documents referred to therein, including the conditions, specifications, designs, drawings and instructions issued from time to time by the Architect & NITRA , and all these documents taken together shall be deemed to form one contract and shall be complementary to one another.

#### **CLAUSE – 2 - : MEANING OF WORDS**

In the contract the following expressions shall, unless the context otherwise requires, have the meanings herewith respectively assigned to them.

- (a) The '**works or work**' shall unless there be something, either in the subject or context repugnant to such construction, shall be construed and taken to mean and work by or by virtue of the contract contracted to be executed, whether temporary or permanent. and whether original , altered, substituted or additional as described therein or in the drawings, including all deviations as may be ordered from time to time by the NITRA.
- (b) The '**site**' shall mean the land of the NITRA, Sector-23, Raj Nagar, Distt. Ghaziabad, and or other places on, into or through which works, is to be executed under the contract, or any adjacent land, path or street, which may be allotted or used for the purpose of carrying out the contract.
- (c) The '**contractor**' shall mean the individual or firm or company, whether incorporated or not, undertaking the works and shall include the legal personal representatives of such individual or the persons composing

such firm or the successors or such firm or company and the permitted assignees of such individual or firm or company to which work is given for execution and signed the contract agreement with NITRA.

- (d) The 'NITRA' or Employer shall mean the NITRA its successors or assignees nominated by the NITRA.
- (e) 'Project Engineer' shall mean the engineer or any representative of NITRA for supervision of work.
- (f) The '**Architects/consultant**' shall mean ARCHITECTS for this project, or their successors or assignees.

Words imparting the singular number include the plural number and vice versa Similarly words imparting masculine gender shall include feminine and vice versa.

### **CLAUSE -3 : COMPENSATION FOR DELAY / LIQUIDATED DAMAGES**

The time allowed for carrying out the work as entered in the tender shall be strictly observed by the Contractor and shall be reckoned from the 15<sup>th</sup> day on which the order to commence work is given to the Contractor. The work shall throughout the stipulated period of the contract be proceeded with all due diligence ( time being deemed to be the essence of the contract on the part of the contractor ) and the Contractor shall pay as compensation an amount equal to one percent or such smaller amount as the officer accepting the contract on behalf of the NITRA, (whose decision in writing shall be final), may decide on the amount of the estimated cost of the whole work as shown in the tender, for every week that the work remains uncommenced or unfinished after the proper dates . And further to ensure good progress during the execution of the work, the Contractor shall be bound in all cases to complete the whole of the work within **four (4) months** from the date of written order to commence the work. In the event of the Contractor failing to comply with this condition, he may be liable to pay as compensation of an amount equal to one percent, or such amount as the NITRA may decide for every week that the due quantity of work remains incomplete. Provided that before taking action under this clause, the NITRA shall give a notice of 10 days in writing to the contractor and provided always that the entire amount of compensation to be paid under the

provisions of this clause shall not exceed 10% of the estimated cost of the work as Shown in tender.

#### **CLAUSE – 4 : TERMINATION OF CONTRACT**

The NITRA shall have the power, without prejudice to their right against the contractor in any respect of any delay of inferior workmanship or otherwise or to any claims for damage in respect of any breaches of the contract and without prejudice to any right or remedies under any of the provision of this contract or otherwise whether the date for completion has or has not elapsed by the notice on writing to terminate the contract in any or the following cases.

- (i) If the contractor having been given a notice in writing ( which notice under the hand of any one of them shall be conclusive evidence ) to rectify by the NITRA, reconstruct or replace any defective work or any work damaged by any reason whatsoever 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 works so that either in judgement of the NITRA he will be unable to secure completion of the work by the date of completion or he has already failed to complete the work by that date.
- (ii) If the contractor being a company shall pass 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 creditor shall be appointed or if circumstances shall arise which entitle the court of creditor to appoint a receiver or manager or which entitles the court to make a winding up order.
- (iii) If the contractor commits breach of any of the terms and conditions of this contract.
- (iv) If the contractor commits any act mentioned in the Clause –19 hereof .
- (v) When the contractor has made himself liable for action under any of the cases aforesaid, NITRA shall have powers to adopt any one or more of following courses as it may deem best suited to the interest of the NITRA:
  - a. To determine or rescind the contract as aforesaid of which termination or rescission notice in writing to the contractor under the hand of the NITRA shall be conclusive evidence. Upon such determination or rescission, the retention money as security deposit of

the contractor shall stand forfeited and shall be absolutely at the disposal of the NITRA.

- b.** To employ labour and to supply materials to carry out the works or any part of the work or to employ another agency debiting the contractor with the cost of the labour and the price of the material ( the certificate under the hand of the NITRA shall be final and conclusive against the contractor ) and crediting him with the value of work done in all respects in the same manner at the same rates as if it had been carried out by the contractor under the terms of his contract. The certificate of the NITRA as to the value of the work done shall be final and conclusive against the contractor provided always that action under this sub- clause shall only be taken after giving ten days notice in writing to the contractor. Provided also, that if the expenses incurred by the NITRA are less then the amount payable, to the contractor at his agreement rates, the difference shall not be paid to the contractor.
- c.** After giving notice to the contractor to measure up the sound work in quality and to take such part thereof as shall be unexecuted out of his hands and to give it to another agency to complete, in which case any expenses which may be incurred in the excess of sum which would have been paid to the original contractor if the whole work had been executed by him ( of the amount of which excess the certificate in writing of the NITRA 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 NITRA under this contract or on any other account, whatsoever or from his security deposit or the proceeds of sales thereof or a sufficient part thereof as the case may be.

In the event of any one or more of the courses being adopted by the NITRA, the contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any material or entered into any engagement or made any advances on account or with a view to the execution of the work or the performance of the contract. And in case action is taken under any of the provision 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 NITRA has certified in writing the performance of such work and the value payable in respect thereof and he shall only be entailed to be paid the value so certified.

**CLAUSE - 5 : CONTRACTOR LIABLE TO PAY COMPENSATION IF ACTION NOT TAKEN**

If any case in which any of the powers conferred upon the NITRA by Clause 4 thereof shall have become exercisable and the same are not exercised, the non-exercise thereof shall not constitute a waiver of any of the conditions hereof and such power shall notwithstanding be exercised in the event of any further case of default by the contractor and the liability of the contractor for compensation shall remain unaffected. In the event of the NITRA putting in force all or any of the powers vested in it under three proceeding clause, the NITRA may if it so desires, after giving notice in writing to the contractor, take possession of all or any tools, plant, materials, and stores in or upon the works or the site thereof, paying or allowing for the same in account at the contract rates or in the case of these not being applicable at current market rates to be certified by the NITRA whose certificate thereof shall be final. Otherwise the NITRA may give notice in writing to the contractor or his clerk of work, foreman or other authorized agent order him to remove such tools, plants ,materials or store from the premises ( within a time to be specified in such notice). And in the event of the contractor failing to comply with any such requisition. The NITRA may remove at the contractor's expenses or sell them by auction or private sale on the account of the contractor and at his risk in all respects ,and the certificate of the NITRA as to the expense of any such removal and the amount of the proceeds and expenses of any sales shall be final and conclusive against the contractor.

**CLAUSE - 6 : TIME EXTENSION**

If the contractor shall desire an extension of time for completion of the work on the grounds of his having been unavoidably hindered in its execution of any other ground, he shall apply in writing to the NITRA within 15(fifteen) days of the date of hindrance on account of which he desires such extension as aforesaid, and the NITRA shall if in its opinion (which shall be final) reasonable grounds be shown therefore authorize such extension of time of any as may in its opinion be necessary or proper. No cost escalation shall be admissible for the extended period , if any.

**CLAUSE - 7 : FINAL CERTIFICATE**

Within thirty days of the completion of the work, the contractor shall give notice of such completion to the NITRA and within thirty days of the receipt of such notice the NITRA with architect/consultant shall inspect the work, and if there is no defect in the work shall furnish the contractor with certificate of completion otherwise a provisional certificate of completion

indicating defects (a) to be rectified by the contractor and / or (a) for which payment will be made at reduced rates shall be issued but no certificate of completion provisional or otherwise shall be issued , nor shall the work be considered to be complete until the contractor shall have removed scaffolding, surplus materials, rubbish and all huts and sanitary arrangements required for their work. People on the site in connection with the execution of the works, as shall have been erected or constructed by the Contractor and cleaned of the dirt from all wood work , door window , walls floors or other part of building, in upon or about which the work is to be executed or of he may have had possession for the purpose of which the execution there of and not until the work shall have been measured by the NITRA. If the Contractor shall fail to comply with the requirement of this clause us to removal of scaffolding, surplus material and rubbish and all huts and sanitary arrangement as aforesaid and cleaning off dirt on or before the date fixed for the completion of work, the NITRA may at the risk & costs of the Contractor remove such scaffolding surplus material and the rubbish etc. and dispose of the same as they think fit and clean of such scaffolding or surplus materials as aforesaid except for any sum actually realized by the sale thereof.

#### **CLAUSE – 7 A**

The splashes and droppings from white washing, colour washing, painting etc. on walls, floors, doors, windows etc. shall be removed and surface cleaned simultaneously with the completion of these items of work in the individual rooms , quarters or promises etc. where the work is done without waiting for the actual completion of all the other items of work in the contract. In case the Contractor fails to comply with the requirement of this clause. NITRA shall have the right to get this work done at the cost of the Contractor. Before taking such action the NITRA shall give three days notice in writing to the tenderer / Contractor.

#### **CLAUSE – 7 B**

The Contractor shall submit completion plan as required vide General Specifications for Electrical work ( Part-1 – Internal –1972, Part-2 - External – 1974) as applicable within thirty days of the completion of the work.

#### **CLAUSE- 8 : PAYMENT ON INTERMEDIATE CERTIFICATES TO BE REGARDED AS ADVANCES**

No payments shall be made for works done estimated to cost less than Rs.10,00,000/- (Rupees Ten lacs only). But in case of works done estimated to cost more than Rs.10.0Lacs (Rupees Ten lacs only), the Contractor shall



submit the bill to the NITRA which would be first verified by NITRA Project Engineer and then certified for payment by the Architect for which Contractor is entitled to receive. But all such intermediate payments shall be regarded as payments by way of advance against final payment only and /or shall not as payments for works actually done and completed and shall not preclude the requiring of bad, unsound and imperfect or unskilled work to be removed and taken away and reconstructed, or re-erected or be considered as an admission of the due performance of the contract or any part thereof in any respect or the acquiring of any claim nor shall it conclude, determine or affect in any way the powers of the NITRA under these conditions or any of them as to the final settlement and adjustment of the accounts or otherwise or in any other way vary or effect the contract.

Normally, the period of honouring interim payments shall be 10 (ten) days after certification by the Architect.

The final bill shall be submitted by the Contractor within one month of the date fixed for completion of the work or the date of the certificate of completion furnished by the Architect and payments shall be made within three months of the certification of such bills by the Architect. The Contractor shall submit a list of disputed items within thirty days from the disallowance thereof and if he fails to do this, his claim shall be deemed to have been fully waived and absolutely extinguished.

#### **CLAUSE – 8A: OBJECTION TO MEASUREMENTS**

Before taking any measurements of any work as has been referred to in Clause 6, 7 and 8 hereof, the Architect or NITRA shall give reasonable notice to the Contractor. If the Contractor fails to attend at the time of measurements after such notice or fails to countersign or to record the difference within a week from the date of measurements in the manner required by the Architect then and in any such event, the measurements taken by the Architect and NITRA's project engineer as the case may be shall be final and binding on the Contractor and the Contractor shall have no right to dispute the same. A bill shall be submitted by the Contractor every month on or before the date fixed by the NITRA for all works executed in the previous month. If the Contractor does not submit the bill within the time fixed as aforesaid, the NITRA's Project Engineer is entitled to measure up the said work in the presence of the Contractor whose countersignature to the measurement will be sufficient warrant.

#### **CLAUSE - 9 : MATERIALS TO BE SUPPLIED**

The contractor shall arrange at his own, all materials of required quality (as specified in schedule of quantity as per approved list of makes) and the required quantities at appropriate times.

If the specification of schedule of items/quantities provides for the use of any special description of materials to be supplied by NITRA or it is required that the tenderer / Contractor shall use certain materials to be provided by the NITRA, the Contractor shall be supplied, by the NITRA, such materials and stores as are required for contract only. And value of the full quantity of materials and stores actually used in the works for which measurement have been taken may be set off 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 or the proceed of the sale thereof.

It shall be responsibility of the Contractor to ascertain from time to time from the Architect about the position of availability of the materials as aforementioned and any delay on the part of the NITRA to arrange supplies or the same shall not entitle the contractor to any compensation but in the event of all such delays the contractor shall be granted reasonable extension of time. All materials supplied the contractor shall not on any account be removed from the site of the work, except with the written permission of the NITRA or under its orders and shall at all times be open to inspection by the Architect and NITRA. Any such materials unused and in perfectly good condition at the time of the completion or taken over by NITRA at the prevailing market rates, if required for use on works in progress provided that the price allowed shall not exceed the amount charged by the Contractor. Daily account of the material supplied by the NITRA will be maintained by the Contractor and the same will be left open for check of the NITRA.

#### **CLAUSE - 10 : SECURED ADVANCE**

The Contractor on signing an indenture in the form to be specified by the Architect shall be entitled to be paid during the progress of the execution of the work upto 50% of the estimated value of any material which are in the opinion of Architect and NITRA, nonperishable and are in accordance with contract or and which have been brought on the site in connection therewith and are adequately stored and /or protected against damage by weather or other causes but 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 work the amount of such advance

shall be deducted from the next payment made under any of the clause or clauses of this contract. However, secured advance would be applicable to the quantity of material which is liable to be incorporated in the works during the next one month. The material against which secured advance has been made, shall not be removed from the site.

**CLAUSE-11: WORK TO BE DONE WITH GOOD WORKMANSHIP.**

The Contractor shall execute the whole and every part of the work in the most substantial and workmanlike manner as per standard engineering practice and both as regard materials and otherwise in every respect in strict accordance with the specifications, quality and quantity.

The Contractor shall also confirm exactly, fully to the designs, drawings and instructions in writing relating to the work signed by the Architect in charge and lodged in his office for the purpose of inspection during office hours, and the Contractor shall be furnished free of charge, one copy of all such designs, drawings and instructions.

**CLAUSE-12: ALTERATIONS IN SPECIFICATIONS & DESIGNS**

The NITRA or his nominee shall have the power to make any alteration in, omissions from, additions to or substitutions for the original specifications, drawings, designs and instructions that appear to him to be necessary during progress of the work and the Contractor shall carry out the work in accordance with any instructions which may be given to him in writing signed by the Architect and NITRA and such alterations, omissions, additions or substitutions shall not invalidate contract and any altered or additional or substituted work which the Contractor may be directed to do in the manner above specified 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 time for the completion of the work shall be extended in the proportion that the altered, additional or substituted work bears to the original contract work, and the certificate of the Architect and NITRA shall be conclusive as to such proportion. The rates for such additional, altered or substituted work under this clause shall be worked out in accordance with the following provisions in their respective order.

**CLAUSE-12(a) : RATES OF ADDITIONAL/SUBSTITUTED ITEMS**

In case of any item/items which have not been detailed either in drawings or in the body of the specifications of the contract documents and the NITRA desires for their execution along-

With the normal work caused under this contract, the Contractor will be bound to carry out such work /works and the same will be treated as extra item /items and will be paid as per Clause 12(b). Any refusal for carrying out such work/ works by the Contractor will be treated as breach of agreement and actions here on will be taken in accordance of Clause 4 of this agreement.

**CLAUSE-12(b): RATES OF ADDITIONAL/ SUBSTITUTED ITEMS**

- (i) If the rates for the additional, altered or substituted work are specified in the contract for the work, the Contractor is bound to carry out the additional, altered or substituted work at the same rates are specified in the contract or work.
- (ii) If the rates for additional, altered or substituted work are not specially provided in the contract for the work, then such rates will be derived from the rates for a similar class of work as are specified in the contract for work.
- (iii) If the additional, altered or substituted work includes any work for which no rate is specified in the contract for the work and can not be derived from the similar class of work in the contract, then such work shall be carried out at the rates entered in CPWD / Delhi Schedule of Rates 2015.
- (iv) If the rates for the altered, additional or substituted work cannot be determined in the manner specified in the subclause (i) to (iii) above, then the rates for such work shall be worked out on the basis of the concerned Schedule of Rates of the Districts specified above minus / plus the percentage which the total tendered amount bears to the estimated cost of entire component of work put to tender. Provided always that if the rate for a particulars part or the item is not in the Schedule of Rates, the rate for such part or parts will be determined by the Architect on the basis of the prevailing market rates when the work was done.
- (v) If the rates for the altered, additional or substituted work cannot be determined in the manner specified in sub clause (i) to (iv) above, then the Contractor shall within 7 days of the date of receipt of order to carry out the work, inform the NITRA of the rate which it is his intention to charge for such class of work supported by analysis of rates claimed and the Architect shall determine the rate or rates on the basis of prevailing market rates to pay the Contractor accordingly. However, the NITRA by notice in writing will be at liberty to cancel his order to carry out such class of work and arrange to carry it out in

such a manner as it may consider advisable. But under no circumstances the Contractor shall suspend the work on the plea of non- settlement of rates of the falling under this clause.

- (vi) Except in case of items relating to foundations, provisions contained in sub-clause (i) to (v) above shall not apply to contract or substituted items as individually exceed the percentage set out in the tender documents (referred to herein below as deviation limit), subject to the following restrictions:
- (A) The deviation limit referred to above is the net effect (Algebraical sum) of all additions and deductions ordered on all items;
  - (B) Extra items and foundation work shall not exceed deviation limit;
  - (C) The deviation ordered on items of any individual trade include in the contract shall not exceed including the additional items and of any other in the trade 50% of the value of that trade in the contract as a whole or half the deviation amount whichever is less;
  - (D) The value of additions of items of any individual trade not already included in the contract shall not exceed 10% of deviation amount.

For the purpose of operation of clause 12 (iv) the following work shall be treated as work relating to foundations:

- (a) For buildings, compound wall, plinth level or 1.2m (4ft) above ground level whichever is lower, excluding items of flooring and D.P.C. but including base concrete below the floors.
- (b) For roads, all items of excavation and filling including treatment of sub- base and soiling work.
- (c) For water supply lines, sewer lines ,underground storm water etc. and similar work, all items of work below ground level except items of pipe work, proper masonry work.
- (d) For open storm water drains, all items of works except lining of drains.

The rate of any such work except the items relating to foundations which is in excess of the deviation limit shall be determined in accordance with the provisions contained in clause 12 C.

#### **CLAUSE - 12 C**

In case of contract of substituted item or additional item which results in exceeding the deviation limit laid down in sub clause (vi) of clause 12 above

except the items relating to foundation work which the contractor is required to do under clause 12 above the Contractor shall within 7 days from the receipt of order, claim revision of the rate supported by proper analysis in respect of such items for quantities in excess of the above limit notwithstanding the fact that the rates for such items exist in the tender for the main work or can be derived in accordance with the provision of sub clause (ii) of clause 12 and the Architect may revise their rates having regard to the prevailing market rates and the Contractor shall be paid in accordance with the rate so fixed. The Architect & NITRA shall, however, be at liberty to cancel his order to carry out such increased quantities of work by giving notice in writing to the Contractor and arrangement to carry it out in such manner as he may consider advisable. But under no circumstances the Contractor shall suspend the work on the pleas of non – settlement of rates of items falling under this clause.

All the provisions of the preceding paragraph shall equally apply to the decrease in rates of items for quantities in excess of the deviation limit notwithstanding the fact that the rates for such items exist in the tender for the main work or can be derived in accordance with sub-clause (ii) of the preceding clause -12 and the Architect and NITRA may revise such rates having regard to the prevailing market rates.

**CLAUSE-13: NO COMPENSATION FOR PART WORK**

If at any time after the commencement of the work the NITRA shall, for reason whatsoever, not require the whole work thereof as specified in the tender to be carried out, the NITRA, shall give notice in writing of the fact to the Contractor who shall have no claim to any payment or compensation whatsoever on account of any profit or advantage, which he might have derived from the execution of the work in full, but which he did not derive in consequence of the full amount of the work not having been carried out, neither shall he has any claim for compensation by reason of any alterations having been made in the original specifications, drawings, designs and instructions, which shall involve curtailment of the work as originally contemplated nor shall he has any claim to compensation by reason of having purchased or procured materials with a view to the execution of the work of the performance of the contract. But the NITRA shall have the option either to take over the materials at site, if of approved quality and not in excess of the requirements of the work and to pay to the contractor the actual cost thereof. In the event of this option not being exercised, the Contractor may submit to the NITRA within two weeks of the date of the order, closing down the work, a detailed statement of the loss that he

estimates he will sustain by removing, selling, or otherwise disposing of the materials. The estimate will be forwarded to the NITRA who will decide what sum, if any, should, as matter of grace be paid to the Contractor to compensate him for the loss suffered by him, and the decision of NITRA shall be final and binding on the Contractor.

**CLAUSE-14 : BAD AND UNSOUND WORK TO BE REMOVED**

If it shall appear to the Architect and the NITRA, 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 contract for or otherwise not in accordance with the contract, the contractor shall on demand in writing from the architect /NITRA, specifying the work, materials or articles complained or not withstanding that the same may have been inadvertently passed, certified and paid, forthwith rectify or remove and reconstruct the work so specified in whole or in part as the case may require or as the case may be, and remove the materials or articles specified and other proper and suitable materials or articles at his own charge and cost, and in the event of his failing to do so within a period to be specified by the NITRA in his demand aforesaid, then the Contractor shall be liable to pay compensation at the rate of one percent on the amount of the estimated cost of that particular work for every day not exceeding the ten days, while his failure to do so shall continue and in the case of any such failure the NITRA may rectify or remove and re-execute the work or remove or replace with others, the materials or articles complained of as the case may be at the risk and expense in all respect of the Contractor.

**CLAUSE - 15 : WORKS TO BE OPEN TO INSPECTION**

All works under or in the course of execution or executed in pursuance of the contract shall at all times be open to the inspection and supervision of the Architect and NITRA's project Engineer or authorized member of the NITRA and the Contractor shall at all times during the usual working hours, and at all other times, at which reasonable notice of intention of the NITRA or its nominee to visit the work shall have been given to the Contractor either himself be present to receive orders and instructions or have a responsible agent duly accredited in writing, present for that purpose. Orders given to the Contractor's agent shall be considered to have the same force as if they had been given to the Contractor himself.

**CLAUSE - 16 : WORK NOT TO BE COVERED WITHOUT PERMISSION**

The Contractor shall give minimum seven days notice in writing to the NITRA 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 covered up or placed 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 covered up or placed beyond the reach of measurement, any work without the consent in writing of the Architect and NITRA or his subordinate in charge of the work, and if any work shall be covered up or placed beyond the reach of measurement without such notice having been given and consent obtained, the same shall be uncovered at the Contractor's expense, or in default thereof no payment or allowance shall be made for such work or the materials with which the same was executed.

**CLAUSE-17 : CONTRACTOR LIABLE FOR IMPROPER WORK**

If the Contractor or his work people or servants shall break, deface, injure or destroy any part of a building, road, fence, enclosure or grass land or cultivated ground continuously to the premises on which the work is being done or has been done or if any damage shall happen to the work due to any defect or shrinkage, or if any faults appear in it within six months after certificate, final or otherwise, of its completion as given by the Architect as aforesaid, the Contractor shall make the same good at his own expense, or in default, the NITRA may cause the same to be made good by other workmen and deduct the expense from any sums that may then or at anytime thereafter, become due to the Contractor or from his security deposit, or the proceeds of sale thereof or of a sufficient portion thereof or in any other manner, legally permissible.

**CLAUSE -18 : CONTRACTOR TO SUPPLY MATERIALS, TOOLS & PLANTS, LABOUR, SCAFFOLDINGS ETC.**

The Contractor shall supply at his own cost all materials, labour, plants tools, appliances, implements, ladders, cordage, tackle, scaffolding and temporary works requisite or proper for the proper execution of the work, whether original altered or substituted and whether included in the specifications or other documents forming part of the contract or referred to in these conditions or not, which may be necessary for the purpose of



satisfying or complying with the requirements of the NITRA as to any matter as to which he is entitled to require, together with carriage therefore, to add from the work. The contractor shall arrange **adequate stock of materials OPC (Ordinary Portland Cement) and reinforcement steel of approved make** in advance so that work does not suffer due to non-availability of materials at particular time. In such cases, the use of *other grade of cement shall NOT be allowed*. The Contractor shall also supply without charge the requisite number of persons with the 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. The Contractor shall also provide all necessary fencing and lights required to protect the public from accident, and shall be bound to bear the expenses of defense of every suit, action or other proceedings at law that may be brought by any person, or which may with the consent of the Contractor be paid to compromise any claim by any such person. If any equipment is issued departmentally, rent will be recovered from the Contractor's bill at current rates fixed by the NITRA, the terms of such issue to be ascertained by the Contractor from the NITRA in writing in advance.

NITRA shall provide only area / land for storage of materials. The safety, security and shelter for storage of men and materials is the sole responsibility of the prospective contractor.

#### **CLAUSE -19: WORK NOT TO BE SUBLET**

*The Contract shall not be assigned or sublet without the written approval of the NITRA.* And if the Contractor shall assign or sublet his contract, or attempt to do so, or become insolvent or commence any insolvency proceeding or make any composition with his creditors, or attempt to do so, the NITRA may thereupon by notice in writing rescind the contract, and the security deposit of the Contractor shall thereupon stand forfeited and be absolutely at the disposal of the NITRA and the same consequence shall ensue as if the contract had been rescinded under clause-4 hereof, and in addition the Contractor shall not be entitled to recover or be paid for any work, actually performed under the contract.

#### **CLAUSE - 20 : MINIMUM AGE OF WORKERS**

The Contractor shall not for the execution of the work employ any labor under 18 years of age to fulfil the requirement of Indian Labour Act. For every breach of this convenient the Contractor shall be liable to pay by way of liquidated damages such sum not exceeding fifty rupees, as the NITRA

may fix and may recover such sum by deduction from any sums which may be due, or may at any time thereafter become due to the Contractor.

- (a) The Contractor shall pay to his labourers a minimum wage and shall supply every labourer employed by him with a wage card on which the rate of wages, the attendance and payments will be entered.
- (b) The Contractor, before he commences work shall display in a conspicuous place of the work a notice board giving the rates of wages which shall not be less than the minimum wages applicable.
- (c) Minimum wage here into above refer to Minimum wages prescribed under the Act.

#### **CLAUSE - 21: PERIOD FOR WAGES**

The Contractor shall be bound by all statutory provisions with regard to the period for which wages shall be paid or for deduction from wages as the case may be.

#### **CLAUSE - 22: COMPLIANCE TO LEGISLATIONS**

The Contractor shall comply with all the provisions of the Minimum Wages Act, 1948. (Regulations & Abolition Act, 1970, Building and Construction Workers (Regulations of Employment and Condition of Service) Act, 1996 and rules framed thereunder the other labour laws, affecting Contract labour that may be brought into force from time to time.

#### **CLAUSE - 23: HEALTH AND SANITARY ARRANGEMENT**

In respect of all labour directly or indirectly employed in the works for the performance of the Contractor's part of this agreement, the Contractor shall comply with or cause to be complied with all the directions issued by the Health authorities from time to time for the protection of health and sanitary arrangements for workers employed by the Contractor,

#### **CLAUSE - 24 : MATERNITY BENEFITS**

As per Government Rules, applicable / enforce from time to time.

#### **CLAUSE-25: HEALTH REGULATIONS TO BE STRICTLY FOLLOWED**

- (a) In the event of the Contractor committing a default or breach of any of the Provisions of the Ghaziabad Administration's directions to Contractors for the protection of health and sanitary arrangements for the workers or furnishing any information or submitting or filling any statement under the provisions of the above directions which are materially incorrect, the Contractor shall, without prejudice to any other liability, pay to the NITRA a sum not exceeding Rs.50/- for every default or breach, and in the events of the Contractor defaulting continuously in this respect, the penalty may be enhanced to 2 percent of the estimated cost of the work put to tender. The decision of the NITRA shall be final and binding on the Contractor.
- (b) should it appear to the NITRA that the Contractor is not properly observing and complying with the said directions for the protection of health and sanitary arrangements for work people employed by the contractor (herein referred to as the said directions), the NITRA shall have the power to give notice in writing to the Contractor requiring that the said directions be complied with and the amenities prescribed therein be provided to the work- people within a reasonable time to be specified in the notice. If the contractor shall fail, within the period specified in the notice, to comply with the observe the said directions and to provide the amenities herein before mentioned at the cost of the Contractor. The Contractor shall erect, make and maintain at his expense and of approved standards, all necessary huts and sanitary arrangements required for his work-people on the site in connection with the execution of the works.
- (c) The Contractor shall also construct temporary latrines and urinals for the use of the labourers each on the scale of not less than four each per one hundred of the total strength. Separate latrine and urinals being provided for women.
- (d) The Contractor shall construct sufficient number of bathing and washing places, one unit for every 25 persons residing in the camp. These bathing and washing places shall be suitable curtained.
- (e) All the huts shall have walls of sun-dried or burnt bricks laid in mud mortar or other suitable local materials as may

be approved by the Architect. In case of sundried bricks, the walls should be plastered with mud-gobri on both sides. The floor may be katcha but plastered with mud-gobri and shall be laid at least 6" (15mm) above the surrounding ground.

- (f) The Contractor shall provide each hut with proper ventilation.
  - (g) All doors, windows and ventilators shall be provided with suitable leaves for security purposes.
  - (h) There shall be kept an open space of at least 8 yards (7.31) between the rows of huts which may be reduced to 20 ft (6.1m) according to the availability of site with the approval of the NITRA. Back to back construction will be allowed.
- (2) Water supply - The Contractor shall provide adequate supply of water for the use of labourers by boring pump of adequate capacity, operated either by electricity or diesel at his own cost. The provisions shall not be less than 25 liters of pure and wholesome water per head- per day for drinking, bathing and washing purposes. where pipe water supply is available, the supply shall be at stand post. The Contractor shall also, at his own cost, make arrangements for laying pipe lines for water supply to his labour camp from the existing main wherever available and shall pay all fees and charges thereof.
- (3) Disposal of excrete -The Contractor shall make necessary arrangements for the disposal of excrete from the latrine by trenching or incineration which shall be according to the requirements laid down by the local Health Authorities. If trenching or incineration is not allowed, the Contractor shall make arrangement for the removal of excrete through the Municipal Committee/ Authority and inform it about the number of labourers employed so that arrangements may be made by such committee/ authority for the removal of the excrete. All charge on this account shall be borne by the Contractor and paid directly by him to the municipality / authority. The Contractor shall provide one sweeper for every eight seats in case of dry system .
- (4) Drainage - The Contractor shall provide efficient arrangements for drainage away sullage water so as to keep the camp neat and tidy.

- (5) The Contractor shall make necessary arrangements for keeping the site area sufficiently lighted to avoid any accidents to the workers.
- (6) Sanitation - the Contractor shall make necessary arrangements for conservancy and Sanitation in the labour camps according to the rules of the local public Health and Medical authorities.

**CLAUSE - 26 : SUM PAYABLE BY WAY OF COMPENSATION TO BE CONSIDERED AS REASONABLE COMPENSATION WITHOUT REFERENCE TO ACTUAL LOSS**

All sums payable by way of compensation under any of these conditions shall be considered as reasonable compensation to be applied to the use of the NITRA without reference to the actual loss or damages sustained and whether or not any damage shall have been sustained.

**CLAUSE - 27 : CHANGES IN CONSTITUTION OF FIRMS**

In case of a tender by partners, any change in the constitution of the firm shall be forthwith notified by the Contractor to the NITRA for its information.

**CLAUSE- 28 : SETTLEMENT OF DISPUTES BY ARBITRATION**

If any dispute, question or controversy, the settlement of which is not herein specifically approved for, shall at any time arise between the NITRA and the Contractor relating to this contract or any clause or thing contained or the construction thereof or any matter connected with this contract, or the portion of the same or the rights or duties or liabilities of either party, then in every such case, the matter in dispute shall be referred to the arbitration of Architect of the NITRA. The Architect shall be the sole arbitrator. The provisions of the Indian Arbitration Act, 1940 as amended from time to time shall apply to such arbitration proceedings. Arbitration proceeding shall be held in U.P. and only U.P. courts will have the jurisdiction in the matter. It will not be open to the Contractor to object to the appointment of such persons as Arbitrator on the ground that he has dealt with the matter in question in the course of his duties or has expressed views on all or any matter in dispute. Services under this contract shall not withstanding the existence of any such dispute/question or controversy, continue during the arbitration proceedings and no payment due to or payable by the NITRA to the Contractor or viceversa shall be withheld on account of such proceedings

unless such payments are the direct subject of such arbitration proceedings. 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 and in the event of non-availability of specifications in C.P.W.D. relevant 1996 Vol. 1 to V1. If for any reason, that is not possible, the matter is not to be referred to arbitration at all. In all cases where the total amount of all claims in dispute is Rs.75,000/- (Rupees Seventy Five Thousand Only) and above, the arbitrator shall give reasons for the award.

If the Contractor (s) do/ does not make any demand for arbitration in respect of any claim(s) in writing within 90 days of receiving the intimation from the NITRA, that the bill is ready for payment, the claims of the Contractor(s) will be deemed to have been waived and absolutely barred and the NITRA shall be discharged and released of all liabilities under the contract in respect of these claims.

The arbitrator may, from time to time with the consent of the parties, enlarge the time for making and publishing the award.

Subject as aforesaid the provisions of the Arbitration Act, 1940 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 proceedings under their clause.

**CLAUSE - 29 : ACTION WHERE NO SPECIFICATIONS GIVEN**

All works shall be carried out in accordance with the detailed specifications of C.P.W.D. 1996 Vol. 1 to V1 corrected up-to-date, ISI specifications and in the event of there being no detailed specifications for the same in both, the work shall be carried out in all respects in accordance with the instructions and requirements of the Architects or the NITRA.

**CLAUSE - 30 : ENCROACHMENTS TO BE REMOVED.**

It shall be the responsibilities of the Contractor to see that the building under construction is not occupied by anybody unauthorisedly during construction and to hand over to the NITRA vacant possession of complete building. If such building, though completed, is occupied illegally then the NITRA will have the option to refuse to accept the said building/ buildings in that position and delay in acceptance on this account will be treated as delay

in completion and for such delay a levy up to 5% of the estimated cost put to the tender may be imposed by the NITRA whose decision shall be final both with regard to the justification and quantum.

However, the NITRA may require the Contractor through a notice to remove the illegal occupation any time on or before construction and delivery.

**CLAUSE - 31 : COMPENSATION TO WORKERS**

- (1) In every case in which by virtue of the provisions of Section (12) of the worker's compensation Act, 1923, the NITRA is obliged to pay compensation to a work-man employed by the Contractor or by any subcontractor for him in the execution of the said work, the NITRA will recover from the Contractor the amount of the compensation so paid, and without prejudice to the rights of the NITRA under section 12, sub/ section (2) of the said Act, the NITRA shall be at liberty to recover such amount or any part thereof by deducting it either from the security deposited the Contractor to his credit under clause 1 of these conditions or from any other sum due to the Contractor under this contract or otherwise.
- (2) The NITRA shall not be bounded to contest any claim made against it under section 12, subsection (1) of the said act except on the written request of the Contractor and upon his giving to the NITRA full security for all costs for which the NITRA might become liable in consequence of contesting the claim.

**CLAUSE - 32 : DEFECTS AFTER COMPLETION**

Any defect, shrinkage, settlement or other faults which may appear. Within the "Defects Liability Period" stated in the Appendix hereto, in the opinion of the Architects or the NITRA, from materials or workmanship, the same shall be, upon the directions in writing of the NITRA and within such reasonable time as specified therein, amended and made good by the Contractor at his own cost. In case of default, the employer may employ and pay other persons to amend and make good such defects, shrinkage, settlement or other faults and all damages, loss and expenses consequent thereon or incidental thereto shall be made good and borne by the/ recoverable from him by the NITRA or may be deducted by the NITRA from any money due or that may become due to the Contractor including security deposit/ retention

money. If any defective work has been done or defective material has been supplied by any of the subcontractors employed on the works who has been approved by the NITRA, the Contractor shall be liable to make good in the same manner as if such work or materials has been done or supplied by the Contractor and is subject to the provisions of this clause and scope of contract.

### **CLAUSE - 33 : OTHER PERSONS ENGAGED BY EMPLOYER**

The employer reserves the right to use the premise and any portion of the site for the execution of any work, not included in this contract which he may desire to be carried out by other agencies and the Contractor shall coordinated and provide reasonable facilities for the execution of the works but is not required to provided any plant or materials for the execution of such works except by special arrangement with the employer.

### **CLAUSE - 34 : VARIATION IN PRICES/ WAGES**

The rates quoted are firm for the contract period and no escalation on cost materials and labour is admissible.

### **CLAUSE-35: INSURANCE IN RESPECT OF DAMAGE TO PERSONS & PROPERTY**

The Contractor shall be responsible for all injury to persons, animals or things and for all structural and decorative damage to property which may arise from the operation or neglect of himself of any nominated subcontractor employees, whether such injury of damage arise from carelessness, accident or any other cause whatsoever in any way connected with the carrying out of this contract. This clause shall be held to include, interalia, any damage to buildings, whether immediately adjacent or otherwise, and any damage to roads, streets, footpaths, bridges or ways as well as all damages caused to the building and works forming the subject of this contract by rains or other inclemency of weather. The Contractor shall indemnify the employer and hold him harmless in respect of all and any expenses arising from any such damage under any Acts of Government of otherwise and also in respect of any award of compensation of damages consequent upon such claims.

The Contractor shall reimburse all damages of every sort mentioned in this clause, so as to delivery up to the whole of the contract works complete and



perfect in every respect and so as to make good or otherwise satisfy all claims for damage to the property of third parties.

The Contractor shall indemnify the employer against all claims which may be made against the employer by any member of the public or the third parties in respect of the works or in consequence thereof and shall, at the his own expense, arrange to effect and maintain, until the virtual completion of the contract with an approved office of a policy of insurance in the joint names of the NITRA and the Contractor against such risks, and deposit such policy or policies with the NITRA from time to time, during the currency of this contract. The Contractor shall similarly indemnify the employer against all claims which may be made upon the currency of this contract or ant common law in respect of any employees of the Contractor or any subcontractor and shall at his own expense effect and maintain until the virtual completion of the contract with an approved office, a policy of insurance in the joint names of the NITRA and the Contractor against such risks and deposits such policy or policies with the NITRA from time to time during the currency of the contract.

The Contractor shall be responsible for anything, which may be excluded from the insurance policies above referred to and also for all other damages to any property arising out of an incident due to the negligent or defective carrying out of this contract. He shall also indemnify the employer in respect of any costs, charges arising out of any claim or proceedings, and also in respect of any award or compensation of damages arising therefrom.

The NITRA shall be at liberty and is hereby empowered to deduct the amount of any damage, compensation, costs, charges and expense arising or accruing from or in respect of any such claims or damage from any sum or sums due or become due to the Contractor including the security deposit/retention money.

#### **CLAUSE - 36 : OPENING OF TENDER**

No excuse on the part of the Contractor as regards to want of information or any particular point shall be entertained after the tender has been received. *No request of any change in rate after the opening of the tender shall be entertained.*

#### **CLAUSE - 37 : CANVASSING**

Any canvassing in any form in connection with the tenders is strictly prohibited and the tenders submitted by the Contractor who resort to canvassing shall be liable to rejection.

**CLAUSE - 38 : ACKNOWLEDGEMENT OF ACCEPTANCE**

The Contractor whose tender is accepted shall within a week's time from the date of receipt of such written order intimate to the NITRA of his acknowledgement duly made on a nonjudicial stamp paper of Rs.100/- only. Contractor's failure to furnish stamp paper within the stipulated shall give right to the NITRA to revoke and acceptance of tender without any further notice to the Contractor.

**CLAUSE - 39 : MUNICIPAL BYELAWS**

Any soil, filth and other matter of on offensive nature taken out of any trench, sewers, drains cess poll or other matter shall not be redeposited on the surface but shall at once be cleared free of charge to some pit or place to be provided by the Contractor as per the local municipal bye-laws.

**CLAUSE-40: INCOME- TAX, WORKS CONTRACT TAX, LABOUR CESS AND SALES -TAX DEDUCTION ON WORKS CONTRACT**

**Income tax, Works Contract Tax, Labour Cess** as applicable, under the income tax rules framed from time to time by the Government of India and sales tax on work contract at the prescribed rates, shall be recovered from each bill of the Contractor.

**CLAUSE - 41 : SIGNATURE OF CONTRACTOR**

The Contractor will sign each and every page of the tender and submit complete tender without removing or adding any page thereto.

**SIGNATORY OF CONTRACTOR**

**SIGNATORY OF NITRA**

DATE : \_\_\_\_\_

## **CHAPTER-4**

### **SPECIAL CONDITIONS OF THE CONTRACT**

#### **1. APPLICATION OF LAW**

The law of the place of the work shall govern the construction under this contract. The disputes shall be subject to Courts in Ghaziabad jurisdiction.

#### **2. USE OF DOCUMENTS**

None of the documents herein before mentioned shall be used by the Contractor for any purpose other than this contract.

#### **3. TYPE OF CONTRACT**

The contract shall be a **Lump Sum rate** contract based on **Rs.per sq.M.of Covered Area**. The Contractor shall be paid for the actual **Covered Area** as measured at site, at the rates finalized in the agreement .

#### **4. CONTRACT DRAWINGS**

- (i) In general the drawings shall be indicative of dimensions, position and type of Construction. The specifications shall indicate the quantities, methods and materials of construction.  
Any work indicated on the drawings and not mentioned in the specification or vice versa, shall be finished as though fully set forth in both.
- (ii) The Contractor's work shall not deviate from the drawings and the specifications. The NITRA's interpretation of these documents shall be final and without appeal.
- (iii) Errors or inconsistencies discovered in the drawings and specifications shall be promptly brought to the attention of the NITRA for interpretation or Correction. Local conditions, which may affect the work, shall likewise be brought to the notice of the NITRA. If at any time, it is discovered that work being done is not in accordance with the drawings and specifications, the Contractor shall correct the work immediately. Corrections of defective work shall not be a basis for any claim for extension of time. The Contractor shall not carry on work except with the written intimation to the NITRA.

(iv) **Dimensions and Drawings**

Figured dimensions on drawings shall supercede measurements by scale and drawing to a large scale shall take precedence over those to a smaller scale. The special dimensions or directions in the specifications shall supersede all else. The Contractor shall verify all dimensions at site. Matters not covered by the specifications given in this contract as a whole shall be covered by relevant C.P.W.D. specifications. For items of work not covered by C.P.W.D. specification, relevant I.S.I. specifications shall be followed. In case of items of work where no such specifications have been framed, the decision of the NITRA shall be final and binding on the Contractor and shall not be questioned. The different items of works included in the specifications shall be done at different height and depths above and below subsoil water level, on alignment straight or curved in plan or elevation and for any or all these different situations nothing extra over and above quoted amount shall be payable to the Contractor.

- (v) All drawings and specifications and copies thereof furnished by the NITRA are their property. They shall not be used on any other work.

**5. CONTRACT SUM**

The contract sum shall not be adjusted or altered in anyway whatsoever otherwise than in accordance with the clauses of these conditions. Any error, whether arithmetic or not, in computation of the contract sum shall be deemed to have been accepted by the Contractor hereto.

The Contractor sum shall be calculated by multiplying the Covered Area, by *the rates finalized in the agreement* (to be signed during award of work).

**6. CONTRACT BILLS**

The quality and quantity of the work included in the contract sum shall be deemed to be that which is put in the contract bills. The bills, unless otherwise expressly in the contract bills, stated in respect of any specified item shall be deemed to have been prepared in accordance with the principles of the standard method of measurement of building works last before issued by the central P.W.D. But same as aforesaid, nothing contained in the contract bills shall over-ride, modify or effect in any way

whatsoever the application or interpretation of that which is contained in these conditions.

**7. SCOPE AND INTENT**

The general character and the scope of the work is illustrated and defined by the specifications and drawings attached herewith. If the Contractor shall find any discrepancy in or divergence between the drawings and/ or the contract bills he shall immediately give to the Architects and NITRA a written notice specifying the discrepancy or divergence and the Architect shall issue instructions in regard thereto and such instructions shall be binding on the Contractor .

**8. FACILITIES AND CO-OPERATION**

(1) In the case of works indicated in the drawings but not included in the contract, the Contractor shall provide necessary facilities and cooperation to other Contractor or suppliers who may be appointed by the NITRA.

(2) The Contractor shall not endanger any work by cutting, excavating or otherwise altering the work and shall not cut or alter the work or other Construction without the consent of the NITRA.

**9.** The Architect and NITRA shall determine the lines and levels which may be required for the execution of the work and shall furnish to the Contractor by way of accurately dimensioned drawings such information as shall enable the Contractor to set out the work at ground level. The Contractor shall set out the level of the work and shall be responsible for the accuracy of the same. He shall provide all the instruments and attendance required by the Architect for checking the works. He shall entirely at his own costs, amend to the satisfaction of the Architects any error found at the stage which may arise through inaccurate setting.

**10. TREASURES**

Any treasures, coins or object of antique, which may be found at the site, shall be handed over to the NITRA and they will belong to it.

**11. APPROVAL OF SAMPLES**

The NITRA through Architects shall check and approve such samples with reasonable promptness only for conformity with the design concept of the

project and for compliance with the information in the contract document. The work shall be in accordance with the approved samples

## **12. APPROVED MAKES**

All materials including cement and steel shall be as per "List of Approved Makes for Civil, Electrical items" mentioned in Tender Document. Other makes shall not be used without written permission of NITRA.

The Architect and NITRA may specify any particular brand, under which it is marked, or any material and the Contractor will have to use only that particular brand and nothing else. The plea of the Contractor that the material being used by him bears I.S.I certification and should, therefore, be approved for use, will not be accepted. He will have to use the particular brand so specified only.

## **13. PROGRESS CHART**

The Contractor shall prepare progress charts and submit the same for approval of the NITRA and the Architect within seven days of the award of the contract. The charts shall indicate the expected date of commencement and completion of each of the item of the work. The chart shall also indicate the scheduling of samples, shop drawings and approvals, and the same shall at all times be displayed in the NITRA's site office.

## **14. DISMISSAL**

The Contractor shall on the request of the NITRA immediately dismiss from the works any person employed thereon by him who may in the opinion of the NITRA be incompetent or misconducts himself and such person shall not be again employed on the work without the permission of the NITRA.

## **15. CONTRACTOR'S FIELD ORGANISATION/ EQUIPMENT**

15.1 The Contractor shall constantly keep on the work during its progress one or more whole-time qualified graduate Engineers separately for civil, road works, sanitary and water supply works and electrical works, who will be responsible for carrying out the works to the true meaning of the drawings, specifications and schedule of the quantities. The Contractor shall also attend to the work almost once in a day and will watch the work during laying of RCC work and

placing of reinforcement. In case the Contractor goes out of station for more than a week, he will inform the NITRA.

15.2 **Materials & Equipments** – The Contractor shall provide and install all necessary hoists, ladders, scaffolding, tools, tackles, plants, all transport for labour, materials and plant necessary for the proper carrying on, execution and completion of the work to the satisfaction of the NITRA's Project Engineer & Architect.

15.3 **Watchman**- The Contractor shall make his own security arrangements to guard the materials and the portion of work under his control site at all times, at his own expenses.

15.4 **Storage of materials**- The Contractor shall provide, erect and maintain proper sheds for the storage and protection of the materials etc., and also for the execution of work which may be prepared in the site. Nothing shall be paid on materials which get spoiled due to improper store, rains, flooding, any other act of the God and loss of materials due to theft or whatsoever reason.

15.5 **Sanitary conveniences** – The Contractor shall provide and erect all necessary sanitary convenience for the site staff and the workmen, maintain it in a clean orderly way.

## 16. **TAXES**

The Contractor shall add to the amount to this tender the amount of sales **tax duty, including WCT, Labour Cess, sales tax on works** contract or any other tax for octroi legally payable and it shall be assumed that his rates cover for all such taxes and duties and no claim on this account will be entertained.

## 17. **WATER FOR CONSTRUCTION**

Arrangement for supply of water required for construction, drinking and other for workers' usage- the Contractor shall make his own from the supply authority, by tankers / by boring tubewell of adequate capacity.

## 18. **ELECTRICITY FOR CONSTRUCTION**

Electricity (UPSEB Power supply) shall be provided up to 15 kW load to the contractor on charge basis @ Rupees 9.00 per KWH using a sub-meter at the panel point. The distribution and tapping up to usage point shall be done by the contractor. In case of power supply failure / excess load requirement, contractor shall make own arrangement of DG set of required capacity.

## **19. CLAIM FOR EXTRA CHARGES**

When any instruction or decision given at site involves an extra or whereby the Contractor may plan to claim an extra amount it shall be the responsibility of the Contractor to inform the NITRA of the extra amount and obtain written authorisation from the NITRA before proceeding with the work involved. Any modification carried out for expediting or simplifying work at the request of the Contractor or his representatives shall not be taken as the basis for claiming an extra charge. However, if such modification shall also involve an extra, the rate for such modification shall be settled in advance and written authorisation be obtained by the contractor from the NITRA before proceeding with the work involved. If no such authorisation is taken by the Contractor in writing from the NITRA, such modification shall not be accepted as the basis for extra charge.

## **20. GUARANTEE**

To include Guarantee about works to be done by contractor.

- (1) The Contractor shall protect and preserve the materials from all damage or accident by providing any temporary roof, window and door coverings, boxing or other construction as required by the NITRA. The protection shall be provided for all material on the site.
- (2) The Contractor shall properly clean the work as work progresses and shall remove all rubbish and debris from the site from time to time as is necessary and as directed.

## **21. TOLERANCE**

The Contractor shall exercise every care to ensure that all structural members are sufficient in plumb and true to dimensions called for on the drawings to receive prefabricated work, concrete, tiles etc. Any variations which may require rectification in the structural members or any involve remarking or replacing the finishing elements, shall be so modified and fabricated to fit into the openings or spaces, as called for on the drawings. In case of separate contract, the Contractor whose work does not conform to dimensions called for, shall be liable for all the expenses which may have to be incurred for rectification or replacement as may be required by the NITRA for the proper installation of the finishing elements.



**22. INSPECTION BY THE ARCHITECT/NITRA**

The Contractor shall at all times provide every facility, assistance and opportunity for inspection of each and every work done by him to the Architect and NITRA and to all members of the NITRA and no obstruction, hindrance will be ever put by Contractor or his men. In day to day work the direction of the authorised person of the Employer (NITRA) will only be followed.

**SIGNATORY OF CONTRACTOR**

**SIGNATORY OF NITRA**

**DIRECTOR GENERAL**

## **CHAPTER-5**

### **SPECIFICATIONS OF WORKS AND MATERIALS**

The following Specifications shall be read and construed with reference to and in context of the rules, specifications and the conditions hereinafter contained.

#### **Technical Specification for Civil works in Foundation and Super structure-**

- i) **Earth work** in excavation in foundation up to required depth/minimum depth 1.50M. Back filling of earth with compaction.
- ii) For all **RCC works, 43 grade Cement OPC** (Ordinary Portland Cement) shall be used. Use of PPC (Pozolona Portland Cement) is NOT allowed in RCC work. Coarse sand shall be washed Badarpur/ stone dust.
- iii) **PCC** 1:4:8 (1 cement :4 coarse sand :8 graded stone aggregate 40 mm nominal size) in Foundation and under Floor
- iv) **RCC footings**, Pedestial, Columns and plinth beam 1:1.5:3 (1 cement :1.5 coarse sand :3 graded stone aggregate) laying, centering, shuttering, curing & finishing complete.
- v) **Filling of earth** with compaction, to raise inside level for Floor at plinth level.
- vi) Pre-Construction Anti-Termite Treatment.
- vii) **Flooring**: – well compacted sub base-150 mm thick Stone soling under floor with compaction, 75 mm thick PCC (1:4:8) under floor. IPS flooring 100mm thick RCC (1:1.5:3) flooring with 8dia bar @ 200 c/c both ways and using floor hardener @ 3.0kg/sqm.
- viii) **Walls**- Brick work with 1<sup>st</sup> class F.P.S. new bricks of class designation 75 using Cement mortar 1:5 (1 cement :5 coarse sand) in foundation (thickness 9" or more) up to plinth level and 9" thick above plinth level, up to 12 feet height, complete including curing.
- ix) **Plastering**- 20mm thick internal and external Plaster on walls using 1:6 Cement coarse Sand mortar. 12mm thick Plaster on Columns using 1:4 Cement badarpur Sand mortar.
- x) **Roofing**- Colour Coated Metal Sheets (of approved reputed company) supported over pre-engineered fabricated MS trusses. Complete including eaves, rain water down pipe etc.
- xi) **Finishing**- oil bond distemper for internal wall and snocem for external wall. Primer and enamel paint on all MS shutters and other all MS items including trusses.

- xii) **Plinth protection**- 750 mm wide plinth protection using CC (1:2:4) all-around the shed / building.
- xiii) MS shutters and aluminum framed glazed ventilators as per drawings.
- xiv) In addition to the Work shed, the contract shall include the following works inside the shed-
  - 1) providing and fixing of 16nos., 25mm (1 inch) dia. PVC conduits, 3.0M length each, concealed in walls and switch boxes at different locations as per instruction of NITRA.
  - 2) providing and laying of 16nos., 100mm (4 inch) dia. HDPE conduits, 6.0M length each, concealed in floor and Chambers of internal size 1.5x1.5x1.0feet at different locations as per drawing Drg-6/WS-NITRA/2015.

### **GENERAL SPECIFICATIONS OF WORK-**

- 1) Internal size shall be 50.0M x15.0M. The ceiling /side wall height (above the plinth level) shall be 12.0 feet. Size is subject to change
- 2) The plinth level shall be at +0.90M above local natural Gr. Level.
- 3) The structure shall be Pre-engineered Building (shed) having Colour coated Metal Roof sheeting over MS truss, RCC foundations, plinth beam, RCC pedestals, anchor bolts, good quality of finishing, necessary excavation, PCC under RCC foundations and floor.
- 4) The entire structure shall be resistant to Earth quakes and wind loads.
- 5) The location of *work shed* shall be about 30 meters from the existing new Metering & HT Panel Room.
- 6). The floor shall have 4inch dia. HDPE (6.0kg pr. class) pipes laid parallel to walls and 1.5x1.5x1.0 feet chambers at 20 feet spacing for laying of Electrical cables.
- 7) If cement is used in bags the concrete mortar mix shall be determined on the basis of their standard weight. The Contractor will ensure that all the bags are filled with exact weight of a standard bag. Necessary weighing arrangements shall be installed near site and subject to verification by the Architect/NITRA.
- 8) The Architect and NITRA shall require (where he deems so necessary) to provide grooves of approved pattern between various surface or surfaces of same items of works such as timber and plaster concrete, exposed concrete/ concreting operations of same or different members (particularly in the exposed concrete work) etc. Such grooves shall have to be provided without extra charges and the Contractor's rates for various items are

deemed to include the cost of all labour, tools and materials required for making such grooves.

- 9) On being directed by the Architect and NITRA, the Contractor shall provide suitable stone with flat tops and build the same permanently to act as benchmarks. Likewise any other levels or lines or points specially required by the Architect and NITRA, shall be built. The Contractor shall carefully protect and preserve such important marks during execution of the work.
- 10) A programme and P.E.R.T. Chart for completion of work shall be submitted within 15 days of the award of work, and the same shall be displayed at site of work. The Contractor will maintain a site office. A register wherein all remarks by Architect and the NITRA will be recorded, will be maintained at site.
- 11) The progress of the work will be reviewed on first Monday every month and the progress should be more or less proportionately to the time schedule, failing which action under appropriate clause shall be taken.
- 12) Theodelite, I.O.P. Level with staff, steel taps, sieves, stop watch, platform type weighting machine of 200 kgs. Capacity, small balance with weights, spring balance, slump cone with rod, six inches 24 Nos. cubes moulds, Plumb-bobs, spirit level, vernier/ micro meter, calibrated cylinder, hammers, thermometer as per requisition as site etc. shall be kept at site of work by the Contractor for execution of work and testing of material.

The Contractor shall store all materials, keep the T&P, install water and power system, electrical and mechanical equipment and construct all temporary structures etc. on the site only at places approved by the NITRA. Should the place where the materials are stored by the Contractor is required by the NITRA for any other purposes, the Contractor shall clear the place within such time as may be instructed by the NITRA and no claim whatsoever will be entertained.

- 13) The tests for materials and works shall be carried out in the laboratories approved by the NITRA as often as it may consider them necessary or it may ask the Contractor to install testing equipments at site for such tests which are required to be carried out more frequently. The Contractor shall ensure and certify the calibrations of the equipment so installed and shall maintain the same in working order throughout the period of construction. The

Contractor shall also provide necessary trained and qualified staff for carrying out such tests and using such equipments.

- 14) The NITRA shall have the power to cause the Contractor to purchase such materials of particular make or from particular sources as may be in his opinion be necessary for proper and reasonable compliance with the specifications and executions of the works.
- 15) The levels, measurements and other information concerning the existing site as shown on the drawing or as described are supposed to be correct but the Contractor shall verify them for himself as no extra claim whatsoever shall be entertained on account of errors or omissions in such matters or on account of the descriptions turning out to be different from what was expected.
- 16) The Contractor shall provide all equipments, instruments, labour and such other allied assistance required by the NITRA for measurements of the works, materials etc.

**17) LOADING TEST**

The Architect and NITRA shall during the progress of the work or during the period of maintenance instruct the Contractor and such instruction shall always be binding, that a loading test (tests) be made on the works as any part thereof, if in his opinion, such test (or tests) be made on the works or any part thereof, if in his opinion, such test (or tests) be deemed necessary for one or more of the reasons herein below specified:

- (a) The site-made concrete test cubes failing to attain the specified strength.
- (b) The shuttering for concrete work being prematurely removed.
- (c) Over loading during the construction of the work or part thereof.
- (d) Concrete improperly cured.
- (e) If any portion of the work carried out without prior approval to proceed with such work.
- (f) If concrete is honey-combed or damaged or in the opinion of the Architect and NITRA, a particular work is important or critical areas of the structure where weakened concrete will affect the stability of the structure to carry designed load.

- (g) Any other circumstances attributable to alleged negligence on the part of the Contractor which in the opinion of the Architect and NITRA resulting in work or part thereof being of less than the expected strength.
- (h) Any reason other than foregoing.

If the loading test be instructed to be made in part for the reason (a) to (h), the tests shall be made at the Contractor's cost whether the results of such test be satisfactory or otherwise.

All the loading tests shall be carried out strictly in accordance with the instructions of the Architect and NITRA. Local testing will generally follow the procedure set out in the Indian standard codes of practice.

## **18) EARTH WORK**

Stacking of excavated material shall be done in places approved by the Architect and NITRA and the original ground levels of such places shall have been recorded by him jointly with the Contractor before commencement of stacking operations. Any thing if found during the excavation shall be the property of the NITRA and Contractor shall have no claim over it.

Extra excavation required for the allied lead / lift required specifically for providing working space to workmen or shuttering to well, etc. shall not be paid for. No extra claim being allowed for such works incidental to development and execution to allied jobs.

Earth work for foundation trenches, drains and over areas shall be in all types of strata such as ordinary soil, hard soil, ordinary hard rock, etc. Excavation shall be done to the required depth including all lead and lifts.

## **19) CONCRETE WORK**

- i) Side shuttering required for the work shall not be paid for separately for items like making panels in concreting , stair steps and for making construction joint in concrete work etc.
- ii) No extra payments shall be made for laying concrete on slopped camber, curved in plan or different thickness.
- iii) Representative samples of materials intended to be used in concrete work shall be taken and tests shall be carried out to determine the

quality, grading, strength, water cement ratio, cement aggregate ratio, etc. as directed by the Architect and/or NITRA. Test shall be carried out separately for different grades of concrete.

In case of preliminary test, the same can be repeated by varying i.e. mix grading, water cement ratio, etc., till desired results are obtained. If a work test does not meet the specified requirements, the architect and NITRA may adopt the procedure of accepting the work at the correspondingly reduced rate as per C.P.W.D. procedure for it. However, the Architect & NITRA is not bound to adopt this procedure if the structural member is load bearing.

If the results are poorer than 75% of the specified strengths, the Architect & /NITRA may order further testing or any kind as may be deemed necessary in his opinion including loading tests. The loading tests shall be carried out on the portion of structure involving concrete represented by the unsatisfactory work tests and such other adjoining elements of buildings as the Architect and NITRA may decide. If the result of loading test is not satisfactory the Contractor shall take remedial measures including dismantling and construction according to the direction and to the satisfaction by the Architect and NITRA. The NITRA may exercise its judgement before accepting or rejecting the work and shall still have the power to apply reduction in rate as herein before taxed in case the work in question is accepted.

## **20. RCC (Reinforced Cement Concrete) Work.**

- i) For all RCC works, the **Ordinary Portland Cement (OPC)** of approved manufacturer only shall be used.

**Use of PPC (Pozolona Portland Cement) is NOT allowed in RCC work.**

- ii) The mix proportions shall apply in terms of average weight of cement in one bag unless otherwise directed. Adjustments shall be made from time to time for variation in moisture content. The Architect and NITRA shall check cement, sand and aggregate by weighing each as often as deemed necessary. If required the mixing has to be done by weighing each materials separately. All RCC work will need vibration. The mix shall be prepared in power driven concrete mixers to the entire satisfaction of the NITRA.

iii) **Test Cubes**

At least six cubes shall be taken for every 10 cu.m. of concrete or part thereof deposited in the work on any day. These cubes shall be tested for 7 days strength. The Architect and NITRA may at his opinion, exempt the Contractor from performing 28 days test, if the earlier test results are satisfactory.

- iv) **Form Work**:- The term 'form work' centering, shuttering, or such other temporary carpentry work shall apply collectively to all forms, moulds, sheeting, shuttering, planking, bracing walls posts, shores, struts, and everything including the temporary support necessary for the concrete including the erection and removal. Holes for cleaning and inspection shall be left in the form work at necessary places as directed and subsequently closed before concreting and its vibration.

Form work shall be designed, erected and maintained by qualified Engineer so as to give the necessary levels slopes, cambers, plumbs, etc. and also according to size and shape and position of various R.C.C. structural members. They shall be supported on firm surfaces through the agencies of double wedges and should be braced at suitable intervals. Only after obtaining the approval of formwork, the RCC work started.

21. **Brick Work**

Brick work shall be with F.P.S. new bricks of class designation 75, soaked in water before use. *Cracked, deformed, under-burnt bricks shall NOT be used.* Contractor shall provide the Samples for approval before procurement.

Cement mortar 1:5 (1 cement: 5 coarse sand) shall be well mixed before use. Use of PPC (Pozzolona Portland Cement) is allowed in Brick work and plastering. Coarse sand shall be washed Badarpur/ stone dust.

**SIGNATORY OF CONTRACTOR**

**SIGNATORY OF NITRA**

**DIRECTOR GENERAL**



## **CHAPTER-6**

### **A) LIST OF APPROVED MAKES OF CIVIL MATERIALS**

S.No	Description of Material	Approved Make / Manufacturers
1	Cement – OPC (43 Grade)	Birla Uttam/ Ultratech/Jaypee/ Shree/ JK Cement.
2	PPC 53 Grade Cement	Jaypee / Birla /ACC / JK / Shree/ Heidelberg/ Lafarge/ Ultratech
3	Colour Coated Metal Sheet for Roof Sheeting	TATA/ Bhusan steel / Equivalent
4	Reinft. and Structural Steel (TMT bars, Sections,Angles, Tees, I & H, Channels)	RATHI / KAMDHENU.
5		
6	Bricks	F.P.S. bricks designation 75 from Kiln of U.P.
7	RMC with OPC	Ultra-tech, ACC Ready mix
8	White Cement	JK white, Birla white
9	Glass , Mirror	Modiguard, Atul or approved equivalent
10	Toughened Glass	GSC, Asahi, Sejal or approved equivalent
11	Laminated flush door	Swastik, Kitply
12	Stainless steel fittings	Ozone, Doorset, Everest or appvd. equivalent
13	Aluminium section	Jindal, Indalco, Hindalco, Mahavir.
14	Flush Door Shutter	Archidply, Mayur, Century, Corbett
15	Plywood and Lamination Sheets	Archidply, Century, Kitply, Merino (Century Laminators)
16	Gypsum board	India Gypsum, Lafarge Boral Gypsum
17	Ceramic Tiles	KAJARIA, SOMANY, JOHNSON, NITCO, Bell
18	Float Glass	Saint Gobain, AIS or approved equivalent
19	M.S.PIPES	TATA / JINDAL
20	G.I PIPES	JINDAL HISAR.
21	Paint, Distemper, Primer	Berger, Asian, Nerolac, ICI.
22	Waterproof Cement Paint	Snowcem or approved equivalent
23	Putty	JK White, Birla wall care
24	Waterproofing Compound	CICO, Dr. Fixit, Accoproof
25	PVC water stopper	Sintex, Superplast or approved equivalent

26	R.C.C. Pipes & collars	Indian Hume Pipe /as approved
27	uPVC Pipe, HDPE	Supreme, Prakash, Kisan
28	HDPE fittings	Kisan, Supreme.
29	GI fittings	New, HB, UNIK
30	Cast Iron Pipes and Fitting	I.S.I. Marked.

### **B) APPROVED MAKES OF ELECTRICAL ITEMS**

S.No.	ITEMS	APPROVED MAKES
1	MOULDED CASE CIRCUIT BREAKERS	L&T/ SIEMENS/ GE POWER / ABB
2	AMMETER, VOLTMETER	AE/ UNIVERSAL/RISHAB/CONZERV
3	DIGITAL METERS	ENERCON / NEPTUNE / SCHNEIDER / CONZERV
4	MULTI-FUNCTIONAL DIGITAL METER	ENERCON/NEPTUNE/AE
5	SELECTOR SWITCH, PUSH BUTTON SWITCH/ EMERGENCY SWITCH	KAY CEE / L&T / GE POWER CONTROL / SIEMENS / SCHENIDER
6	LED INDICATION LAMPS	AE /VINAY LED / SIEMENS/ L&T/ SCHENIDER / CONZERV
7	CT'S	AE / KAPPA / MEI / UNIVERSAL / C &S / L&T, MECO / CONZERV
8	A). CABLE GLANDS B). LUGS & THIMBLES	DOWELL / SIEMENS / JHONSONS
9	A). UPTO & INCLUDING 11KV CABLES (ISI MARKED) B). CONTROL CABLES (ISI MARKED)	BONTON / SKYTONE / DIAMOND / CCI BONTON / SKYTONE / CCI.
10	RACEWAY/ CABLE TRAY	RICOH / ELPOWER / VENUS.
11	PROTECTION & OTHER RELAYS	ALSTOM / L & T / ABB / ALLEN BRADLEY
12	MCB, MCB DB & ISOLATORS	L & T (HAGER) / LEGRAND/ ABB.
13	RCCB / RCBO	L & T (HAGER) / LEGRAND/ GE.
14	MS CONDUIT	BEE / AKG .
15	PVC CONDUIT	DAUPHIN / AKG / POLYPACK/ DOLLAR / SETIA
16	INDUSTRIAL SOCKET IN SHEET STEEL ENCLOSURE WITH MCB	MDS (LEGRAND)/ HAGER / SCHNEIDER / C &S/ GE
17	PVC INSULATED COPPER WIRE (ISI MARKED).	BONTON / SKYTONE / RAJNI GANDHA / LAPP
18	CO- AXIAL CABLES	BONTON / SKYTONE / FINOLEX

19	LIGHTNING ARRESTOR	ALLTEC / PHOENIX
20	TAG BLOCK	KRONE OR EQUIVALENT MAKE APPROVED BY E-I-C
21	LIGHT FIXTURES & LAMPS	CROMPTON/PHILIPS/BAJAJ/WIPRO/GE / THORN / KESELEC/ GEWISS(C &S)
22	CEILING FANS	GEC / USHA / CROMPTON / BAJAJ / HAVELLS
23	EXHAUST FANS	GEC / CROMPTON / BAJAJ / HAVELLS
24	CONTACTORS	L & T / GE / BCH / SIEMENS / ABB / SCHNEIDER
25	PUSH BUTTONS	L & T / SIEMENS / BCH / CON CORD

**Notes : 1)** In case of any other material to be used in work which is not mentioned above, the contractor shall submit the sample/s for the approval of NITRA.

**2)** Where Equivalent materials are proposed these shall be approved by Architect/consultants and NITRA in advance of procurement. Samples shall be submitted by the Contractor. Any change in the approved make shall be with prior approval of NITRA.

## **CHAPTER-7**

### **LIST OF DRAWINGS**

<b>S.No</b>	<b>Drawing No.</b>	<b>Description</b>
1	Drg-1/WS-NITRA/2015	Key Plan Showing Location of Proposed Work Shed.
2	Drg-2/WS-NITRA/2015	Ground Floor Plan & Terrace Plan
3	Drg-3/WS-NITRA/2015	Sections and Elevations
4	Drg-4/WS-NITRA/2015	Foundations, Footing Structural Details- RCC and Steel Sections.
5	Drg-5/WS-NITRA/2015	Details of Tie Beam
6	Drg-6/WS-NITRA/2015	Plan-Layout of HDPE Pipe & Chambers in Floor

# **TENDER DOCUMENT**

## **VOLUME-2**

### **PRICE BID**

**Name of Work:**

**Construction of Work Shed for Focus Incubation  
Center at NITRA, Sector-23, Raj Nagar, Ghaziabad.**

**Time of Completion – 4 (Four) months.**

**Submitted By: (Name of Bidder / Contract Company)**

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**PRICE BID** (To be filled by the bidder)

**Name of Work:**

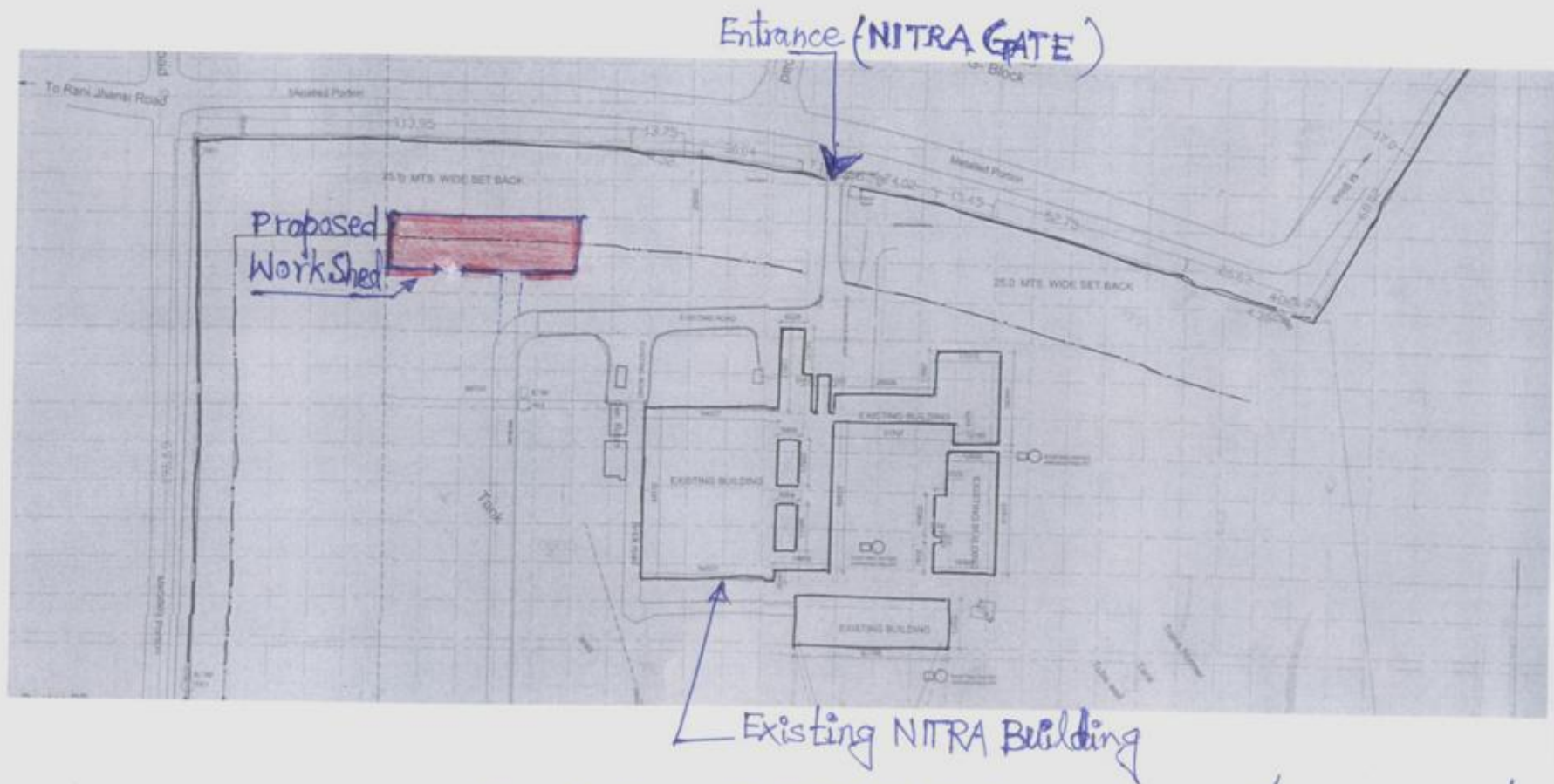
**Construction of Work Shed for Focus Incubation  
Center at NITRA, Sector-23, Raj Nagar, Ghaziabad.**

Our Rate for the above mentioned work as defined in the scope of work  
in Technical bid document Volume-1, is as Follows :

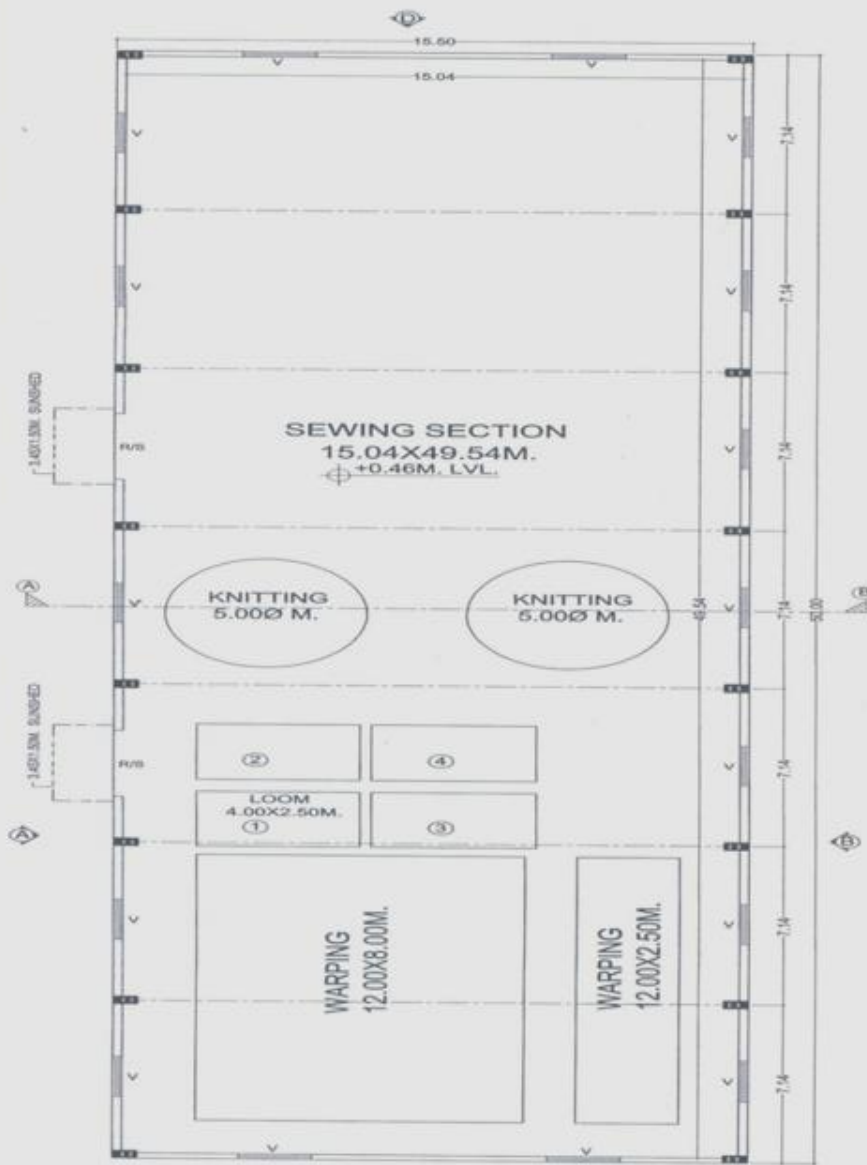
**Rate (in figures)** Rupees.....per Sq.M. of Covered Area.

**Rate (in words)** Rs. .... per Sq.M. of Covered Area.

Signature of Bidder / Contractor



KEY PLAN - DRAWING No. Drg-1/WS-NITRA/2015



GROUND FLOOR PLAN



TERRACE PLAN

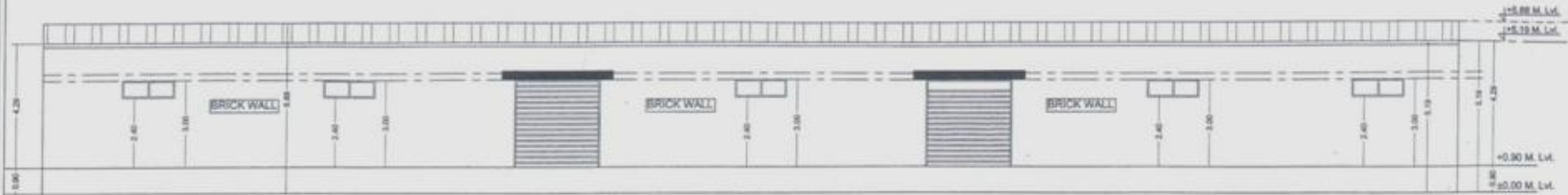
Drg.No.: Drg-2/WS-NITRA/2015

PREPARED BY:-

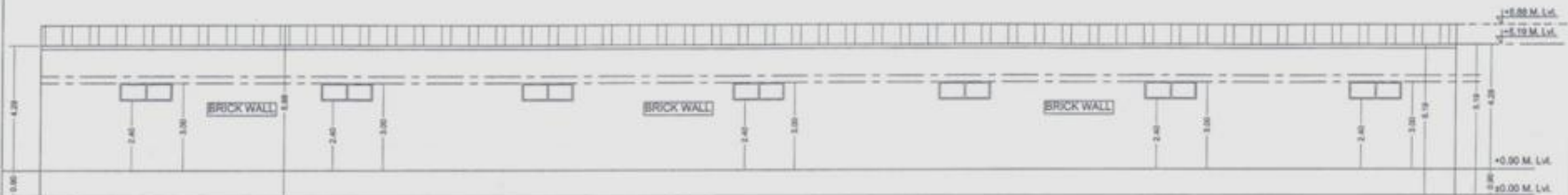


COMBINE  
Creative Designers

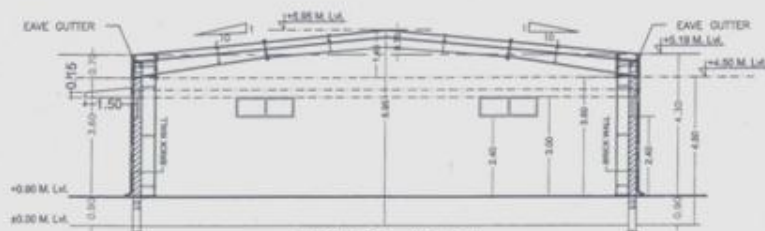
(ARCHITECT & INTERIOR DESIGNERS)  
E-23, NEW ARYA NAGAR,  
GHAZIABAD,  
MOBILE NO. : 9811054143 (M)



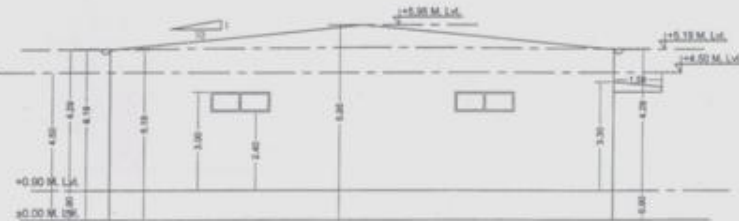
SIDE ELEVATION-A



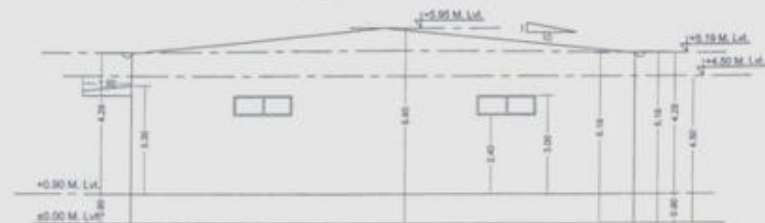
SIDE ELEVATION-B



SECTION AT A-B



REAR ELEVATION-D



FRONT ELEVATION-C



Drg. No.: Drg-3/WS-NITRA/2015

PREPARED BY:-



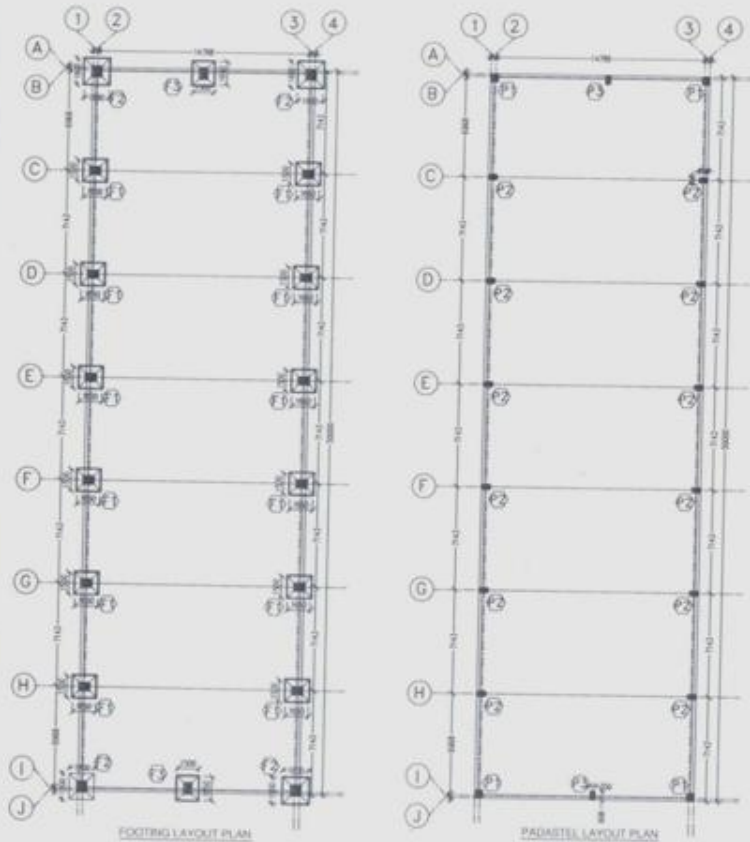
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COMBINE  
Creative Designers

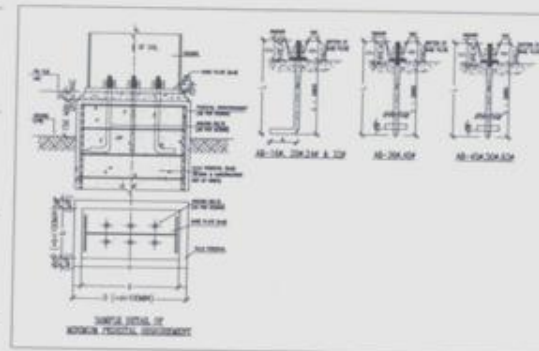
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Drg-3/WS-NITRA/2015

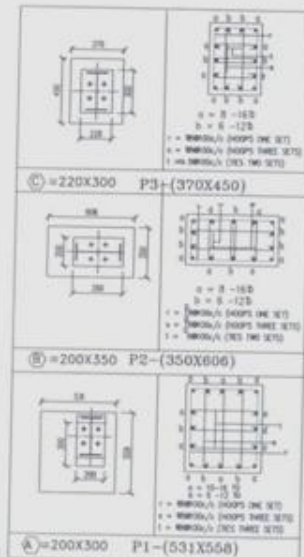
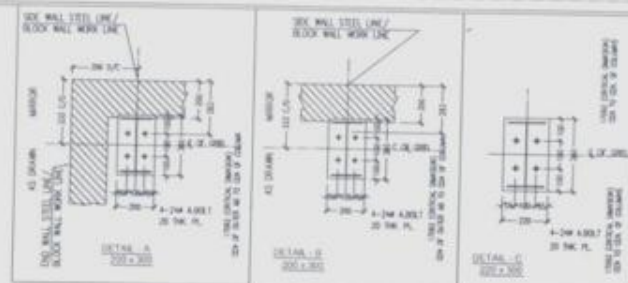




FOOTING R/F DETAILS							
S.NO	FOOTING NO.	FTG. SIZE (L X B)	D	d	MAIN BARS	CROSS BAR	TOP BAR B/W
1.	F1	(1500X1650)	450	250	12#Ø150 C/C	12#Ø150 C/C	10#Ø200 C/C
2.	F2	(1800X1800)	500	250	12#Ø125 C/C	12#Ø125 C/C	10#Ø200 C/C
4.	F3	(1500X1650)	450	250	12#Ø150 C/C	12#Ø150 C/C	10#Ø200 C/C



TYP. R/F DET. OF FTG MKD. F1, TO F3  
SECTION 1-1



1. ALL DIMENSIONS ARE IN MM UNLESS NOTED OTHERWISE.
2. MINOR DIMENSIONS SHALL BE FOLLOWED DRAWINGS ARE NOT TO BE SCALE.
3. GRADE OF CONCRETE AND WALL BE IN-20 CONFORMING TO IS-10262-2006.
4. REINFORCEMENT SHALL BE HIGH STRENGTH AUTOMATIC BARS OF GRADE Fe 415 CONFORMING TO IS-1786-1985. CLEAR COVER TO REINFORCEMENT SHALL BE AS FOLLOWS: FOOTING = 50mm; COLUMN = 40mm.
5. ALL DISCONTINUES FIBRE IN DIMENSIONS IN ANY OF THE DIMENSIONS SHALL BE CLARIFIED WITH THE ENGINEER IN CHARGE BEFORE EXECUTION OF WORK AT SITE.
6. THE CONTRACTOR SHALL VERIFY & REPORT ALL DIMENSIONS A LEVEL IN THE DRAWINGS AND SHALL CORRELATE WITH ACTUAL SIZE CONFORMING AND DISCONTINUES FIBRE SHALL BE BRIDGED TO AVOID OF THE ENGINEER IN CHARGE BEFORE EXECUTION OF WORK AT SITE.
7. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER STRUCTURAL, ARCHITECTURAL, ELECTRICAL, PLUMBING & MECHANICAL DRAWINGS AND ALL OTHER RELATED DRAWINGS AND THE OWNER DOCUMENT.

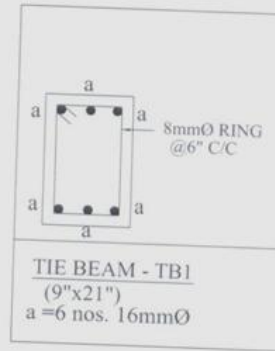
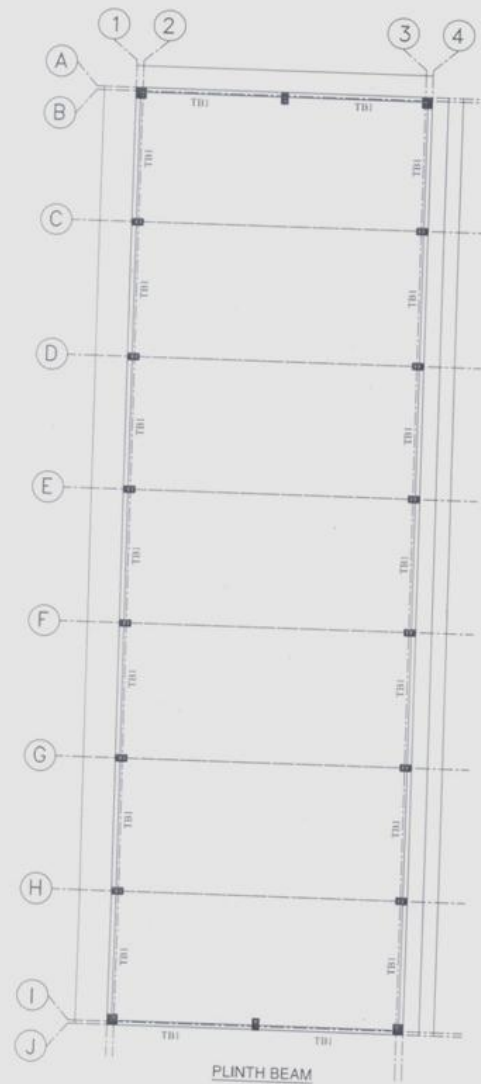
PREPARED BY:-



COMBINE  
Creative Designers

(ARCHITECT & INTERIOR DESIGNERS)  
E-23, NEW ARYA NAGAR,  
GHAZIABAD  
MOBILE NO - 9810234143

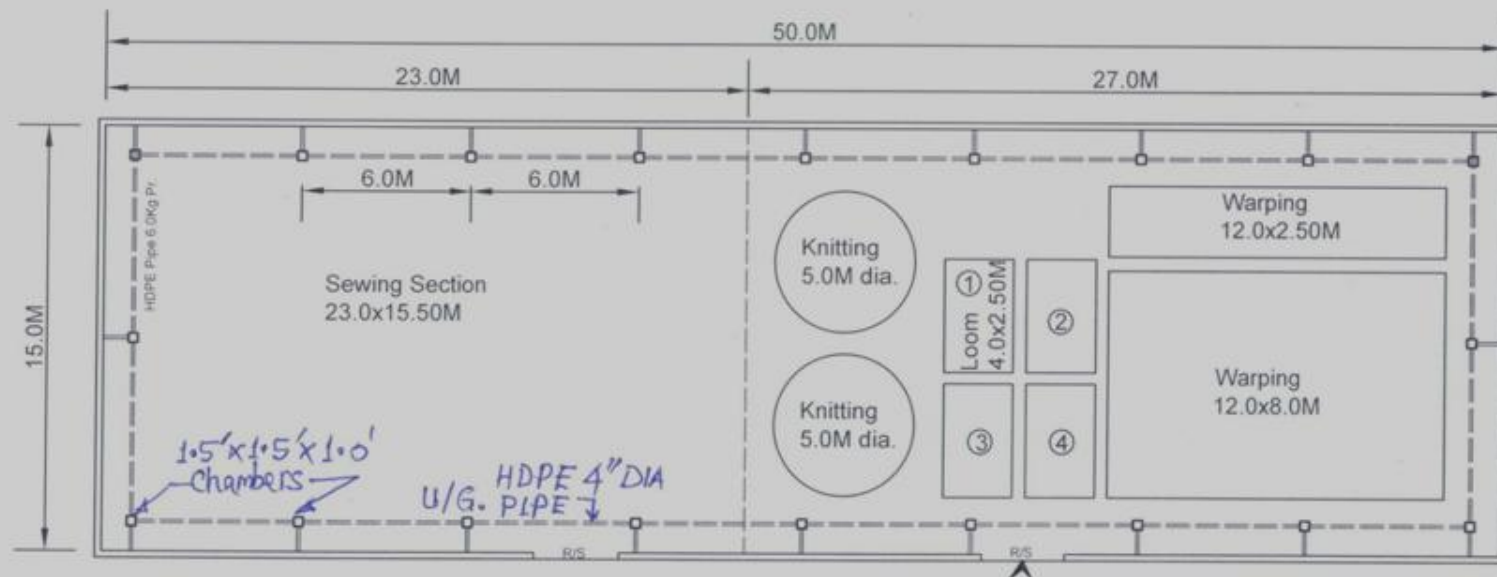
Dwg. No.: Dwg-4/WS-NITRA/2015.



TIE BEAM - TB1  
(9"x21")  
a = 6 nos. 16mmØ

PLINTH BEAM

Drg.No- Drg-5/WS-NITRA/2015 .



Pipe Layout for Electrical Cable  
(Working area = 750 Sqmt.)

Drq. No. Drq-6/WS-NITRA/2015.