



Chhattisgarh State Minor Forest Produce (Trading & Development) Cooperative Federation Ltd.

CGMFPFED RAIPUR

Tender Document

Item Rate Tender

for the

**Construction of MFP Based Common Incubation Facility at
Deobhog, District-Gariyaband (C.G.) in the following packages**

- 1. PACKAGE- A : Building for Processing Units**
- 2. PACKAGE- B : Buildings for Processing Units, Water
Supply and Electrification**
- 3. PACKAGE- C : Warehouse and Amenities**

P.A.C. for PACKAGE-A	:	RS. 141.87 Lakh
P.A.C. for PACKAGE-B	:	RS. 128.48 Lakh
P.A.C. for PACKAGE-C	:	RS. 71.78 Lakh
P.A.C. for TOTAL PACKAGE (A+B+C)	:	RS. 342.13 Lakh

TENDER DOCUMENT (PART ONE)

Notification No. Fed/MFP-CIF/2023/I

Raipur, Dated 10/03/2023

Issued by:
Managing Director
Chhattisgarh State Minor Forest Produce (Trading & Development) Cooperative Federation Ltd.
Van Dhan Bhawan, Sector-24, Nawa Raipur Atal Nagar
Website : www.cgmfpfed.org, Email address: mfpfed.cg@nic.in, Phone : 0771-2513100 to 2513110

Tender Document Contains

- (a) Only schedule “A” and Section-I of schedule “D” are to be filled & signed by the tenderer.
- (b) All the certificates as per prequalification criteria shall be appended with relevant forms of schedule “D”.

1. PART ONE (CGMFP F-1)- (Attached herewith, to be submit along the tender)

Part (A)

- a) Press Notice & Corrigendum
- b) Detailed NIT

Part (B)

- a) Schedule-A -NIL
- b) Schedule-B –NIL
- c) Schedule-C –NIL
- d) Schedule-D

Section-I..... Tender forms

PART-1 – Format for Technical Bid Submission (Envelope-A)

- 1. Annexure-1 – General Information
- 2. Annexure-2- Document to be Uploaded (Technical Bid)
 - (i) FORM-1 : Letter of Technical Tender
 - (ii) FORM-2 : Tenderer's Information Sheet
 - (iii) FORM-3 : Annual Turnover
 - (iv) FORM-4 : Specific Construction Experience
 - (v) FORM-5 : Construction Experience in Key Activities
 - (vi) FORM-6 : Integrity Pact & Agreement
 - (vii) FORM-7 : List of Key Equipments/Machines for construction work
 - (viii) FORM-8 : Affidavit
 - (ix) FORM-9 : Check list for Technical tender evaluation
 - (x) FORM-10: Format for Power of Attorney

PART-2- Format for Financial Bid (Envelope-B)

- 3. Annexure-3 – Bill of Quantity

Section –II Scope of work

Section –III..... Technical specifications of work

Section –IV..... Special Conditions of Contract

Section –V..... General/ISI Specification & list of approved makes.

Section –VI..... Drawings

- e) Schedule-E
- f) Schedule-F

2. PART TWO (CGMFP F-2/3)-Standard form (Attached herewith, but not to be submitted along the tender)

- 1. General Guidelines
- 2. Tender
- 3. General rules and directions
- 4. Conditions of contract
- 5. Clauses of contract
- 6. Model rules relating to labour, water supply and sanitation in labour camps safety code.
- 7. Sketch of cement Godown
- 8. Contract forms
 - (a) Draft Format for Performance Security
 - (b) Earnest Money Deposit Form (Bank Guarantee)
 - (c) Format of Contract Agreement
 - (d) Draft Format for Performance Guarantee for Water Proofing and Anti-termite Works
 - (e) Indemnity Bond
 - (f) Indenture Bond
 - (g) Notice for Appointment of Arbitrator
- 9. Proforma of schedules (Schedule 'A' to Schedule 'F')



Chhattisgarh State Minor Forest Produce (T&D) Cooperative Fed. Ltd.

Van Dhan Bhawan, Sector-24, Nawa Raipur Atal Nagar

GST Reg. No. 22AABAC5137E22C, Phone: 0771-2513100 to 2513110

Website: www.cgmpfed.org, Email address: mfpfed.cg@nic.in

Notification No.Fed/MFP-CIF/2023 /1

Dated 10/03/2023

**Tender for Works - MFP Based Incubation Facility, Deobhog
(Through e-Procurement Portal Only)**

Chhattisgarh State Minor Forest Produce (T&D) Cooperative Federation Ltd. (CGMFP) invites e-tender for the work of "Construction of MFP based Common Incubation Facility at Deobhog, District-Gariyaband, (C.G.)

S. No.	Package	Details	Approximate Value (INR Lakhs)
1.	Package A	Buildings for Processing Units	141.87
2.	Package B	Buildings for Processing Units, Water Supply and Electrification	128.48
3.	Package C	Warehouse and Amenities	71.78
Total (Package A+ Package B + Package C)			342.13

Bidders eligible for participating in the tender

Registered Contractor in CGPWD or in appropriate class in other Departments - (Class-B & Above).

Bidders may apply for single package or multiple packages or all the packages

e-Bids can be submitted online on the dates mentioned in table below till 3:00 PM in the e- procurement portal <https://cgmpfedtenders.abcpocure.com> only, the tenders will be openedonline from 3:10 PM on the mentioned in table below. **Pre-bid meeting will be held virtually on 22-03-23 at 11:30 AM**

Bid Round	Bid downloading start date	Online bid submission start Date	Online bid submission last date	Date of online opening of Bid
First	17.03.2023	03.04.2023	10.04.2023	10.04.2023
Second	18.04.2023	24.04.2023	02.05.2023	02.05.2023
Third	08.05.2023	11.05.2025	17.05.2023	17.05.2023

The tender documents may be downloaded from the website www.cgmpfed.org and e-Procurement portal <https://cgmpfedtenders.abcpocure.com> only. Amendments / Notices will be available on above website and e-Procurement portal Only

Managing Director

Chhattisgarh State Minor Forest Produce (Trading & Development) Cooperative Federation Ltd. (CGMFP)

DETAILED NOTICE INVITING TENDER

Its Call

NIT No. Fed/MFP-CIF/2023/I

Raipur, Dated 10/03/2023

Online Item rate Tenders are invited for Construction of MFP Based Common Incubation Facility at Deobhog, District-Gariyaband (C.G.) in the following packages

- | | | | |
|---------------|---|---------------------------------|-------|
| 1. PACKAGE- A | : | Building for Processing Units | |
| 2. PACKAGE- B | : | Buildings for Processing Units, | Water |
| | | Supply and Electrification | |
| 3. PACKAGE- C | : | Warehouse and Amenities | |

The prescribed tender documents by **CGMFP** shall be applicable for bidding by the eligible contractors registered with any Central/ Semi Central/State Government or PSU in appropriate class as per PWD Guideline. The qualified bidder must fulfill the eligibility criteria (EC). The Tenderer should download the document (<https://cgmfpedtenders.abcprocure.com>) and <https://cgmfped.org> and submit the same through online bidding portal (<https://cgmfpedtenders.abcprocure.com>)

1. The detailed NIT is as under: -

Name of work	Construction of MFP Based Common Incubation Facility at Deobhog, District-Gariyaband (C.G.) in the following packages. 1. PACKAGE- A : Building for Processing Units 2. PACKAGE- B : Buildings for Processing Units, Water Supply and Electrification 3. PACKAGE- C : Warehouse and Amenities
Estimated Cost of Works/Probable Amount of Contract (PAC) (INR in Lacs)	For PACKAGE-A: RS. 141.87 Lakh For PACKAGE-B: RS. 128.48 Lakh For PACKAGE-C: RS. 71.78 Lakh For TOTAL PACKAGE (A+B+C): RS. 342.13 Lakh
Earnest Money Deposit (EMD) (INR)*	For PACKAGE-A: RS. 1,10,000/- (One Lakh and Ten Thousand) For PACKAGE-B: RS. 1,10,000/- (One Lakh and Ten Thousand) For PACKAGE-C: RS. 75,000/- (Seventy-Five Thousand) For TOTAL PACKAGE (A+B+C): RS. 2,95,000/- (Two Lakh Ninety-Five Thousand) The total amount i.e., EMD amount as applicable + cost of Tender is to be paid together online on the e-tendering portal

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	<p>(https://cgmpfedtenders.abcprocure.com)</p> <p>If the tenderer is applying the tender for One Package Only, then EMD amount pertaining to that particular Package will have to be paid by the tenderer. In case where the tenderer is applying for more than one Package or the Total package then the total EMD amount which will be equivalent to the sum of all the Packages for which tenderer is applying for shall have to paid. For Example: In case of application for Package A and Package B, sum of EMD amount applicable for Package A (INR 1,10,000.00) and Package B (INR 1,10,000.00) i.e., total EMD amount INR 2,20,000.00 will have to be deposited by the Tenderer. The bid/s will be considered only for the Package for which the bidder has paid the amount of EMD for. For example: If tenderer has applied bid for Total Package i.e., (Package A+ Package B+ Package C) and has deposited the EMD amount pertaining for only Package A and Package B in such case the bid shall be considered for evaluation only for Package A and Package B and not for the Total package.</p> <p>The E.M.D. of unsuccessful tenderers will be returned online only, without any interest, after selection of Successful Tenderer</p>
Cost of Tender (inclusive of 18% GST) (in INR)*	<p>Rs. 5000.00 (For participation in Anyone Package /Any Two Package / Total Package)</p> <p>The total amount i.e., cost of Tender + EMD amount as applicable is to be paid together online on the e-tendering portal (https://cgmpfedtenders.abcprocure.com)</p>
Time allowed for execution of work including rainy season	06 months for physical completion of work (including rainy season) for Any One Package or Any Two Package or Total Package.
Defect liability period including rainy season (after Completion of work/Go live recorded)	24 Month (After physical completion of work)
Bidders eligible for participating in the tender	Registered Contractor in CGPWD or in appropriate class in other Department (Class B & Above). Bidders may apply for single package or multiple packages or all the packages.
Bid downloading Start Date	17/03/2023 at 3:00 PM
Online Bid Submission Start Date	03/04/2023 at 3:00 PM
Online Bid submission Last Date	10/04/2023 at 3:00 PM
End date for Physical Submission	09/04/2023 at 5:00 PM
Date of Online Opening of Bid	10/04/2023 at 3:10 PM
Date of Pre-bid Meeting	22/03/2023 at 11:30 AM
Pretender Clarification/ amendments/ corrigendum	Shall be available only on the websites mentioned below: https://cgmpfedtenders.abcprocure.com and

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	https://cgmfped.org
Submission of Tender Documents	<p>1) Tender documents to be submitted in Two envelope marked A and B online as per mentioned key dates on portal of https://cgmfpedtenders.abcprocure.com</p> <p>Online Envelope “A” will contain technical qualifications/details required for pre-qualification as per Detailed NIT and other details as per tender document.</p> <p>Online Envelope “B” shall have financial offer (Price Bid).</p> <p>2) For technical qualification, eligibility criteria, Payment Receipt of Cost of Tender Document, Payment Receipt of earnest money and other required documents, the documents submitted online shall only be treated as final submission of document. Any physical submission of extra paper/documents shall not be taken for consideration for technical qualification/eligibility criteria.</p> <p>3) Additionally, all the Tenderer are required to submit Envelope A, comprising following original Document as hard copy also - Demand Draft of EMD, Payment Receipt of Cost of tender document, Power of attorney, Affidavit, Integrity pact and Integrity agreement. The documents should be submitted only through Registered post/speed post to reach in the office of Office of the Chhattisgarh State Minor Forest Produce (Trading & Development) Cooperative Federation Ltd. (CGMFP), Van Dhan Bhavan, Sector-24, Nawa Raipur Atal Nagar, Phone: 0771-2513100 to 25131100 on or before the Date & time as mentioned in the detailed NIT “End Date for Physical submission”. For any postal delay the department shall not be responsible. Failing which the tenderer cannot participate in the tender.</p>

* Earnest Money Deposit (EMD) plus Tender Cost should be paid online only through the e-tendering portal (<https://cgmfpedtenders.abcprocure.com>) as per clause 2.2 of Appendix 1- Instructions for the Submission of the Online Tender

Notes:

- It is mandatory for bidder to submit all documents online on the website <https://cgmfpedtenders.abcprocure.com>. Any documents which are not submitted online but submitted physically will not be accepted.
- Bidder has to submit all the mandatory documents, if the mandatory documents not submitted by bidder, then bid will be disqualified without any further clarification.
- The experience of sublet works/Joint venture works shall not be considered.
- Joint venture/consortium is not allowed.

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- e) The Bids of the contractors must be digitally signed by the digital Certificate of the Contractor before submitting the bids online.
- f) The bidder must submit their incorporation documents along with GST and PAN no. details.
- g) If any document as required is not received as per the desired form, then the Bidder will be treated disqualified, and his tender will not be opened.
- h) Conditional tenders shall be summarily rejected.
- i) Any amendment issued shall be part of the tender document and shall be published on the website only and shall not be published in any newspaper.
- j) (i) cess @ 1% (one percent) shall be deducted at source from every bill of the contractor under Building and other construction for workers welfare, cess act 1996.
(ii) It is mandatory for the contractor(S) to get himself/themselves registered with C.G. Building & other Construction welfare Board and “Karmchari Rajya Bima Yojna (ESIC) Govt.-India” for their employees (in case of more than 10 employees) as soon as the work order is issued to him/them for the work amounting to Rs. 10.00 (ten) lacs and above and submit a copy of the same to the concern Executive Engineer. Otherwise, no payment will be made under the contract.

2. Pre-Qualification Criteria -To be eligible under the contract, the intending tenderer should meet the following mandatory criteria **2.1, 2.2 (A & B).**

2.1 Financial Criteria

Average Annual Turnover: Minimum average annual gross turnover of the bidder should be as per following table, during any three complete financial years out of previous five years Financial Years (i.e. 2017-18, 2018-19, 2019-20, 2020-21 & 2021-22). **(Turnover Certificate signed by practicing CA having UDIN duly should be enclosed).**

Package Details	Minimum Average Annual Gross Turnover
Package A	90 Lakh
Package B	90 Lakh
Package C	50 Lakh
Package A+ Package B + Package C	230 Lakh

Annual turnover is total certified payments received for contracts in progress or completed during the financial year

For above, the Tenderer has to submit IT return and audited balance sheets of their financial turn over/ accounts along with profit and loss account for the last three or four years, along with the Tender. Where necessary, the Employer can make enquiries with the Tenderer's Bankers.

2.2 Technical Criteria

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A	Intending tenderer shall be registered contractor with any Central/ Semi Central/State Government or PSU in the state of Chhattisgarh in class of contractor under appropriate categories of respective authority.
AND	
N o t B - 2 :	<p>Intending tenderer should have completed satisfactorily following works during any three years out of the previous five years Financial Years i.e., (2017-18, 2018-19, 2019-20, 2020-21, 2021-22), in any Central/State Government/Local Body/PSU's as below: -</p> <p>(a) One Similar work costing not less than</p> <p style="margin-left: 40px;">i) For Package A - INR 120 Lac</p> <p style="margin-left: 40px;">ii) For Package B – INR 120 Lac</p> <p style="margin-left: 40px;">iii) For Package C – INR 60 Lac</p> <p style="margin-left: 40px;">iv) For Complete Package (A+B+C)- INR 300 Lac</p> <p style="text-align: center;">OR</p> <p>(b) Two Similar works costing not less than</p> <p style="margin-left: 40px;">i) For Package A - INR 75 Lac each</p> <p style="margin-left: 40px;">ii) For Package B – INR 75 Lac each</p> <p style="margin-left: 40px;">iii) For Package C – INR 40 Lac each</p> <p style="margin-left: 40px;">iv) For Complete Package (A+B+C)- INR 190 Lac each</p> <p>Note 1:</p> <p>Similar work shall mean project of Any Type of Building work along with below mentioned work experience.</p> <p>For Package A - Internal & External Electrification, Internal and External Water Supply</p> <p>Package B - Internal & External Electrification, Internal and External Water Supply, UGR and OHT</p> <p>Package C - Internal & External Electrification, Internal and External Water Supply</p> <p>Total Package- Internal & External Electrification, Internal and External Water Supply, UGR-50 KL or More and OHT 50 KL or More</p>
Note-1: If any or all the above requirements are not met, it shall lead to rejection of bids.	

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- a) For the purpose, value of executed works and financial turnover shall be brought to current costing level by enhancing the actual value of work at the rate of 10% per annum (compounded annually), calculated from the date of completion to last date of receipt of applications for tenders.
- b) With reference to Clause 2.2 (B) above, Ongoing project / part project experience shall not be considered for evaluation.
- c) For the benefit of the intending tenderers a checklist is enclosed at FORM-9 of Schedule-D (Section-I), for the mandatory documents to be submitted along with tender. Tenderers are required to submit other documents/information also with the technical tender as required in the detailed NIT or elsewhere in the Tender Document PART ONE (CGMFP F-1), otherwise it shall lead to rejection of bids.
- d) Those who qualify under the Technical Criteria as per 2.2 (A & B) shall have to employ sub vendor who has experience in execution of that component, for which tenderer does not have experience. That sub vendor should have successfully completed work in any central/ state Govt./ PSU in respect of component as below.
 - i. One completed work of 80% of the value of that component
 - OR
 - ii. Two completed works of 50% each, of the value of that component.

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In a Central/State Govt. department/PSU

Certificates:

- a) All tenderers should submit the valid Contractor registration certificate, Valid GST registration certificate with copy of GST return for the immediate two months preceding the month in which tender is invited, balance sheet with profit and loss account statement for at least 3 years.
 - b) The tenderers shall also submit satisfactory completion certificates in support of each quoted experience along with work order. The satisfactory completion certificate should be signed by an officer not below the rank of Executive Engineer concerned in case of Government department or the rank of General Manager in case of public sector as the case may be.
 - c) **All the documents to be submitted shall be self attested, except affidavit and Power of attorney for signing & submission of bid, which is to be submitted on non judicial stamp paper of Rs. 100/- duly notarized.**
3. All E-Tenders must be submit physical/hard copy of the following original documents
- a) **Payment receipt of Earnest Money Deposit (EMD) as applicable + Cost of Tender** as mentioned in the Detailed NIT
 - b) Affidavit on INR 100.00 non judicial Stamp paper in the prescribed format,.
 - c) Power of Attorney for Signing & submission of Bid On Rs.100/- (Rupees hundred only) Non judicial Stamp Paper.
 - d) Integrity pact and Integrity Agreement in the prescribed format.
4. (a) M.D.CGMFP reserves full rights to reject any or all the tenders without assigning any reason, and to seek any further information about the tenderers. The selection shall be at the entire discretion of CGMFP and the CGMFP 's decision in this respect shall be final and binding. Further CGMFP reserves right to split the contract in two or more parts. This shall be at the entire discretion of CGMFP and CGMFP 's decision in this matter shall be final and without appeal.
- (b) The competent authority on behalf of CGMFP does not bind himself to accept the lowest or any other tender, and reserves to himself the authority to reject any or all of the tenders received without the assignment of a reason. All tenders in which any of the prescribed conditions is not fulfilled or any condition including that of conditional rebate is put forth by the tenderer, shall be summarily rejected.
5. (a) E-Tenders shall be valid for 90 (Ninety) days from the last date of submission of the tender. CGMFP will not be responsible for any costs or expenses incurred by Tenderers in connection with the preparation or Online Tendering System. If any tenderer withdraws his tender before the said period or issue of letter of acceptance/intent, whichever is earlier, or makes any modifications in the terms and conditions of the tender which are not acceptable to the CGMFP, then the CGMFP shall, without prejudice to any other right or remedy, be at liberty to forfeit entire amount of Earnest Money as aforesaid.
- (b) Any bidder, who has withdrawn his proposal or have been disqualified on the basis of the above clause, shall not be eligible to submit the tender in the recall of such tender.
- (c) Subletting of the contract or Joint Venture in any case shall not be allowed. In case subletting is done or proved during the contract, the work shall be closed at the stage as it is and the SD / Retention money/any other deposits available with department shall be forfeited.
6. **The intending tenderers are advised to send their queries to CGMFP by email to mfpfed.cg@nic.in . All Aamendments' /Clarifications/Corrigendum, if any shall be uploaded on the website and shall not be published in any newspaper.**
7. Period for completion of work as mentioned above is inclusive of rainy season.
8. Tenderers are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders, as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in

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general, shall themselves at their own cost obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect the execution of work and shall incorporate the cost of such effects while quoting the tender, A tenderer shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charges consequent on any misunderstanding or otherwise shall be allowed, The tenderer shall be responsible for arranging and maintaining at his own cost all materials tools & plants, water, electricity, access facilities for workers and on all other services required for executing the work unless otherwise specifically provided in the contract documents. Submission of tender by a tenderer implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and local conditions and other factors having a bearing on the execution of the work.

9. Canvassing whether directly or indirectly, in connection with tenders is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection.
10. The successful tenderer shall be required to execute an agreement on a non judicial stamp paper of appropriate value with the **Managing Director, CGMFP or Authorized Person by CGMFP** in the Proformas annexed to the tender document, within 15 days of the issue of letter of acceptance/ award by the CGMFP. The cost of non judicial stamp paper shall be borne by contractor. In the event of failure on the part of the successful tenderer to sign the agreement within the specified period the entire earnest money will be forfeited and tender shall be cancelled.
11. The successful tenderer, upon issue of letter of acceptance, in addition to execution of an agreement on a non judicial stamp paper of appropriate value, shall also be required to furnish an irrevocable Performance Bank Guarantee of requisite amount (equal to the 5% of tendered amount) to the **Managing Director, CGMFP** in the Performa annexed to the tender document, within 07 days (extendable for further 07 days) of the issue of the letter of acceptance /award of Tender by the CGMFP. In the event of failure on the part of the successful tenderer to furnish the Performance Bank Guarantee within specified period the earnest money will be forfeited and tender shall be cancelled.
12. This Notice Inviting Tender shall form a part of the contract document. In accordance with clause 1 of the contract, the letter of acceptance/ award shall be issued in favour of the successful tenderer/ contractor. After submission of the performance guarantee, by the contractor, the General arrangement drawings and other details for commencement of work shall be issued. The contract shall be deemed to have come into effect on issue of communication of letter of acceptance of the tender. On such communication of acceptance, the successful Tenderer/ Contractor shall, within 07 days (further extendable up to 07 days) from such date, formally sign the agreement consisting of:-
 - a) PART ONE of the Tender documents along with detailed NIT as issued to the contractor at the time of invitation of tender and acceptance thereof together with any correspondence leading there to and
 - b) PART TWO of the Tender document i.e. "General conditions of contract duly modified / corrected to the extent as specified under PART ONE (Issued to the contractor and also available for inspection on written demand at the office of the officer inviting tenders specified under Schedule F of PART ONE of the Tender Document) and deemed to have been consulted, inspected, understood and considered by the tenderer before quoting and submitting his tender.
 - c) Agreement signed on non-judicial stamp paper of appropriate value as per prescribed proforma of tender documents.
13. **General Condition of Contract (GCC) is available with the Tender Document as per section CGMFPF2/3**
14. While submitting the tender online the contractor shall clearly and legibly write his full mailing address including PIN code, Telephone/ mobile no./ Fax Numbers/ e-mail address etc for communication purposes and shall inform the Engineer in Charge, appointed by the Department, about any change from time to time in his postal/ mailing address. The communication shall be dispatched only at the contractor's such latest informed address and CGMFP shall in no way be responsible for non-receipt of correspondence by the contractor.
15. If it is found that the tenderer has misrepresented the facts or has attempted to secure or has secured the work by misrepresenting the facts or by submitting false or forged documents then the Entire Earnest

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Money submitted by the Tenderer and /or the Performance Guarantee and/ or the Security Deposit as the case may be, shall be liable to be absolutely forfeited and such Tenderer/ individuals shall also be liable to be prosecuted for cheating/ forgery/ fraud etc as per law.

16. Bill of quantities is enclosed with tender document, the rate shall be quoted against each item separately in figures as well as in words as per Annexure 3

During price Tender evaluation, the CGMFP will correct arithmetical errors on the following basis:

- a) if there is a discrepancy between words and figures, following procedure shall be followed:
 - i. the unit price which corresponds to the total price for the item worked out by the Tenderer shall be followed.
 - ii. If the total price of an item is not worked out by the Tenderer or it does not correspond with the rates written either in words or figures, then the rate quoted by the Tenderer in words shall be taken as correct.
 - b) if there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected.
 - c) If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail, and the total shall be corrected.
 - d) The unit wise amounts will be rounded to the nearest rupee.
 - e) The tendered rates of items against which no rate or price is entered by the tenderer will be taken as zero and the price of the same shall be deemed to have been covered by the rates/amount quoted in other items.
17. All royalties are to be paid by the contractor and also all tolls, duties, local and other levies including sales tax, insurances & workman compensation act etc.
 18. All taxes as applicable on date including GST shall be payable by the contractor. The rate quoted by Contractor shall be deemed to have included all the applicable tax on date.
 19. Contractor will be bound to follow CG Model rules relating to its water supply & sanitation in labour camp.
 20. The contractor shall pay not less than the minimum wages to labours engaged by him on the work.
 21. Department reserves the right to take up the work departmentally or to award any work on contract in the vicinity without prejudice to the terms of contract.
 22. If the rate quoted by the lowest (L1) of the tenderer is considered unbalanced (in relation to the Department's estimate of cost of work to be performed under the contract) by the M.D., CGMFP, then tenderer shall submit detail price/rate analysis of major items of the work within 7 days of such notice so as to demonstrate the internal consistency of these price/rate(s) with his quoted price/rate(s). After evaluation by tender sanctioning authority M.D., CGMFP may require the tenderer to submit additional Security up to 5% of the estimated cost put to tender for the performance of the agreement in the shape of F.D. Or a BG receipt in favor of the M.D., CGMFP before signing of the agreement, which shall be refunded along with the normal S.D. after Completion of work. If he fails to complete the work or leave the work incomplete, this 5% additional SD, shall also be forfeited by the department, in addition to other provision of the contract & the agreement shall be terminated and action shall be taken in accordance of relevant contract clause of the agreement.

S. No.	Percentage below Estimated Cost/PAC	Additional Security Percentage of the Estimated cost/PAC to be received
1	0 Up to 5%	No Additional Security
2	5% Up to 7.5%	1%
3	7.5% Up to 10%	2%

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4	10% Up to 12.5%	3%
5	12.5% Up to 15%	4%
6	More than 15%	5%

23. Agency/contractor/firm/bidders not eligible to bid.

- a) **CGMFP** reserves the right to disallow issue of tender documents or summarily reject the bid of any Agency/contractor/firm/bidder even though they meet the above criteria: against whom an action for violation of its commitment(s) and obligation(s) has been taken and/or whose performance at ongoing project (s) is below par and usually poor with records of poor performance such as abandoning the work, rescinding of contract for which the reasons are attributable to the non-performance of the contractor; made misleading or false representation in the form, statements submitted; consistent history of litigation awarded against them or financial failure due to bankruptcy.
- b) Those, who have earlier abandoned work in **CGMFP** or those who have not completed any work assigned to incorporation them after its award during last 3 years shall not be eligible to bid for this project.
- c) All Agency/contractor/firm/bidders shall include the information and documents regarding any pending and/or history of contract litigation/arbitration for last three (3) years, in which they are involved, disputed amount and contract litigation or arbitration awarded. Consistent history of awards against the Agency/contractor/firm/bidders or habitual litigation/may Consider ineligible for bidding.
- d) The Agency/contractor/firm/bidder whose E.M.D. has been forfeited due to their failure to deposit performance Guarantee after issue of letter of acceptance during last three year shall not be eligible to bid for the project.
- e) The already blacklisted/ debarred Agency/contractor/firm/bidders by the **CGMFP** are not eligible to participate in the tender process and their bids shall be rejected summarily.
- f) The Agency/contractor/firm/bidders should not be currently blacklisted or deregistered for forgery, misrepresentation or supplying of sub-standard quality products(s) for which the bid is being submitted”.

Contact Person		Managing Director,
Name	: Mr. Atul Shrivastava	Chhattisgarh State Minor Forest Produce (Trading & Development) Cooperative Federation Ltd., Van Dhan Bhavan, Sector-24, Nawa Raipur Atal Nagar, Phone :
Designation	: Deputy M.D.	0771-2513100 to 25131100
Office Phone	: + 91 7000240678	
Mobile No.	: +91 7000240678	
Email ID	: mdgariyaband@gmail.com	

Website: <https://cgmpfed.org> , <https://cgmpfedtenders.abcprocure.com>

Note:-

1. All eligible/interested Tenderers are mandated to get enrolled on the e Procurement portal (<https://cgmpfedtenders.abcprocure.com>) in order participate in the subsequent bidding process. And the Tender documents can be downloaded from <https://cgmpfed.org> and <https://cgmpfedtenders.abcprocure.com>

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2. For details on tendering procedure through the electronic tendering system (E-Procurement portal), please refer **Appendix 1- Instructions for the Submission of the Online Tender.**
3. For any other queries regarding online registration on the above mentioned website please get in touch with e-Procurement system integrator, **M/s. e-Procurement Technologies Ltd, Raipur – 492001** on **+91-9099090830 / +91-6353217080** and info@AbcProcure.com and other contact details mentioned below **Appendix 1 - Instructions for the Submission of the Online Tender**
4. All Documents related to Tender (**Online Envelope A and Online Envelope B**) are to be submitted by tenderers online only. In Addition, hard copy of **Envelope A** comprising following original documents i.e., Power of attorney, Affidavit, Integrity pact and Integrity agreement should be submitted in original through **Registered Post / Speed Post only**, failing which the tenderer shall be disqualified. The Hard copy documents should be submitted only through Registered post/speed post so as to reach in the office of Office of the Chhattisgarh State Minor Forest Produce (Trading & Development) Cooperative Federation Ltd. (CGMFP), Van Dhan Bhavan, Sector-24, Nawa Raipur Atal Nagar, Phone: 0771-2513100 to 25131100 on or before the Date & time as mentioned in the detailed NIT “End Date for Physical submission”. For any postal delay the department shall not be responsible. Failing which the tenderer cannot participate in the tender.

Managing Director,
Chhattisgarh State Minor Forest Produce
(Trading & Development) Cooperative
Federation Ltd.,
Van Dhan Bhavan, Sector-24, Nawa Raipur
Atal Nagar,
Phone : 0771-2513100 to 25131100

Signature of Contractor.....

Signature of CGMFP.....

Appendix 1- Instructions for the Submission of the Online Tender

Note: The following steps need to be carried out for online submission of the Tender. Detailed instructions for each of the steps are given in the Tenderer's Manual on the Home Page of <https://cgmfpedtenders.abcprocure.com>

1. Sequence of steps for online tender submission:

Step 1 – To obtain Digital Signature Certificate (DSC):

The DSC is issued by an approved certifying authority, authorized by the Controller of Certifying Authorities (CCA), Government of India. The individual may obtain information required for issuance of a Class II / Class III DSC from the Controller of Certifying Authorities (www.cca.gov.in). The tenderer will have to obtain DSC from <https://cgmfpedtenders.abcprocure.com> or any other CCA approved agency.

DSC is issued upon receipt of mandatory identity proofs and verification letters attested by a Gazetted Officer. Only upon the receipt of the required documents, a DSC can be issued.

Important Note: The offers submitted online should be signed electronically with a DSC to establish the identity of the tenderer. In case, during the process of a particular tender, the user loses his/her DSC (eg. due to virus attack, hardware problem, operating system problem etc.) he may not be able to submit the offer online. Hence the users are advised to back up the certificate and keep the copies at safe places under proper security to be used in case of emergencies.

In case of online tendering, the DSC issued to the authorized user of a firm and used for electronic tendering will be considered equivalent to no-objection certificate / power of attorney to that user. The firm has to authorize a specific individual via an authorization certificate signed by all partners to use the DSC as per Indian IT Act 2000. Unless the certificate is revoked, it shall be assumed to represent adequate authority of the user to submit tender on behalf of the firm for the Chhattisgarh State Minor Forest Produce (Trading & Development) Co-op. Federation Limited as per Information Technology Act 2000. The DSC of this authorized user will be binding on the firm. It shall be the responsibility of management / partners of the registered firm to inform the Certifying Authority or Sub-Certifying Authority, if the authorized user changes, and apply for a fresh Digital Signature Certificate and issue a fresh '**authorization certificate**' for the new user.

The same procedure holds true for the authorized users in a Private / Public company. In this case, the authorization certificate will have to be signed by the directors of the company.

Step 2 – Online registration of intending bidder:

In order to participate in the bid, the bidder is required to be registered on the e-Procurement portal (<https://cgmfpedtenders.abcprocure.com>). Only after online registration of the bidder, the bidder shall be allowed to participate in the bids floated by the C.G.M.F.P. Federation using the e-Procurement System.

The following Registration Fee will be charged by the Service Provider (i.e. e-Procurement Technologies Limited) from the bidder:

Sl. No.	Description	Charges	Service Tax @ 18%	Total Amount
1.	Online Registration (Valid for One Year)	Rs. 500/-	Rs. 90/-	Rs. 590/-

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Documents required for Registration with the e-Procurement portal

(I) In case of Renewal – No documents required for renewal of registration on the e-procurement portal.

(II) In case of New Registration – The following documents required along with online registration form :-

Individual or Proprietorship Firm –

Any one ID Proof and One Address Proof (Attested by Banker or Notary or Gazetted Officer as well as Self Attested)

ID Proof	PAN Card	Address Proof	Electricity Bill
	Passport		Passport
	Voter ID		Voter ID
	Driving License		Driving License
	Aadhaar Card		Bank Passbook

a. Partnership Firm –

(i) Any one ID Proof and One Address Proof (Attested by Banker or Notary or Gazetted Officer as well as Self Attested)

ID Proof	PAN Card	Address Proof	Electricity Bill
	Passport		Passport
	Voter ID		Voter ID
	Driving License		Driving License
	Aadhaar Card		Bank Passbook

(ii) Partnership Deed details which have to be attested by partners with their company seal.

b. Pvt. Ltd. Company –

(i) Any one ID Proof and One Address Proof (Attested by Banker or Notary or Gazetted Officer as well as Self Attested)

ID Proof	PAN Card	Address Proof	Electricity Bill
	Passport		Passport
	Voter ID		Voter ID
	Driving License		Driving License
	Aadhaar Card		Bank Passbook

(ii) Any one of the Organization proofs issued by Government (Attested by authorized signatory of Organization along with organization seal)

- **Certificate of Incorporation**
- **Articles of Incorporation**
- **Memorandum of Association**

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c. Hindu Undivided Family (H.U.F) –

Any one ID Proof and One Address Proof (Attested by Banker or Notary or Gazetted Officer as well as Self Attested)

ID Proof	PAN Card	Address Proof	Electricity Bill
	Passport		Passport
	Voter ID		Voter ID
	Driving License		Driving License
	Aadhaar Card		Bank Passbook

d. Others –

(i) Any one ID Proof and One Address Proof (Attested by Banker or Notary or Gazetted Officer as well as Self Attested)

ID Proof	PAN Card	Address Proof	Electricity Bill
	Passport		Passport
	Voter ID		Voter ID
	Driving License		Driving License
	Aadhaar Card		Bank Passbook

(ii) Any other relevant documents

The scanned copies of all required documents as above and payment proof of required fees for New Registration and payment proof of required fees for renewal are required to be submitted by the intending tenderer to e-Procurement Technologies Limited (abcProcure). After verification of the above documents the e-Procurement Technologies Limited (abcProcure) will register the Tenderer and inform by the e-mail accordingly.

After obtaining the Digital Signature Certificate successfully installed on their system, the tenderer have to be online registered through “**New Bidder Registration**” page of the e-Procurement portal (<https://cgmpfedtenders.abcprocure.com>) and mapped their Digital Signature Certificate.

After online registration your registration will be approved by the Service Provider and intimate the same to the tenderer. The tenderer will be inform about the Tenderer’s Code, login Id & password. The login Id and password will be required for online tender preparation and the Tenderer’s Code will be used for making EMD payment through RTGS / NEFT mode, if opted for.

Step 3 – Online bid preparation**1. Technical Bid Envelope-A (Folder)**

1. General Information– **Annexure-1**
2. Documents to be uploaded- **Annexure-2**

2. Financial Bid Envelope-B (Folder)

1. Financial Bid Form – **Annexure-3**

Step 4 – Payment of Bid Security / Earnest Money Deposit (EMD)

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Bid Security / Earnest Money Deposit (EMD) has to be paid online as per instructions provided in clause 2.2 below:

1. Tenderers applying for Package A- Rs. 110000.00
2. Tenderers applying for Package B- Rs. 110000.00
3. Tenderers applying for Package B- Rs. 75000.00
4. Tenderers applying for total Package (A+B+C) - Rs. 295000.00

Step 5 – Final submission of the bid.

2. Other Information:

2.1 Set-up of Machine:

In order to operate on the e-Procurement System, following minimum operating system and hardware is required.

- Windows XP with service pack 3
- Windows vista / windows 7
- Browser Internet Explorer 7, 8 or 9
- Minimum bandwidth 512 kbps
- Minimum RAM 2 GB

2.2 Procedure of payment of Cost of Tender plus EMD (Package Wise) through RTGS / NEFT mode:

Since RTGS / NEFT payments are settled by RBI in batches, intended **EMD (Package Wise) plus Cost of Tender** amount is required to be paid at least one day in advance of online bid submission by following procedure:

A. Please mention the following details while making the RTGS / NEFT payment from your Bank:

(i) Beneficiary account number – This will be in the following format:

<CGMF+ Tenderer Code>

For example, in case your Bidder Code is ABC66215, the beneficiary account number will be **CGMFABC66215**.

(ii) Beneficiary bank branch - **ICICI Bank, CMS, Mumbai**

(iii) Beneficiary IFSC code - **ICIC0000104**

B. After completing the online bid preparation formalities, select RTGS / NEFT payment option at the **Earnest Money Deposit (EMD) plus Cost of Tender** payment screen. Upon doing so, you shall be able to view the funds already remitted by you through NEFT / RTGS as available balance in beneficiary account. Bidder should note that available balance against their name in ICICI Bank is not **Cost of Tender** amount available with C.G.M.F.P Federation.

C. Please proceed to deposit the **Earnest Money Deposit (EMD) plus Cost of Tender** from available balance. Upon doing so, the required amount to be paid for the **Earnest Money Deposit (EMD) plus Cost of Tender**, shall get appropriately deducted from the amount remitted and payment of **Earnest Money Deposit (EMD) and Cost of Tender** shall be confirmed & receipt will be generated in real time.

D. In case there is excess remittance i.e., money not transferred for use as **Earnest Money Deposit (EMD) plus Cost of Tender**, the refund of the same can be claimed by the bidder simultaneously. On submitting refund request, the amount would be transferred in the bank account opted by you by next working day.

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E. In case, bidder wants to utilize the excess fund (i.e., the remaining available balance) for participating in next round of bid by Federation under e-Procurement portal, they may do so instead of taking refund.

Please feel free to get in touch with our e-procurement support team / ICICI Bank support team in case any clarification is required.

2.3 Submission of Online Bids:

C.G.M.F.P Federation will not be responsible for any failure on part of the bidder in submission of the Bid and/or the etc. before scheduled time and date, for any reason whatsoever, including, inter-alia, non-credit of said amounts of **Earnest Money Deposit (EMD) and Cost of Tender** and therefore no claims shall be entertained on these grounds.

Under this online payment system for e-Bidding, the bids will not be submitted / received by C.G.M.F.P Federation unless the **Earnest Money Deposit (EMD) and Cost of Tender** is received / credited before scheduled time and date. Hence, bidder shall remit the said amount well in advance. It is clarified that the Bids will not be considered for opening if **Earnest Money Deposit (EMD) and Cost of Tender** is not received/ credited before schedule time and date, for any reason whatsoever.

The bidder is advised to submit his / her bid as well as pay the Earnest Money Deposit (EMD) and Cost of Tender amount well before the cut-off time and date to avoid any inconvenience on account of any problem e.g., system slow down or network problem.

2.4 Helpline:

For any assistance regarding Registration on e-Procurement portal, DSC, online tender form submission and other points of e-tendering process, please contact our service provider:-

Important Note for Bidders for New E-Tendering portal

abcProcure (M/s. e-Procurement Technologies Ltd.) is conducting e-Tenders for Chhattisgarh State Minor Forest Produce (Trading & Development) Co-operative Federation Limited (**CGMFPFED**) for sale of various Minor Forest Produces and for Procurement of various Goods, Services and works. It is to herewith inform to all existing bidders who are registered on <https://cgmfped.abcprocure.com> that abcProcure (M/s. e-Procurement Technologies Ltd.) is introducing new e-Tender Portal for foresaid tendering activities for CGMFPFED.

For introducing the new e-Tender portal, Training was scheduled whole month round in Mar. 2022.

It is to inform all the existing bidders that abcProcure (M/s. e-Procurement Technologies Ltd.), has shared with you your Log-IN ID, New Password for new portal (<https://cgmfpedtenders.abcprocure.com>) on your registered email ID on 16.03.2022. All existing Bidders registered on <https://cgmfped.abcprocure.com> shall use Log-In and new Password shared over email on 16.03.2022 to login on new e-Tendering portal i.e., <https://cgmfpedtenders.abcprocure.com>.

After logging in on new e-Tendering portal, bidders are mandatorily required to change their password and attach DSC. Once DSC is attached, bidders are required to get it verified from abcProcure (M/s. e-Procurement Technologies Ltd.) by getting in touch with DSC verification Team reachable on +91-9099090830 / +91-6353217080 and info@AbcProcure.com.

Further, All the bidders are issued new e-Wallet / Virtual Account for remitting EMD in new e-Tender portal which has been shared on your registered E-Mail ID on 10.03.2022. Bidders are required to use the same e-Wallet / Virtual account for remitting payment by NEFT/RTGS for e-Tender which are floated on new e-Tendering portal i.e., <https://cgmfpedtenders.abcprocure.com>. Bidders are strongly

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requested to not to use their current/ existing e-Wallet / Virtual account for new e-Tender portal. The same is applicable for old e-Tendering portal only and not valid for new e-Tendering portal. Please take strong note of this.

Bidders can download Bidder Manual to get familiar with the new portal from <https://cgmfpedtenders.abcprocure.com/EPROC/ajaxcall/downloadfile/23/577>

For New Registration/DSC Support/Profile Approval, Please call or write on:

Cell Number: +91-9099090830 / +91-6353217080

e-mail at: info@AbcProcure.com

Call/write for e-Tender Submission / e-Auction Bid Support:

Phone Numbers:+91-79 6813 6854/50/48/49

Cell Number: +91-9374519729 / 9904406300 / 9510812971

Write by e-mail at: Support@AbcProcure.com

Call/write for e-Payment Related Queries:

Phone Numbers:+91-9374519729 / 9081000427

Write by e-mail at: Payment@eptl.in

Office Hours:

Monday to Friday - 10:00AM to 07:00PM

1st,3rd & 5th Saturday -10:00AM to 06:00PM

2nd & 4th Saturday - Holiday

For any assistance regarding banking transactions, please contact ICICI Bank, Civil Lines, Raipur at the following numbers:

Mr. Shivam Shekhar – 7077102017

Ms. Shubhangi Gupta – 9993822514

MANAGING DIRECTOR

Chhattisgarh State Minor Forest Produce

(Trading & Development) Co-op.

Federation Limited

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SCHEDULE– D

Section-I Tender Forms

Schedule-D

Section I - Tender Forms

This Section contains the forms/Annexures which are to be completed by the Tenderer and submitted along with its bid as part of his PART ONE (CGMFP F-1).

Part 1 - FORMATS FOR TECHNICAL BID SUBMISSION (ENVELOPE A)

- 1. Annexure 1 – General Information**
- 2. Annexure 2 – Documents to be Uploaded (Technical Bid)**
 - i. FORM 1 : Letter of Technical Tender
 - ii. FORM-2 : Tenderer's Information Sheet
 - iii. FORM-3 : Annual Turnover
 - iv. FORM-4 : Specific Construction Experience
 - v. FORM-5 : Construction Experience in Key Activities
 - vi. FORM-6 : Integrity Pact & Agreement
 - vii. FORM-7 : List of Key Equipments/Machines for construction work
 - viii. FORM-8 : Affidavit
 - ix. FORM-9 : Check list for Technical tender evaluation
 - x. FORM-10 : Format for Power of Attorney

Annexure 1- General Information

1. Tender Notification Number: Fed/MFP-CIF/2023/I		Round1: 10.04.2023	
2. Date of opening of Bid		Round 2: 02.03.2023	
		Round 3: 17.05.2023	
1.	Status of Tenderer (Select)	Drop Down Menu (INDIVIDUAL, PROPRIETORSHIP FIRM, PARTNERSHIP FIRM, COMPANY, OTHERS)	
2.	(a) Tenderer's Legal name		
3.	Tenderer's Legal Address for Correspondence		
	(a) House No.		
	(b) Street / Location		
	(c) Area / Landmark		
	(d) City		
	(e) District Name		
	(f) State	Selection from Drop down menu (List provided by Federation)	
	(g) Pin Code		
4.	Contact No. 1 (Provide STD Code also in case of Landline No.)		
5.	Alternate Contact Nos. (Mobile No.)		
	(a) Contact No. 2		
	(b) Contact No. 3		
6.	Fax No. (Provide STD Code also)		
7.	Alternate E-mail Id		Should be valid E-mail Id
	Proof of Incorporation		
8.	Income Tax P.A.N. (Scanned Copy to be Uploaded)		
9.	Goods and Services Tax Identification Number (GSTIN) (Scanned Copy of certificate of Goods and Services Tax Identification Number to be Uploaded)		
10.	Details of Packages for which bidder is bidding for (Any One Package/Any Two Package/Total Package as per Detailed NIT)		
	S.No.	Package A (Yes/No)	Package B (Yes/No)
	1.		
11.	Registered Address of the office of the tenderer		

	(a)	Registered Address of the office of the tenderer	
12.	Tenderer's Bank Details for Transactions by Federation		
	(a)	Type of Account	Drop Down Menu (Saving Bank A/c / Current A/c / Cash Credit A/c / Over Draft A/c)
	(b)	Account Number	
	(c)	Name of Bank and Branch	
	(d)	IFSC Code	
13.	Name of the person signing the tender		

I / We hereby submit Technical Bid as per terms & conditions of the above mentioned notification of Chhattisgarh State Minor Forest Produce (Trading & Development) Co-operative Federation Limited., Raipur which are acceptable to me / us. I / We are aware that while evaluating the bid, if any, of the items mentioned above is not found meeting the requirement of the tender notice, the bid will not be accepted.

Annexure 2- Documents to be uploaded (Technical Bid)

S.No.	Checklist of Documents
1.	Online Payment Receipt Tender Cost + Earnest Money Deposit (EMD) - Mandatory
2.	Certificate of Incorporation/Registration and PAN (Mandatory)
3.	GSTIN Certificate (Mandatory)
4.	Letter of Technical Tender as per format specified in Form 1 (Mandatory)
5.	Tenderer's Information Sheet as per format specified in Form 2
6.	Average Annual Turnover as per format specified in Form 3 (Mandatory)
7.	Specific Construction Experience as per format specified in Form 4 (Mandatory)
8.	Integrity Pact and Integrity Agreement as per format specified in Form -6 - Mandatory
9.	Details of key Equipment/Machines to be deployed on Contract work (Ownership Certificate or rent agreement) as per format specified in Form 7 (Mandatory)
10.	Affidavit on Rs 100 Stamp Paper as per format specified in Form – 8 (Mandatory)
11.	Checklist for Technical Tender Evaluation as per format specified in Form 9 (Mandatory)
12.	Power of Attorney for Signing of Bid on Rs 100 Stamp Paper as per format specified in Form -10 – Mandatory
13.	Contractor Registration Certificate in CG PWD or in appropriate class in State Government/ PSU's/ Local Bodies of the state of Chhattisgarh (Mandatory)
14.	Audited Balance sheet for any three years out of the last five years i.e., 2017-18, 2018-19, 2019-20, 2020-21, 2021-22 (Mandatory)
15.	Profit and loss statement for any three years out of the last five years i.e., 2017-18, 2018-19, 2019-20, 2020-21, 2021-22 (Mandatory)
16.	Turn over Certificate from Chartered accountant having UDIN in original (Mandatory)
17.	Work order and satisfactory work completion certificate for each quoted experience (Mandatory)
18.	Signed copy of CGMFP F1- Detailed NIT part Only (Mandatory)
19.	Technical Qualifications /Details /Documents required for pre qualification as per Detailed NIT and other relevant supporting documents
20.	Any other Document

(i) FORM-1 : Letter of Technical Tender

Date: _____

To:

Managing Director

Office of the Managing Director,

Chhattisgarh State Minor Forest Produce (Trading & Development) Cooperative Federation Ltd., **Van****Dhan Bhavan, Sector-24, Nawa Raipur Atal Nagar, Phone : 0771-2513100 to 25131100**

Website: www.cgmfpfed.org, Email address: mfpfed.cg@nic.in

Ref for No. Fed/MFP-CIF/2023/I

Raipur, Dated 10/03/2023

Subject: Name of the work: - Construction of MFP Based Common Incubation Facility at Deobhog, District-Gariyaband (C.G.) in the following packages.

1. PACKAGE- A : Building for Processing Units
2. PACKAGE- B : Buildings for Processing Units, Water Supply and Electrification
3. PACKAGE- C : Warehouse and Amenities

Dear Sir,

I/We, the undersigned, declare that:

- (a) I/We have examined and have no reservations to the Tender Document, including Addendum if any, minutes of meeting, clarification to the queries etc.
- (b) I/We offer to execute the subjected under in conformity with the Tender Documents and the addendums.
- (c) I/We have satisfied ourselves as to the location of the site and working conditions, examined the requirements of **CGMFP** and have obtained all the information necessary for the successful and timely completion of the work.
- (d) I/We have submitted the Earnest Money Deposit as specified in the tender document which will not bear any interest and shall be subjected to forfeiture on following defaults.
 - (i) if we withdraw our Tender during the period of tender validity as specified in Detailed NIT Para 5 or
 - (ii) if we fail to:
 - furnish a Performance Security in accordance with Detailed NIT Para 11 or
 - sign the Contract in accordance with Detailed NIT Para 10; or
 - Accept the correction of its Tender Price pursuant to Detailed NIT Para 16.
 - (iii) If we have given the false, documents in support of qualification with the technical tender.
- (e) My/Our Tender shall be valid for a period of 90 days from the date fixed for the tender submission deadline in accordance with the Tender Document, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;

- (f) If my/our Tender is accepted, we commit to obtain a Performance Security in the amount as specified in the tender document for the due performance of the Contract and sign the agreement.
- (g) I/We are not participating, as Tenderers in more than one Tender in this Tendering process, in accordance with the Tender Document.
- (h) My/our firm, its affiliates, or subsidiaries, including any subcontractors or suppliers for any part of the Contract, has not been declared ineligible by **CGMFP**.
- (i) I/We understand that this Tender, together with your written acceptance thereof included in your letter of acceptance, shall constitute a binding contract between us, until a formal Contract is prepared and executed.
- (j) I/We understand that you are not bound to accept the lowest evaluated tender or any other tender that you may receive.
- (k) I/We hereby pay the Earnest Money Deposit (Package wise) of required amount online through e-procurement portal only.
- (l) I/We hereby declare that, the entire work including Addendum/ Corrigendum, if any, shall be completed in all respect within the time limit specified in the NIT.
- (m) I/We here by authorize the Employer to get all demand draft/FDR/BG verified and got confirmed from concerned Bank.

Signature: -----

Signed by: -----(Name)

Designation: -----

For and on Behalf of -----(Name of Tenderer)

Date:

(ii) FORM -2: Tenderer's Information Sheet

Tenderer's Information		
Tenderer's legal name		
Tenderer's legal address		
PAN & GSTIN Details		
Proof of Incorporation		
Tenderer's authorized representative (Name, address, telephone numbers, fax numbers, e-mail address)	Name:	Address:
	Telephone : Fax :	E-Mail:
Tenderer's details of Incorporation	Place of incorporation/ registration:	Year of incorporation:
Attached are copies of the following original documents. <input type="checkbox"/> 1. Articles of incorporation or constitution of the legal entity named above. <input type="checkbox"/> 2. In the case of government-owned entity, documents establishing legal and financial autonomy and compliance with commercial law.		

Details of the office closest to Raipur (if available)

1.	Address of Office	
2.	Telephone :	Contact :
3.	Fax :	E-Mail :

Signature of Tenderer

Date:_____

(iii) FORM -3: Annual Turnover

Annual Turnover Data for the Last 3 Years			
Financial Year	Amount and Currency	Exchange Rate if any	INR Equivalent
2018-19			
2019-20			
2020-21			
2021-22			
Average Annual Turnover for any 3 financial years in INR			

All Tenderers are requested to complete the information in this form.

The information supplied should be the Annual Turnover of the Tenderer in terms of the amounts billed to clients for each year for contract in progress or completed, converted to INR at the rate of exchange at the end of the period reported.

As a proof of the above, the contractor shall submit the copies of the balance sheet for last three years or four years along with audited profit & loss statement duly signed by the chartered accountant having UDIN number.

Signature of Tenderer

Date: _____

(iv) FORM-4: Specific Construction Experience

Fill up one (1) form per contract.

Details of Contract			
Contract No of	Name of work		
Award Date		Completion Date	
Role in Contract	<input type="checkbox"/> Contractor	<input type="checkbox"/> ----- --	
Total Contract Amount	INR		
Employer's Name Address Telephone/Fax Number E-mail			
Description of the work executed			

Note: Attach copies of work order and satisfactory completion certificates in support of each quoted experience. The completion certificate should be signed by the officer not below the rank of concerned Executive Engineer in case of Government department or in the rank of General Manager in case of public sector as the case may be.

Signature of Tenderer

Date: _____

(v) FORM-5: Construction Experience in key Activities.

[DELETED]

(vi) FORM – 6: Integrity Pact & Agreement

To,

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.....
.....

Sub: NIT No. for the work

Dear Sir,

It is here by declared that Chhattisgarh State Minor Forest Produce (Trading & Development) Cooperative Federation Ltd., Van Dhan Bhavan, Sector-24, Nawa Raipur Atal Nagar, Phone : 0771-2513100 to 25131100 is committed to follow the principle of transparency, equity and competitiveness in public procurement.

The subject Notice Inviting Tender (NIT) is an invitation to offer made on the condition that the Bidder will sign the integrity Agreement, which is an integral part of tender/bid documents, failing which the tenderer/bidder will stand disqualified from the tendering process and the bid of the bidder would be summarily rejected.

This declaration shall form part and parcel of the Integrity Agreement and signing of the same shall be deemed as acceptance and signing of the Integrity Agreement on behalf of the Chhattisgarh State Minor Forest Produce (Trading & Development) Cooperative Federation Ltd., (C.G.)

Yours faithfully

INTEGRITY PACT

To,

**Chhattisgarh State Minor Forest Produce (Trading & Development) Cooperative Federation Ltd.
Gariyaband (C.G.)**

Sub: Submission of Tender for the work of

Dear Sir,

I/We acknowledge that _____ is committed to follow the principles thereof as enumerated in the Integrity Agreement enclosed with the tender/bid document.

I/We agree that the Notice Inviting Tender (NIT) is an invitation to offer made on the condition that I/We will sign the enclosed integrity Agreement, which is an integral part of tender documents, failing which I/We will stand disqualified from the tendering process. I/We acknowledge that THE MAKING OF THE BID SHALL BE REGARDED AS AN UNCONDITIONAL AND ABSOLUTE ACCEPTANCE of this condition of the NIT.

I/We confirm acceptance and compliance with the Integrity Agreement in letter and spirit and further agree that execution of the said Integrity Agreement shall be separate and distinct from the main contract, which will come into existence when tender/bid is finally accepted by **Chhattisgarh State Minor Forest Produce (Trading & Development) Cooperative Federation Ltd., Raipur (C.G.)**,

I/We acknowledge and accept the duration of the Integrity Agreement, which shall be in the line with Article 1 of the enclosed Integrity Agreement.

I/We acknowledge that in the event of my/our failure to sign and accept the Integrity Agreement, while submitting the tender/bid, **Chhattisgarh State Minor Forest Produce (Trading & Development) Cooperative Federation Ltd., Raipur (C.G.)**, shall have unqualified, absolute and unfettered right to disqualify the tenderer/bidder and reject the tender/bid in accordance with terms and conditions of the tender/ bid.

Yours faithfully

(Duly authorized signatory of the Bidder)

**To be signed by the bidder and same signatory competent / authorized
to sign the relevant contract with Chhattisgarh State Minor Forest
Produce (Trading & Development) Cooperative Federation Ltd., Raipur
(C.G.),**

INTEGRITY AGREEMENT

This Integrity Agreement is made at on this.....day of.....20.....

BETWEEN

Chhattisgarh State Minor Forest Produce (Trading & Development) Cooperative Federation Ltd., Gariyaband (C.G.),

Represented through The MD CGMFP or Any Officer appointed by him, (Hereinafter referred as the '**Principal/Owner**', which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

AND

..... (Name and Address of the Individual/firm/Company) through
..... (Details of duly authorized signatory) (Hereinafter referred to as the "**Bidder/Contractor**" and which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

Preamble

WHEREAS the Principal/Owner has floated the Tender (NIT No.) (hereinafter referred to as "Tender/Bid") and intends to award, under laid down organizational procedure, contract for..... (Name of work) Herein after referred to as the "Contract".

AND WHEREAS the Principal/Owner values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/transparency in its relation with its Bidder(s) and Contractor(s).

AND WHEREAS to meet the purpose aforesaid both the parties have agreed to enter into this Integrity Agreement (hereinafter referred to as "Integrity Pact" or "Pact"), the terms and conditions of which shall also be read as integral part and parcel of the Tender/Bid documents and Contract between the parties.

NOW, THEREFORE, in consideration of mutual covenants contained in this Pact, the parties hereby agree as follows and this Pact witnesses as under:

Article 1: Commitment of the Principal/Owner

(1) The Principal/Owner commits itself to take all measures necessary to prevent corruption and to observe the following principles:

- (a) No employee of the Principal/Owner, personally or through any of his/her family members, will in connection with the Tender, or the execution of the Contract, demand, take a promise for or accept, for self or third person, any material or

Signature of Contractor.....

Signature of CGMFP.....

immaterial benefit which the person is not legally entitled to.

- (b) The Principal/Owner will, during the Tender process, treat all Bidder(s) with equity and reason. The Principal/Owner will, in particular, before and during the Tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the Tender process or the Contract execution.
 - (c) The Principal/Owner shall endeavour to exclude from the Tender process any person, whose conduct in the past has been of biased nature.
- (2) If the Principal/Owner obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal code (IPC)/Prevention of Corruption Act, 1988 (PC Act) or is in violation of the principles herein mentioned or if there be a substantive suspicion in this regard, the Principal/Owner will inform the Chief Vigilance Officer and in addition can also initiate disciplinary actions as per its internal laid down policies and procedures.

Article 2: Commitment of the Bidder(s)/Contractor(s)

- (1) It is required that each Bidder/Contractor (including their respective officers, employees and agents) adhere to the highest ethical standards, and report to the Government / Department all suspected acts of fraud or corruption or Coercion or Collusion of which it has knowledge or becomes aware, during the tendering process and throughout the negotiation or award of a contract.
- (2) The Bidder(s)/Contractor(s) commits himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the Tender process and during the Contract execution:
 - (a) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal/Owner's employees involved in the Tender process or execution of the Contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the Tender process or during the execution of the Contract.
 - (b) The Bidder(s)/Contractor(s) will not enter with other Bidder(s) into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to cartelize in the bidding process.
 - (c) The Bidder(s)/Contractor(s) will not commit any offence under the relevant IPC/PC Act. Further the Bidder(s)/Contractor(s) will not use improperly, (for the purpose of competition or personal gain), or pass on to others, any information or documents provided by the Principal/Owner as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
 - (d) The Bidder(s)/Contractor(s) of foreign origin shall disclose the names and addresses of agents/representatives in India, if any. Similarly Bidder(s)/Contractor(s) of Indian Nationality shall disclose names and addresses of foreign agents/representatives, if any. Either the Indian agent on behalf of the foreign principal or the foreign principal directly could bid in a tender but not both. Further, in cases where an agent participate in a tender on behalf of one manufacturer, he shall not be allowed to quote on behalf of another manufacturer along with the first manufacturer in a subsequent/parallel tender for the same item.

- (d) The Bidder(s)/Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the Contract.
- (3) The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.
- (4) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm indulge in fraudulent practice means a willful misrepresentation or omission of facts or submission of fake/forged documents in order to induce public official to act in reliance thereof, with the purpose of obtaining unjust advantage by or causing damage to justified interest of others and/or to influence the procurement process to the detriment of the Government interests.
- (5) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm use Coercive Practices (means the act of obtaining something, compelling an action or influencing a decision through intimidation, threat or the use of force directly or indirectly, where potential or actual injury may befall upon a person, his/ her reputation or property to influence their participation in the tendering process).

Article 3: Consequences of Breach

Without prejudice to any rights that may be available to the Principal/Owner under law or the Contract or its established policies and laid down procedures, the Principal/Owner shall have the following rights in case of breach of this Integrity Pact by the Bidder(s)/Contractor(s) and the Bidder/ Contractor accepts and undertakes to respect and uphold the Principal/Owner's absolute right:

- (1) If the Bidder(s)/Contractor(s), either before award or during execution of Contract has committed a transgression through a violation of Article 2 above or in any other form, such as to put his reliability or credibility in question, the Principal/Owner after giving 14 days notice to the contractor shall have powers to disqualify the Bidder(s)/Contractor(s) from the Tender process or terminate/determine the Contract, if already executed or exclude the Bidder/Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of transgression and determined by the Principal/Owner. Such exclusion may be forever or for a limited period as decided by the Principal/Owner.
- (2) Forfeiture of EMD/Performance Guarantee/Guarantee Deposit: If the Principal/Owner has disqualified the Bidder(s) from the Tender process prior to the award of the Contract or terminated/determined the Contract or has accrued the right to terminate/determine the Contract according to Article 3(1), the Principal/Owner apart from exercising any legal rights that may have accrued to the Principal/Owner, may in its considered opinion forfeit the entire amount of Earnest Money Deposit, Performance Guarantee and Guarantee Deposit of the Bidder/Contractor.
- (3) Criminal Liability: If the Principal/Owner obtains knowledge of conduct of a Bidder or Contractor, or of an employee or a representative or an associate of a Bidder or Contractor which constitutes corruption within the meaning of IPC Act, or if the Principal/Owner has substantive suspicion in this regard, the Principal/Owner will inform the same to law enforcing agencies for further investigation.

Article 4: Previous Transgression

- (1) The Bidder declares that no previous transgressions occurred in the last 5 years with any other Company in any country confirming to the anticorruption approach or with Central Government or State Government or any other Central/State Public Sector Enterprises in India that could justify his exclusion from the Tender process.
- (2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the Tender process or action can be taken for banning of business dealings/ holiday listing of the Bidder/Contractor as deemed fit by the Principal/ Owner.
- (3) If the Bidder/Contractor can prove that he has resorted / recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal/Owner may, at its own discretion, revoke the exclusion prematurely.

Article 5: Equal Treatment of all Bidders/Contractors/Subcontractors

- (1) The Bidder(s)/Contractor(s) undertake(s) to demand from all subcontractors/sub-vendors a commitment in conformity with this Integrity Pact. The Bidder/Contractor shall be responsible for any violation(s) of the principles laid down in this agreement/Pact by any of its Subcontractors/sub-vendors.
- (2) The Principal/Owner will enter into Pacts on identical terms as this one with all Bidders and Contractors.
- (3) The Principal/Owner will disqualify Bidders, who do not submit, the duly signed Pact between the Principal/ Owner and the bidder, along with the Tender or violate its provisions at any stage of the tender process, from the Tender process.

Article 6- Duration of the Pact

This Pact begins when both the parties have legally signed it. It expires for the Contractor/Vendor 12 months after the completion of work under the contract or till the continuation of defect liability period, whichever is more and for all other bidders, till the Contract has been awarded.

If any claim is made/lodged during the time, the same shall be binding and continue to be valid despite the lapse of this Pacts as specified above, unless it is discharged/determined by the Competent Authority, **Chhattisgarh State Minor Forest Produce (Trading & Development) Cooperative Federation Ltd., (C.G.)**.

Article 7- Other Provisions

- (1) This Pact is subject to Indian Law, place of performance and jurisdiction is the Head quarters of the Division of the Principal/Owner, who has floated the Tender.
- (2) Changes and supplements need to be made in writing. Side agreements have not been made.
- (3) If the Contractor is a partnership, this Pact must be signed by all the partners or by one or more partner holding power of attorney signed by all partners. In case of a Company, the Pact must be signed by a representative duly authorized by board resolution.
- (4) Should one or several provisions of this Pact turn out to be invalid; the remainder of

this Pact remains valid. In this case, the parties will strive to come to an agreement to their original intentions. It is agreed term and condition that any dispute or difference arising between the parties with regard to the terms of this Integrity Agreement / Pact, any action taken by the Owner/Principal in accordance with this Integrity Agreement/ Pact or interpretation thereof shall not be subject to arbitration.

Article 8- LEGAL AND PRIOR RIGHTS

All rights and remedies of the parties hereto shall be in addition to all the other legal rights and remedies belonging to such parties under the Contract and/or law and the same shall be deemed to be cumulative and not alternative to such legal rights and remedies aforesaid. For the sake of brevity, both the Parties agree that this Integrity Pact will have precedence over the Tender/Contact documents with regard any of the provisions covered under this Integrity Pact.

IN WITNESS WHEREOF the parties have signed and executed this Integrity Pact at the place and date first above mentioned in the presence of following witnesses:

.....
(For and on behalf of Principal/Owner)

.....
(For and on behalf of Bidder/Contractor)

WITNESSES:

1.
(signature, name and address)

2.
(signature, name and address)

Place:

Date:

(vii) FORM -7 : List of Key Equipments/Machines for Construction Work

S. No.	Name of Equipment/Machinery	Minimum Nos. to be deployed (Quantity)
1	Motor Grader	1 Nos.
2	Transit Mixture	2 Nos.
3	Concrete Pump	1 Nos.
4	Water Tanker	2 Nos.
5	Tipper/Trucks (8-10 Tones)	1 Nos.
6	Generator (250 KVA)	1 Nos.

नोट : उक्त उल्लेखित टूल्स एण्ड प्लांटस् स्वयं के स्वामित्व का हो, जिसका प्रमाण पत्र कार्यपालन अभियंता द्वारा जारी किया गया हो, जिसमें जावक क्रमांक एवं दिनांक अंकित किया गया हो, जारी किया गया प्रमाण पत्र निविदा जारी दिनांक से दो वर्ष से अधिक अवधि का होने पर मान्य नहीं किया जावेगा।

यदि उक्त उल्लेखित टूल्स एण्ड प्लांटस् किराये पर लिये जाते हैं तो राशि रु. 100.00 के भारतीय गैर न्यायिक स्टाम्प पेपर (नोटरी से सत्यापित) पर किये जाने वाले किरायानामा अनुबंध पत्र जो इसी कार्य के लिए जारी किया गया हो, जिसमें उपलब्ध उक्त आवश्यक मशीनों का स्पष्ट रूप से उल्लेख हो एवं जिससे किरायानामा अनुबंध निष्पादित किया गया हो उस एजेंसी का टूल्स एण्ड प्लांटस् का स्वामित्व का सत्यापन कार्यपालन अभियंता द्वारा जावक क्रमांक एवं दिनांक अंकित सहित जारी किया गया हो (जारी किया गया प्रमाण पत्र निविदा जारी दिनांक से दो वर्ष से अधिक अवधि का होने पर मान्य नहीं किया जावेगा) अथवा टूल एण्ड प्लांटस् के स्वामित्व के संदर्भ में **Copy of Invoice/RTO Registration** की सत्यापित प्रति/प्रमाण पत्र संलग्न किया जाना आवश्यक होगा। उपरोक्त के अभाव में ठेकेदार की अनर्हता मानते हुये निविदा नहीं खोली जावेगी।

FORM – 8: AFFIDAVIT**[on Rs. 100/- (Rupees one Hundred only) Stamp Paper, duly Notarized]**

I.....S/o.....
 Aged..... Yearsresidentof
 (address.....)
 (For and on behalf of), do here by
 and herewith solemnly affirm/state on oath that:-

1. All documents and information's furnished are correct in all respects to the best of my knowledge and belief.
2. I/We read carefully & understood the entire Tender document including Addendum if any along with important instructions to the tenderers submitting the tender online.
 In case at any stage whatsoever at a later date it is found that we have given false documents/information, we clearly understand that our work shall be liable to be cancelled and Earnest Money/Performance Guarantee/Security deposit etc. all are liable to be forfeited by CGMFP and in such an eventuality I/We shall have no right or claim for any damages/compensation from CGMFP on this account. Further in such case I/We may also be debarred by CGMFP for further participation in the concerned work of CGMFP.
3. I have not suppressed or omitted any information as required.
4. I do here by and herewith solemnly affirm/state on oath that all information furnished regarding work experience is correct.
5. I am/we are/none of our partner or director is neither blacklisted nor debarred by Govt. of India/Other State Govt. Departments/PSUs/Chhattisgarh State Govt. Departments/Semi Govt. Departments (C.G. & Other Govt.)
6. I do here by and herewith solemnly affirm/state on oath that all information furnished regarding plants & machineries is correct.
7. I do here by and herewith solemnly affirm/state on oath that all information furnished regarding Technical persons employed with me/our company/or to be employed, when work is allotted to me/our firm/our company is correct.
8. I hereby authorize the CGMFP Officials to get all the documents verified from appropriate source(s).

Deponent
 (.....)
 Authorized signatory/
 For and on behalf of

 (affix seal)

Verification

I _____ S/o _____ do here by affirm that contents stated in para1 to 6 above are true to the best of my knowledge and believe and are based on my/our record.
 Verified that this on _____ at (Place) Raipur.
 Notary with date (_____)

Deponent
 (.....)
 Authorized signatory/

FORM - 9: CHECK LIST FOR TECHNICAL TENDER EVALUATION

S. No	Document	Details		
1	Cost of Tender Document	Amount		
		Name of the Bank & Branch		
		Date		
		D.D no & Photo copy attached	Yes	No
2	Earnest Money Deposit (EMD)	Amount		
		Form of EMD		
		Issuing Bank & Branch		
		No & Date Photo copy attached	Yes	No
3	Contractor Registration Certificate	Class in which registered		
		Name of Department		
		Registration Number & Date		
		Validity		
4	GSTIN Certificate	Registration Number:		
		Name of the Office		
		Registration Number:		
		Name of the Office		
5	Average Annual Turnover in Lacs	2018-2019		
		2019-2020		
		2020-2021		
		2021-2022		
		Chartered accountant certificate in original or photocopy duly notarized must be submitted		

S. No	Document	Details	
6	Details of the projects/works completed as pre-qualification criteria	Name of the Work	
		Work Completed	Yes/No
		Year of completion	
		Cost of the Project	
		Certificate Enclosed	Yes/No
		Name of the Work	
		Work Completed	Yes/No
		Year of completion	
		Cost of the Project	
		Certificate Enclosed	Yes/No
7	Details of the projects/works completed as pre-qualification criteria For Construction experience in key Activities	Name of the Work	
		Work Completed	Yes/No
		Year of completion	
		Cost of the Project	
		Certificate Enclosed	Yes/No
		Name of the Work	
		Work Completed	Yes/No
		Year of completion	
		Cost of the Project	
		Certificate Enclosed	Yes/No
8	Details of key Equipment/Machines to be deployed on Contract work	Ownership Certificate	Yes/No
		Rental Agreement Certificate	
9	Affidavit	on Rs. 100/- (Rupees one Hundred only) Stamp Paper, duly Notarized	Yes/No
10	Power of Attorney for signing and submission of tender	on Rs. 100/- (Rupees one Hundred only) Stamp Paper, duly Notarized	Yes/No
11	Detail of Incorporation and PAN	Registration Number:	
		Name of the Office	
		PAN No.	

Note: The above check list only provides for those documents which are mandatory for the tender pre-qualification criteria.

Tenderers are required to append, other documents also with the technical tender as required in the detailed NIT or elsewhere in the PART ONE (CGMFP F-1).

Signature of Tenderer

Date: _____

FORM - 10: FORMAT FOR POWER OF ATTORNEY

(Original copy as part of Technical Proposal on stamp paper of value required under law duly signed by Bidder for the RFP)

Dated: _____

POWER OF ATTORNEY

To Whomsoever It May Concern

Know all men by these presents, We, _____ (name of the firm and address of the registered office) do hereby irrevocably constitute, nominate, appoint and authorise Mr. / Ms (Name), son/daughter/wife of _____ and presently residing at _____, who is [presently employed with us and holding the position of [_], as our true and lawful attorney (hereinafter referred to as the "Attorney") to do in our name and on our behalf, all such acts, deeds and things as are necessary or required in connection with or incidental to submission of our proposal for Selection of Contractor for **"Construction of MFP Based Common Incubation Facility at Deobhog, District-Gariyaband (C.G.) For Package A - Buildings for Processing Units Water Supply and Electrification, Package B- Building for Processing Units, Package C- Warehouse and Amenities , issued by The Managing Director, Chhattisgarh Minor Forest Produce Cooperative Federation Limited (the "Authority")** including but not limited to signing and submission of all applications, Bids and other documents and writings, participate in Pre Bid Meeting and other conferences and providing information / responses to the Authority, representing us in all matters before the Authority, signing and execution of all contracts including the Agreement and undertakings consequent to acceptance of our Bid, and generally dealing with the Authority in all matters in connection with or relating to or arising out of our Proposal for the said Project and/or upon award thereof to us and/or till the entering into of the Agreement with the Authority

AND we hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things lawfully done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Attorney in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us.

IN WITNESS WHEREOF WE _____, THE ABOVE NAMED PRINCIPAL HAVE EXECUTED THIS POWER OF ATTORNEY ON THIS _____ DAY OF , 20**.

For _____

(Signature)

(Name, Title and Address) Witnesses: 1

2.

(Signature)

(Name, Title and Address of the Attorney) [Notarised]

Accepted [Notarised]

Notes:

- *The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executants(s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure.*

Part 2 – FORMAT FOR FINANCIAL BID (ENVELOPE B)

Annexure 3- Bill of Quantity

Annexure 3- Bill of Quantity(BOQ)

PACKAGE - A										
SERIAL No.	Department	SOR	Year	ITEM CODE	DESCRIPTION	UNIT	SOR RATE	TOTAL QTY.	Rate Quoted by Bidder	Total Amount Non Editable
1	PWD	PWD BLD	2015	1.1.1	Excavation for all types and sizes of foundations, trenches and drains or for any other purpose including disposal of excavated stuff upto 1.5 m lift and lead upto 50m (at least 5m away from the excavated area), including dressing and leveling of pits.1.1.1) In all types of soil	CUM	185	540.20		
2	PWD	PWD BLD	2015	1.2	Surface dressing of the ground including removing vegetation and making up undulations and in-equalities not exceeding 15 cms in depth/ height including disposal of rubbish upto 1.5 m lift and lead upto 50m (at least 5m away from the dressed area).	SQM	7.2	1141.00		
3	PWD	PWD BLD	2015	1.6.1	Extra for every additional lift of 1.5M or part there of.1.6.1 All types of soil	CUM	26.5	75.13		
4	PWD	PWD BLD	2015	1.17	Filling from available excavated stuff (excluding rock) in trenches, plinth, sides of foundation etc. in layers not exceeding 20 cm in depth consolidating each deposited layer by ramming and watering with a lead upto 50 m. and lift upto 1.5 M.	CUM	65	0.00		
5	PWD	PWD BLD	2015	1.18	Providing and filling in plinth with sand /crusher dust and hard moorum under floor in layers not exceeding 20 cm in depth and consolidating each deposited layer by ramming and watering, including dressing etc.	CUM	371	912.39		
6	PWD	PWD BLD	2015	1.25.1	Diluting chemical emulsion (chlorpyrifos/ lindane) in water as per manufacturers recommendation and injecting for pre-construction curative cum preventive anti-termite treatment.(Five year service guarantee bond to be signed by contractor) Surface treatment by spreading emulsion under floor, over the plinth area before laying base concrete @ 5 litres / sqm	SQM	27.5	1513.30		
7	PWD	PWD BLD	2015	1.25.3	Treatment of outer side of plinth masonry wall using diluted chemical emulsion @ 1.5 litre per hole, including drilling 12 mm diameter holes in plinth wall at the junction of floor at the interval of 300 mm and plugging with cement mortar 1 :2 (1 cement : 2 Coarse sand).	METER	13.5	337.52		
8	PWD	PWD BLD	2015	2.1.1	Providing and fixing formwork including centering, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for: Foundations, footings, bases of columns plinth beam, curtain wall in any shape and size and all type of wall below plinth level.	SQM	139	767.24		
9	PWD	PWD BLD	2015	2.1.5	Providing and fixing formwork including centering, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for: Columns, Pillars, Piers and likes- rectangular or square in shape	SQM	297	459.36		
10	PWD	PWD BLD	2015	2.1.7	Providing and fixing formwork including centering, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for: Suspended floors, roofs, access platform, balconies (plain surfaces) and shelves (cast in situ)	SQM	235	1501.99		
11	PWD	PWD BLD	2015	2.1.8	Providing and fixing formwork including centering, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for: Beams, lintels, Cantilevers & Walls.	SQM	202	657.05		
12	PWD	PWD BLD	2015	2.1.13	Providing and fixing formwork including centering, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for: Weather shade, chhajja, Cornices and mouldings	SQM	294	66.15		
13	PWD	PWD BLD	2015	2.1.13	Providing and fixing formwork including centering, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for: Weather shade, chhajja, Cornices and mouldings	SQM	230	30.12		
14	PWD	PWD BLD	2015	3.1.3	Providing and laying nominal mix plain cement concrete with crushed stone aggregate using concrete mixer in foundation, plinth and at ground level excluding cost of form work. 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40mm nominal size).	CUM	2970	24.48		
15	PWD	PWD BLD	2015	3.2	Providing and laying nominal mix reinforced cement concrete with crushed stone aggregate using concrete mixer in all works upto plinth level excluding cost of form work. 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20mm nominal size)	CUM	4298	104.64		
16	PWD	PWD BLD	2015	3.4	Extra for laying PCC/RCC of any grade in superstructure above plinth level for every floor or part thereof in addition to rate for foundation and plinth: ground floor	CUM	4395.5	312.18		
17	PWD	PWD BLD	2015	3.12.1	Providing and placing in position reinforcement for R.C.C. work including straightening, cutting, bending, binding etc. complete as per drawings including cost of binding wire all complete: Thermo-Mechanically treated bars FE 415	KG	54.5	37514.08		
18	PWD	PWD BLD	2015	3.13	Providing and laying damp proof course (upto 50mm thick) with plain cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded crushed stone aggregate 20mm nominal size) including formwork.	CUM	4237	4.89		
19	PWD	PWD BLD	2015	3.15	Applying a coat of hot bitumen VG-10 using @ 1.7kg/ sqm on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.	SQM	93.5	97.78		
20	PWD	PWD BLD	2015	3.16	Making 50mm thick plinth protection of plain cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded crushed stone aggregate 20mm nominal size) over 75mm bed of dry brick ballast 40mm nominal size well rammed and consolidated and grouted with sand including finishing the top smooth.	SQM	273	195.55		
21	PWD	PWD BLD	2015	7.5.4	Brick work with modular fly-ash lime bricks (FALG Bricks) conforming to IS:12894-2002 of class designation 40 in foundation and plinth in:7.5.4 Cement Mortar 1:6 (1 cement : 6 coarse sand)	CUM	3263	326.48		
22	PWD	PWD BLD	2015	7.6.	Extra for brick work in superstructure Above plinth level for every floor or part thereof in addition to rate for foundation and plinth:	CUM	3384	341.30		
23	PWD	PWD BLD	2015	11.2	Providing and making 12mm.thick cement plaster of mix : In Cement Mortar 1:4(1 Cement :4 fine Sand)	SQM	103	1541.52		
24	PWD	PWD BLD	2015	11.3	Providing and making 15mm.thick cement plaster on the rough side of single or half brickwork of mix. 11.3.4.) In Cement Mortar 1:4 (1 cement : 4 fine sand)	SQM	120	1215.72		
25	PWD	PWD BLD	2015	11.9	Extra for providing and mixing water proofing materials in cement plaster work in proportion as recommended by manufacturer	KG	43.5	1382.62		
26	PWD	PWD BLD	2015	12.2	25mm thick cement concrete flooring with 1:2:4 cement concrete (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5 mm nominalsize) finished with floating coat of neat cement.	SQM	165	1517.15		
27	PWD	PWD BLD	2015	12.6.1	Cement plaster skirting upto 30 cm. height with cement mortar 1:3 (1 cement : 3 fine sand) finished with a floating coat of neat cement including rounding of junction with floor.18 mm thick in two layers of 12mm and 6mm	SQM	200	48.89		
28	PWD	PWD BLD	2015	8.2.1	Providing wood work in frames of doors, windows, clerestory windows and other frames wrought framed and fixed in position.Sal, bijasal, bentek, khair, haldu	CUM	61051	0.65		
29	PWD	PWD BLD	2015	8.3	Providing 40x5mm iron hold fast 40cm long including fixing to frame with 10mm bolts nuts and wooden plug and embedding in Cement Concrete 1:2:4 in blocks of size 30x10x15cm.	EACH	72.5	40.00		
30	PWD	PWD BLD	2015	8.14.1	Providing and fixing flush door shutters, core of block board construction with frame of first class hard wood and well matched first class Indian teak ply veneering on one face and commercial ply veneering on the other face of the shutter with vertical grains, cross bands and face veneering excluding hinges.40 mm. thick (single leaf)	SQM	2034	31.68		
31	PWD	PWD BLD	2015	8.115	Extra for double leaf shutter instead of single leaf.		52	19.20		
32	PWD	PWD BLD	2015	8.61.1	Providing and fixing brass door latch with brass polished MS screws complete:300x16x5 mm		398	15.00		
33	PWD	PWD BLD	2015	8.65	providing and fixing bright finished brass door handles rwith brass polished MS screw complete		49.0	15.00		
34	PWD	PWD BLD	2015	9.2	Structural steel work riveted or bolted or welded in built-up sections, trusses and frames work upto a height of 5m above plinth level, including cutting, hoisting, fixing in position and applying a priming coat of red oxide zinc chromate primer.	KG	66.0	17187.79		
35	PWD	PWD BLD	2015	9.15	Providing and fixing M.S. grill of approved pattern made of M.S. flats or square or round bars welded to steel frame of windows etc. including applying a priming coat welded to frame with all necessary fitting complete including applying a priming of red oxide zinc chromate primer.	KG	68.0	1863.00		
36	PWD	PWD BLD	2015	9.27.1	Supplying and fixing rolling shutter of approved makes made of M.S. laths interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and out side locking with push and pull arrangement complete but excluding the cost of top cover and spring.80x1.25mm M.S. Laths	SQM	1691.0	36.45		
37	PWD	PWD BLD	2015	9.28	Providing and fixing 27.5cm long wire spring for rolling shutters.	EACH	362.0	8.00		
38	PWD	PWD BLD	2015	9.29	Providing and fixing M.S. sheet top cover for rolling shutter	SQM	540.0	6.75		
39	PWD	PWD BLD	2015	9.3	Providing and fixing ball bearing for rolling shutters.	EACH	423.0	12.00		
40	PWD	PWD BLD	2015	9.31	Providing and fixing mechanical device chain and crank operation for operating rolling shutters.	SET	5672.0	6.00		

41	PWD	PWD BLD	2015	9.47.2	Providing and fixing aluminium work for doors, windows, ventilators and partitions made out of extruded aluminium standard sections (main section with minimum 1.5mm thickness) conforming to IS: 733, IS: 1285 mltred and jointed mechanically including aluminium cleats, neoprene weather stripping gasket beveled edge beading, screws duly fixed in wall/ floor with fixing clips or hold fasteners or bolts and nuts as required aluminium sections shall be anodized transparent or dyed to approved shade according to IS: 1868, minimum anodic coating shall be of grade AC-15. (Glazing to be paid for separately:For shutter of doors, windows & ventilators including providing and making provision for fixing of fitting wherever required including the cost of PVC/ neoprene gasket required	KG	338.0	621.00		
42	PWD	PWD BLD	2015	9.51.2	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with PVC/ neoprene gasket etc. complete. (Cost of aluminium snap beading shall be paid in basic item):With float glass panes of 5 mm thickness	SQM	708.0	124.20		
43	PWD	PWD BLD	2015	9.43.1	Providing and fixing in position chain linked steel wire fabric made of 4 mm dia G.I. wire of required width in mesh to concrete/ wooden/ angle iron posts including securing and screwing with 2mm dia G.I. wire, G.I. staples, G.I.U-nails or steel pins etc., complete.Aperture 50x50mm	SQM	331.0	0.00		
44	PWD	PWD BLD	2015	14.12	Applying one coat of cement primer on wall surface (applied @ 0.80 ltrs/10 sqm) complete.	SQM	23.0	2765.24		
45	PWD	PWD BLD	2015	14.1.1	Wall painting with acrylic premium emulsion (plastic) paint of required shade to give an even shade.On new work (two or more coats)	SQM	44.5	1549.52		
46	PWD	PWD BLD	2015	14.15.1	Painting exterior surface with ACRYLIC SMOOTH exterior paint of required shade as per manufacturer's specifications to give protective and decorative finish including cleaning washing of surface etc. complete with:On new work (Two or more coats applied @ 1.43 ltr/ 10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/ 10 sqm)	SQM	56.0	1215.72		
47	PWD	PWD BLD	2015	14.22.2	Painting on new work (two or more coats) to give an even shade with: Premium synthetic enamel paint	SQM	47.0	2567.30		
48	PWD	PWD BLD	2015	10.12	Supply and fixing of polymer precoated galvalume profile sheets (PPGL) of approved size, shape and pitch of corrugation, total coated thickness (TCT) 0.60 mm +/- 5%, epoxy primer on both side of the sheet and colour polyester top coat 18-20 microns and 6-7 microns on bottom. Sheet should have protective guard film of 25 microns minimum to avoid scratches while transportation and should be supplied in single length upto 12 metre or as desired by Engineer-in-charge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55mm) with EPDM seal or with polymer coated J or L hooks, bolts and nuts 8mm diameter with bitumen and G.I. limpet washers or with G.I. limpet washers filled with white lead complete upto any pitch in horizontal/ vertical or curved surfaces excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.	SQM	693.0	1567.55		
49	PWD	PWD BLD	2015	10.16.1	Providing and fixing precoated galvanised steel sheet roofing accessories 0.50 mm +/- 5% total coated thickness (TCT), Zinc coating 120gsm as per IS: 277 in 240mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns using self drilling/ self tapping screws or with polymer coated J or L hooks, bolts and nuts and or G.I. seam bolts and nuts, G.I. plain and bitumen washers complete.Ridges plain (500-600mm)	METRE	552.0	219.56		
50	PWD	PWD BLD	2015	10.16.2	Flashings/ Aprons. (Upto 600 mm)	METRE	539.0	219.56		
51	PWD	PWD BLD	2015	10.16.6	Gutter. (600 mm over all girth).	METRE	629.0	212.16		
52	NS				Supply ,installation ,testing and commisioing of Roof Air Ventilator of 1100CFM at 2 m/s wind velocity etc. complete as required as per technical specification including all taxes and duties , loading, unlaoding, transportation, insurance to project site at CSIDC Jangaon-M, Durg District. ROOF AIR VENTILATOR Base Ring MOC- SS 304 (min 0.5mm thickness) Top Plate MOC- SS 304 (min 0.5mm thickness) Vanes MOC- Aluminium Alloy (Min 0.45mm thickness) Rotation - Pivot Mechanism (EN 8 grade) Centre Shaft- M.S. with electro zinc plating Centre pipe - M.S. with powder coat. Rubber Seal- Black nylon (M28RC grade) Dusting cap- U type (for dust free operation) Inner Arm- M.S. sheet with powder coated min 2mm thick Outer Arm- M.S.,Rod with Electro zinc plating Ventilators to be made out of good quality aluminum and stainless steel gr.304, inside structure is mild steel painted, with Teflon bush for friction free smooth movement. Fibre Glass Reinforced Plastic (FRP) Base plate of transparent/ivory shade Thickness- 1.5 mm Shade - As per architect's requirement Exhaust Rate: 1100 CFM (minimum) at 2 m/s wind velocity. Ventilators to be made out of good quality aluminum and stainless steel gr.304, inside structure is mild steel painted, with Teflon bush for friction free smooth movement. Contractor to consider high roof heights (15 meter minimum) where turbofans are to be installed.	EACH	5900	28.00		
53	PWD	ELECT	2020	1.7.1	Wiring for light/ fan/ exhaust fan / call bell point with 3x1.5 Sqmm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) with 5/6 amp modular switch, modular base and cover plate, suitable size G.I. box as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5) Short Point	P	266.00	32.00		
54	PWD	ELECT	2020	1.7.2	Wiring for light/ fan/ exhaust fan / call bell point with 3x1.5 Sqmm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) with 5/6 amp modular switch, modular base and cover plate, suitable size G.I. box as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5)Medium Point	P	424.00	46.00		
55	PWD	ELECT	2020	1.7.3	Wiring for light/ fan/ exhaust fan / call bell point with 3x1.5 Sqmm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) with 5/6 amp modular switch, modular base and cover plate, suitable size G.I. box as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5) Long Point	P	588.00	203.00		
56	PWD	ELECT	2020	1.9	Extra for providing and fixing light plug point on board in concealed FRLSPVC conduit (heavy duty, thickness of pipe should be 2 mm) point wiring with modular type 3 pin 5/6 amp socket outlet and 5/6 amp switch including cost of base and cover plate and G. I. box etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5)	P	216.00	55.00		
57	PWD	ELECT	2020	1.10.1	Wiring for light plug point with 3x2.5 sq mm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with modular type 6 Amp switch and 3 pin 6 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size wire etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part S)Short Point	P	442.00	6.00		
58	PWD	ELECT	2020	1.10.2	Wiring for light plug point with 3x2.5 sq mm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with modular type 6 Amp switch and 3 pin 6 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size wire etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part S)Medium Point	P	659.00	5.00		
59	PWD	ELECT	2020	1.10.3	Wiring for light plug point with 3x2.5 sq mm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with modular type 6 Amp switch and 3 pin 6 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size wire etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part S)Long Point	P	922.00	6.00		
60	PWD	ELECT	2020	1.10.4	Wiring for light plug point with 3x2.5 sq mm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with modular type 6 Amp switch and 3 pin 6 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size wire etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part S)Extra Long Point I	P	1302.00	6.00		

61	PWD	ELECT	2020	1.10.5	Wiring for light plug point with 3x2.5 sq mm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with modular type 6 Amp switch and 3 pin 6 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size wire etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part S) Extra Long Point II	P	1657.00	5.00		
62	PWD	ELECT	2020	1.10.6	Wiring for light plug point with 3x2.5 sq mm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with modular type 6 Amp switch and 3 pin 6 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size wire etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part S) Extra Long Point III	P	1995.00	5.00		
63	PWD	ELECT	2020	1.11.1	Wiring for power plug point with 3x4 sq mm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with modular type 16 Amp switch and 6 pin 16 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size wire etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part S) Short Point	P	589.00	6.00		
64	PWD	ELECT	2020	1.11.2	Wiring for power plug point with 3x4 sq mm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with modular type 16 Amp switch and 6 pin 16 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size wire etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part S) Medium Point	P	942.00	6.00		
65	PWD	ELECT	2020	1.11.3	Wiring for power plug point with 3x4 sq mm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with modular type 16 Amp switch and 6 pin 16 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size wire etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part S) Long Point	P	1350.00	5.00		
66	PWD	ELECT	2020	1.11.4	Wiring for power plug point with 3x4 sq mm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with modular type 16 Amp switch and 6 pin 16 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size wire etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part S) Extra Long Point I	P	1807.00	6.00		
67	PWD	ELECT	2020	1.11.5	Wiring for power plug point with 3x4 sq mm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with modular type 16 Amp switch and 6 pin 16 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size wire etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part S) Extra Long Point II	P	2315.00	5.00		
68	PWD	ELECT	2020	1.11.6	Wiring for power plug point with 3x4 sq mm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with modular type 16 Amp switch and 6 pin 16 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size wire etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part S) Extra Long Point III	P	2825.00	5.00		
69	PWD	ELECT	2020	1.12.1	Wiring for power plug point with 3x6 sq mm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with modular type 32 AMP SPMCB "C" curve and 6 pin 20 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size wire etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part S) Short Point	P	709.00	5.00		
70	PWD	ELECT	2020	1.12.2	Wiring for power plug point with 3x6 sq mm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with modular type 32 AMP SPMCB "C" curve and 6 pin 20 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size wire etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part S) MEDIUM POINT	P	1171.00	5.00		
71	PWD	ELECT	2020	1.12.3	Wiring for power plug point with 3x6 sq mm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with modular type 32 AMP SPMCB "C" curve and 6 pin 20 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size wire etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part S) long point	P	1705.00	6.00		
72	PWD	ELECT	2020	1.12.4	Wiring for power plug point with 3x6 sq mm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with modular type 32 AMP SPMCB "C" curve and 6 pin 20 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size wire etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part S) extra long point I	P	2326.00	6.00		
73	PWD	ELECT	2020	1.12.5	Wiring for power plug point with 3x6 sq mm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with modular type 32 AMP SPMCB "C" curve and 6 pin 20 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size wire etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part S) extra long point II	P	3016.00	6.00		
74	PWD	ELECT	2020	1.12.6	Wiring for power plug point with 3x6 sq mm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with modular type 32 AMP SPMCB "C" curve and 6 pin 20 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size wire etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part S) extra long point III	P	3708.00	6.00		
75	PWD	ELECT	2020	1.13.1	Wiring for circuit/ sub main wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, wire in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) as per specification and IS: 694 (2010), IS: 9537 (2000 Part S) 3 X 1.5 sq. mm in 20mm conduit	METRE	92.00	72.00		
76	PWD	ELECT	2020	1.13.2	Wiring for circuit/ sub main wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, wire in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) as per specification and IS: 694 (2010), IS: 9537 (2000 Part S) 3 X 2.5 sq. mm in 20mm conduit	METRE	111.00	380.00		
77	PWD	ELECT	2020	1.13.3	Wiring for circuit/ sub main wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, wire in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) as per specification and IS: 694 (2010), IS: 9537 (2000 Part S) 6 X 2.5 sq. mm in 25mm conduit	METRE	172.00	138.00		
78	PWD	ELECT	2020	1.13.4	Wiring for circuit/ sub main wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, wire in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) as per specification and IS: 694 (2010), IS: 9537 (2000 Part S) 9 X 2.5 sq. mm in 32mm conduit	METRE	238.00	75.00		
79	PWD	ELECT	2020	1.13.12	Wiring for circuit/ sub main wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, wire in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) as per specification and IS: 694 (2010), IS: 9537 (2000 Part S) 6 X 4 sq. mm in 32mm conduit	METRE	236.00	72.00		
80	PWD	ELECT	2020	1.13.13	Wiring for circuit/ sub main wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, wire in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) as per specification and IS: 694 (2010), IS: 9537 (2000 Part S) 6 X 6 sq. mm in 32mm conduit	METRE	312.00	753.00		
81	PWD	ELECT	2020	1.14	Extra cost for point wiring in concealed in FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) at height above 4 meters from floor level for every 2 metres or part thereof, and IS: 694 (2010), IS: 9537 (2000 Part S)	P	10.00	81.00		
82	PWD	ELECT	2020	1.15.1	Supplying and fixing of following sizes FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with accessories in concealed complete as per specification and IS: 9537 (2000 Part S) 20 mm	METRE	42.00	88.00		
83	PWD	ELECT	2020	1.15.2	Supplying and fixing of following sizes FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with accessories in concealed complete as per specification and IS: 9537 (2000 Part S) 25mm	METRE	53.00	88.00		
84	PWD	ELECT	2020	5.4.1	Supplying and fixing following modular switch, socket, other accessories on the existing modular plate & switch box including connections but excluding modular plate etc. as per specification. 5/6 amps one way switch	EACH	69.00	26.00		

85	PWD	ELECT	2020	5.4.4	Supplying and fixing following modular switch, socket, other accessories on the existing modular plate & switch box including connections but excluding modular plate etc. as per specification.15/16 amp switch	EACH	89.00	12.00		
86	PWD	ELECT	2020	5.4.5	Supplying and fixing following modular switch, socket, other accessories on the existing modular plate & switch box including connections but excluding modular plate etc. as per specification. 3 pin 5/6 amp socket outlet	EACH	96.00	20.00		
87	PWD	ELECT	2020	5.4.6	Supplying and fixing following modular switch, socket, other accessories on the existing modular plate & switch box including connections but excluding modular plate etc. as per specification. 6 pin 15/16 amp socket outlet	EACH	120.00	14.00		
88	PWD	ELECT	2020	5.4.7	Supplying and fixing following modular switch, socket, other accessories on the existing modular plate & switch box including connections but excluding modular plate etc. as per specification.6 pin 20 amp socket outlet	EACH	144.00	6.00		
89	PWD	ELECT	2020	5.4.9	Supplying and fixing following modular switch, socket, other accessories on the existing modular plate & switch box including connections but excluding modular plate etc. as per specification. Fan regulator (two module size) electronic stepped type moving all rounds	EACH	223.00	56.00		
90	PWD	ELECT	2020	6.1.4	Supplying, installation, testing and commissioning of following sizes ceiling fan including wiring the down rods of standard length up to 30 cm with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable, earthing etc. complete as required. P.F. should be greater than 0.9, with BEE Star rating from 3 star and above,IS: 374:2019 including all amendments. 1400 mm sweep	EACH	1773.00	57.00		
91	PWD	ELECT	2020	6.6.3	Supplying, installation, testing and commissioning of following sizes heavy duty (continuous running) 1400 rpm exhaust fan in existing opening in wall including earthing etc. complete as per specification. P.F. should be greater than 0.9 450 mm sweep	EACH	3976.00	26.00		
92	PWD	ELECT	2020	6.11.2	Supplying and fixing following sizes of down rod of 15/20mm dia M.S. pipe of thickness 2 mm to ceiling fan including painting with matching colour etc. as per specification.60 cm long	EACH	40.00	46.00		
93	PWD	ELECT	2020	6.17.6	Supplying, fixing, testing and commissioning of following LED lamps with inbuilt electronic driver heat sink and all other accessories in existing holder/ luminaires as per specification and P.F. should be greater than 0.9. LED chip efficacy ratio * 100 lumens /watt.15 Watt	EACH	249.00	12.00		
94	PWD	ELECT	2020	6.19.3	Supplying, installation, testing and commissioning of following LED tube light fitting including batten with Electronic Driver Heat sink Capacitor complete with all other accessories on surface/ in false ceiling, including connection, earthing etc complete as per specification and IP20, P.F. should be greater than 0.9. LED chip efficacy ratio * 100 lumens /watt. 18/20 watt (4 feet)	EACH	443.00	112.00		
95	PWD	ELECT	2020	6.27.1	Supplying, installation, testing and commissioning of following LED Bulk Head fitting complete with Electronic Driver Heat sink Capacitor and all other accessories, including connection, earthing etc complete as per specification and P.F. should be greater than 0.9. LED chip efficacy ratio * 100 lumens /watt. IP65	EACH	1140.00	16.00		
96	PWD	ELECT	2020	6.29.2	Supplying of following 230/250 volts LED Flood light fitting with all accessories like driver, heat sink made of die cast aluminium with IP 66 protection and 15 KV surge protection on pole bracket, including connection, earthing. Separate housing for driver etc complete as per specification and P.F. should be greater than 0.9. LED chip efficacy ratio n 120 lumens /watt.	EACH	2855.00	69.00		
97	PWD	ELECT	2020	9.1.4	Providing and fixing following rating and breaking capacity MCCB in existing cubicle panel board including drilling holes in cubicle panel, making connections, etc. as per specification, IS/ IEC: 60947-2 and Ics = 100 % Icu. 3 pole MCCB, 100A, Adjustable Thermal - Magnetic Release, 25KA	EACH	3734.00	3.00		
98	PWD	ELECT	2020	9.1.5	Providing and fixing following rating and breaking capacity MCCB in existing cubicle panel board including drilling holes in cubicle panel, making connections, etc. as per specification, IS/ IEC: 60947-2 and Ics = 100 % Icu.3 pole MCCB, 125A, Adjustable Thermal - Magnetic Release, 25KA	EACH	5740.00	1.00		
99	PWD	ELECT	2020	9.1.6	Providing and fixing following rating and breaking capacity MCCB in existing cubicle panel board including drilling holes in cubicle panel, making connections, etc. as per specification, IS/ IEC: 60947-2 and Ics = 100 % Icu.3 pole MCCB, 160A, Adjustable Thermal - Magnetic Release, 25KA	EACH	7623.00	1.00		
100	PWD	ELECT	2020	9.2.1	Supplying and fixing on surface/ recess following way, 240 volts SP&N MCB distribution board of sheet steel phosphatized and powder painted complete with tinned copper busbar, neutral busbar, earth bar, din bar, detachable gland plate, including interconnections, earthing etc. as per specification. (But without MCB/RCCB/Isolator) 4 way, Single door	EACH	567.00	48.00		
101	PWD	ELECT	2020	9.4.4	Supplying and fixing on surface/ recess horizontal type following way, 415 volts, TPN MCB distribution board of sheet steel phosphatized and powder painted, complete with tinned copper busbar, neutral busbar, earth bar, din bar, detachable gland plate, including interconnections, earthing etc. as per specification. (But without MCB/RCCB/Isolator) 4 way Double door	EACH	1716.00	4.00		
102	PWD	ELECT	2020	9.4.5	Supplying and fixing on surface/ recess horizontal type following way, 415 volts, TPN MCB distribution board of sheet steel phosphatized and powder painted, complete with tinned copper busbar, neutral busbar, earth bar, din bar, detachable gland plate, including interconnections, earthing etc. as per specification. (But without MCB/RCCB/Isolator) 6 way Double door	EACH	2038.00	2.00		
103	PWD	ELECT	2020	9.6.6	Supplying and fixing on surface/ recess vertical type following way, 415 volts, TPN MCB distribution board of sheet steel phosphatized and powder painted, with 200 amps tinned copper busbar, common neutral link, earth bar, din bar, detachable gland/ knock out plate, provision for 63/100 amp MCCB as incomer including interconnection between incomer MCCB and busbars, earthing etc. as per specification. (But without MCCB and MCB) (Note : Vertical type MCB TPDB is normally used where 3 phase outlets are required.) 9.6.6 12 way (4 + 36), Double door with provision for 100 amps MCCB as incomer	EACH	6805.00	6.00		
104	PWD	ELECT	2020	9.11.2	Supplying and fixing SP MCB, 240 volts, 'C' curve, suitable for inductive load in the existing MCB DB complete with connections, testing and commissioning etc. as per specification. 6 amps to 32 amps	EACH	148.00	74.00		
105	PWD	ELECT	2020	9.15.2	Supplying and fixing TP MCB, 440 volts, 'D' curve, suitable for inductive/ motor load in the existing MCB DB complete with connections, testing and commissioning etc. as per specification. 6 amps to 32 amps	EACH	686.00	49.00		
106	PWD	ELECT	2020	9.15.3	Supplying and fixing TPMCB, 440 volts, 'D' curve, suitable for inductive/ motor load in the existing MCB DB complete with connections, testing and commissioning etc. as per specification.40 amps	EACH	1077.00	7.00		
107	PWD	ELECT	2020	9.15.5	Supplying and fixing TP MCB, 440 volts, 'D' curve, suitable for inductive/ motor load in the existing MCB DB complete with connections, testing and commissioning etc. as per specification.63 amps	EACH	1084.00	5.00		
108	PWD	ELECT	2020	9.17.2	Supplying and fixing TP&N MCB, 440 volts, 'D' curve, suitable for inductive/ motor load in the existing MCB DB complete with connections, testing and commissioning etc. as per specification. 6 amps to 32 amps	EACH	933.00	49.00		
109	PWD	ELECT	2020	9.17.3	Supplying and fixing TP&N MCB, 440 volts, 'D' curve, suitable for inductive/ motor load in the existing MCB DB complete with connections, testing and commissioning etc. as per specification.40 amps	EACH	1351.00	8.00		
110	PWD	ELECT	2020	9.17.5	Supplying and fixing TP&N MCB, 440 volts, 'D' curve, suitable for inductive/ motor load in the existing MCB DB complete with connections, testing and commissioning etc. as per specification.63 amps	EACH	1326.00	4.00		
111	PWD	ELECT	2020	12.19.1	Providing maintenance free earthing with following size GI pipe including making bore pit of minimum 150mm dia, providing and laying approved make Earthing Electrode of Pipe-in-Pipe technology as per IS 3043(R 2016) -1987 made of corrosion free G.I. Pipes having outer pipe of 80mm dia and inner pipe of 50mm dia and filling with specified qty highly conductive compound around pipe and above that with soft soil in bore pit complete and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. as per specification: With 3 metre long GI Pipes and 50 kg back filling compound.	EACH	10955	10.00		
112	PWD	PWD BLD	2015	19.4.6	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge. INTERNAL WORK - EXPOSED ON WALL 50mm nominal outer dia Pipes	METRE	560	223.00		
113	PWD	PWD BLD	2015	19.4.2	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge. INTERNAL WORK - EXPOSED ON WALL 20mm nominal outer dia Pipes	METRE	151	187.00		

114	PWD	PWD BLD	2015	19.4.1	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge. INTERNAL WORK - EXPOSED ON WALL 15mm nominal outer dia Pipes	METRE	110	153.00		
115	PWD	PWD BLD	2015	19.14.3	Providing and fixing 15 mm nominal bore C.P. brass fittings of approved make and conforming to IS:8931 including C.P. brass extension if required: Long body bib cock (500 grams)	NOS	426	23.00		
116	PWD	PWD BLD	2015	19.17.2	Providing and fixing ball valve (brass) of approved quality. High or low pressure, with plastic floats complete : 20 mm nominal bore	EACH	394	40.00		
117	PWD	PWD BLD	2015	18.76.1	Providing and fixing on wall face or under floor UV stabilized Unplasticised Rigid PVC pipes (single socketed) having 3.2mm wall thickness conforming to IS : 13592 (4kg/sqcm) including required couplers, jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion etc complete. 75mm dia pipe	METER	182	80.00		
118	PWD	PWD BLD	2015	18.76.2	Providing and fixing on wall face or under floor UV stabilized Unplasticised Rigid PVC pipes (single socketed) having 3.2mm wall thickness conforming to IS : 13592 (4kg/sqcm) including required couplers, jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion etc complete. 110mm dia pipe	METER	267	200.00		
119	PWD	PWD BLD	2015	18.76.3	Providing and fixing on wall face or under floor UV stabilized Unplasticised Rigid PVC pipes (single socketed) having 3.2mm wall thickness conforming to IS : 13592 (4kg/sqcm) including required couplers, jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion etc complete. 150mm dia	METER	440	290.00		
120	PWD	PWD BLD	2015	18.77.1.1	Providing and fixing on wall face UV stabilized Unplasticised - PVC moulded fittings/ accessories having 3.2mm wall thickness for Rigid PVC pipes conforming to IS : 13592 (heavy) jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion. Tee/ Tee with door/ Bend 45°/ Bend 90° 75mm	EACH	113	144.00		
121	PWD	PWD BLD	2015	18.77.1.1	Providing and fixing on wall face UV stabilized Unplasticised - PVC moulded fittings/ accessories having 3.2mm wall thickness for Rigid PVC pipes conforming to IS : 13592 (heavy) jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion. Tee/ Tee with door/ Bend 45°/ Bend 90°, 110 mm	EACH	154	155.00		
122	PWD	PWD BLD	2015	18.77.1.1	Providing and fixing on wall face UV stabilized Unplasticised - PVC moulded fittings/ accessories having 3.2mm wall thickness for Rigid PVC pipes conforming to IS : 13592 (heavy) jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion. Tee/ Tee with door/ Bend 45°/ Bend 90, 150 mm	EACH	273	138.00		
123	PWD	PWD BLD	2015	18.77.6	Providing and fixing on wall face UV stabilized Unplasticised - PVC moulded fittings/ accessories having 3.2mm wall thickness for Rigid PVC pipes conforming to IS : 13592 (heavy) jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion. Nahani trap 110x75mm	EACH	90.5	37.00		
124	PWD	PWD BLD	2015	11.1.2	Providing and making 6mm thick cement plaster of mix: In Cement Mortar 1:4 (1 cement : 4 fine sand)	SQM	87	8.00		
125	PWD	PWD BLD	2015	12.28	15mm thick Marble stone slab flooring over 18mm (Average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with grey cement slurry including grinding rubbing and polishing etc. complete. (Area of slab should be 0.50 sqm and above)	SQM	3752	98.16		
								TOTAL AMOUNT		0.00

PACKAGE - B										
SERIAL No.	Department	SOR	Year	ITEM CODE	DESCRIPTION	UNIT	RATE	TOTAL QTY.	Rate Quoted by Bidder	Total Amount Non Editable
1	PWD	PWD BLD	2015	1.1.1	Excavation for all types and sizes of foundations, trenches and drains or for any other purpose including disposal of excavated stuff upto 1.5 m lift and lead upto 50m (at least 5m away from the excavated area), including dressing and leveling of pits. 1.1.1) In all types of soil	CUM	185	436.035		
2	PWD	PWD BLD	2015	1.2	Surface dressing of the ground including removing vegetation and making up undulations and in-equalities not exceeding 15 cms in depth/ height including disposal of rubbish upto 1.5 m lift and lead upto 50m (at least 5m away from the dressed area).	SQM	7.2	1582		
3	PWD	PWD BLD	2015	1.6.1	Extra for every additional lift of 1.5M or part there of. 1.6.1 All types of soil	CUM	26.5	119.613		
4	PWD	PWD BLD	2015	1.17	Filling from available excavated stuff (excluding rock) in trenches, plinth, sides of foundation etc. in layers not exceeding 20 cm in depth consolidating each deposited layer by ramming and watering with a lead upto 50 m. and lift upto 1.5 M.	CUM	65	0		
5	PWD	PWD BLD	2015	1.18	Providing and filling in plinth with sand /crusher dust and hard moorum under floor in layers not exceeding 20 cm in depth and consolidating each deposited layer by ramming and watering, including dressing etc. complete.	CUM	371	693.071		
6	PWD	PWD BLD	2015	1.25.1	Diluting chemical emulsion (chlorpyrifos/ lindane) in water as per manufacturers recommendation and injecting for pre-constructional curative cum preventive anti-termite treatment: (Five year service guarantee bond to be signed by contractor) Surface treatment by spreading emulsion under floor, over the plinth area before laying base concrete @ 5 litres / sqm	SQM	27.5	1241.78		
7	PWD	PWD BLD	2015	1.25.3	Treatment of outer side of plinth masonry wall using diluted chemical emulsion @ 1.5 litre per hole, including drilling 12 mm diameter holes in plinth wall at the junction of floor at the interval of 300 mm and plugging with cement mortar 1 : 2 (1 cement : 2 Coarse sand).	METER	13.5	301.2		
8	PWD	PWD BLD	2015	2.1.1	Providing and fixing formwork including centering, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for: Foundations, footings, bases of columns plinth beam, curtain wall in any shape and size and all type of wall below plinth level.	SQM	139	569.672		
9	PWD	PWD BLD	2015	2.1.5	Providing and fixing formwork including centering, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for: Columns, Pillars, Piers and likes- rectangular or square in shape	SQM	297	216		
10	PWD	PWD BLD	2015	2.1.7	Providing and fixing formwork including centering, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for: Suspended floors, roofs, access platform, balconies (plain surfaces) and shelves (cast in situ)	SQM	235	742.94		
11	PWD	PWD BLD	2015	2.1.8	Providing and fixing formwork including centering, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for: Beams, lintels, Cantilevers & Walls.	SQM	202	443.175		
12	PWD	PWD BLD	2015	2.1.13	Providing and fixing formwork including centering, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for: Weather shade, chhajja, Cornices and mouldings	SQM	294	48.51		
13	PWD	PWD BLD	2015	2.1.13	Providing and fixing formwork including centering, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for: Weather shade, chhajja, Cornices and mouldings	SQM	230	13.08		
14	PWD	PWD BLD	2015	3.1.3	Providing and laying nominal mix plain cement concrete with crushed stone aggregate using concrete mixer in foundation, plinth and at ground level excluding cost of form work. 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40mm nominal size).	CUM	2970	18.938		
15	PWD	PWD BLD	2015	3.2	Providing and laying nominal mix reinforced cement concrete with crushed stone aggregate using concrete mixer in foundation, plinth and at ground level excluding cost of form work.	CUM	4298	97.309795		
16	PWD	PWD BLD	2015	3.4	Extra for laying PCC/RCC of any grade in superstructure above plinth level for every floor or part thereof in addition to rate for foundation and plinth: ground floor	CUM	4395.5	170.16269		
17	PWD	PWD BLD	2015	3.12.1	Providing and placing in position reinforcement for R.C.C. work including straightening, cutting, bending, binding etc. complete as per drawings including cost of binding wire all complete: Thermo-Mechanically treated bars FE 415	KG	54.5	25288.60365		
18	PWD	PWD BLD	2015	3.13	Providing and laying damp proof course (upto 50mm thick) with plain cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded crushed stone aggregate 20mm nominal size) including formwork.	CUM	4237	4.518		
19	PWD	PWD BLD	2015	3.15	Applying a coat of hot bitumen VG-10 using @ 1.7kg/ sqm on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.	SQM	93.5	90.36		
20	PWD	PWD BLD	2015	3.16	Making 50mm thick plinth protection of plain cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded crushed stone aggregate 20mm nominal size) over 75mm bed of dry brick ballast 40mm nominal size well rammed and consolidated and grouted with sand including finishing the top smooth.	SQM	273	180.72		

21	PWD	PWD BLD	2015	7.5.4	Brick work with modular fly-ash lime bricks (FALG Bricks) conforming to IS:12894-2002 of class designation 40 in foundation and plinth in:7.5.4 Cement Mortar 1:6 (1 cement : 6 coarse sand)	CUM	3263	225.2682		
22	PWD	PWD BLD	2015	7.6.	Extra for brick work in superstructure Above plinth level for every floor or part thereof in addition to rate for foundation and plinth:	CUM	3384	315.399		
23	PWD	PWD BLD	2015	11.2	Providing and making 12mm.thick cement plaster of mix : In Cement Mortar 1:4(1 Cement :4 fine Sand)	SQM	103	1486.2		
24	PWD	PWD BLD	2015	11.3	Providing and making 15mm.thick cement plaster on the rough side of single or half brickwall of mix.	SQM	120	1272.72		
25	PWD	PWD BLD	2015	11.9	Extra for providing and mixing water proofing materials in cement plaster work in proportion as recommended	KG	43.5	1379.46		
26	PWD	PWD BLD	2015	12.2	25mm thick cement concrete flooring with 1:2:4 cement concrete (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5 mm nominalsize) finished with floating coat of neat cement.	SQM	165	1139.68		
27	PWD	PWD BLD	2015	12.6.1	Cement plaster skirting upto 30 cm. height with cement mortar 1:3 (1 cement : 3 fine sand) finished with a floating coat of neat cement including rounding of junction with floor.18 mm thick in two layers of 12mm and 6mm	SQM	200	45.48		
28	PWD	PWD BLD	2015	8.2.1	Providing wood work in frames of doors, windows, clerestory windows and other frames wrought framed and fixed in position.Sal, bijasal, bentleak, khair, haldia	CUM	61051	0.294		
29	PWD	PWD BLD	2015	8.3	Providing 40x5mm iron hold fast 40cm long including fixing to frame with 10mm bolts nuts and wooden plug and embedding in Cement Concrete 1:2:4 in blocks of size 30x10x15cm.	EACH	72.5	28		
30	PWD	PWD BLD	2015	8.14. 1	Providing and fixing flush door shutters, core of block board construction with frame of first class hard wood and well matched first class Indian teak ply veneering on one face and commercial ply veneering on the other face of the shutter with vertical grains, cross bands and face veneering excluding hinges.40 mm. thick (single leaf)	SQM	2034	20.16		
31	PWD	PWD BLD	2015	8.115	Extra for double leaf shutter instead of single leaf.		52	33.6		
32	PWD	PWD BLD	2015	8.61.1	Providing and fixing brass door latch with brass polished MS screws complete:300x16x5 mm		398	7		
33	PWD	PWD BLD	2015	8.65	providing and fixing bright finished brass door handles rwith brass polished MS screw complete		49.0	7.0		
34	PWD	PWD BLD	2015	9.2	Structural steel work riveted or bolted or welded in built-up sections, trusses and frames work upto a height of 5m above plinth level, including cutting, hoisting, fixing in position and applying a priming coat of red oxide zinc chromate primer.	KG	66.0	14362.8		
35	PWD	PWD BLD	2015	9.15	Providing and fixing M.S. grill of approved pattern made of M.S. flats or square or round bars welded to steel frame of windows etc. including applying a priming coat welded to frame with all necessary fitting complete including applying a priming of red oxide zinc chromate primer.	KG	68.0	837.0		
36	PWD	PWD BLD	2015	9.27.1	Supplying and fixing rolling shutter of approved makes made of M.S. laths interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and out side locking with push and pull arrangement complete but excluding the cost of top cover and spring.80x1.25mm M.S. Laths	SQM	1691.0	10.8		
37	PWD	PWD BLD	2015	9.28	Providing and fixing 27.5cm long wire spring for rolling shutters.	EACH	362.0	2.0		
38	PWD	PWD BLD	2015	9.29	Providing and fixing M.S. sheet top cover for rolling shutter	SQM	540.0	2.0		
39	PWD	PWD BLD	2015	9.3	Providing and fixing ball bearing for rolling shutters.	EACH	423.0	4.0		
40	PWD	PWD BLD	2015	9.31	Providing and fixing mechanical device chain and crank operation for operating rolling shutters.	SET	5672.0	2.0		
41	PWD	PWD BLD	2015	9.47.2	Providing and fixing aluminium work for doors, windows, ventilators and partitions made out of extruded aluminium standard sections (main section with minimum 1.5mm thickness) conforming to IS: 733, IS: 1285 miltred and jointed mechanically including aluminium cleats, neoprene weather stripping gasket beveled edge beading, screws duly fixed in wall/ floor with fixing clips or hold fasteners or bolts and nuts as required aluminium sections shall be anodized transparent or dyed to approved shade according to IS: 1868, minimum anodic coating shall be of grade AC-15. (Glazing to be paid for separately.For shutter of doors, windows & ventilators including providing and making provision for fixing of fitting wherever required including the cost of PVC/ neoprene gasket required (Fittings shall be paid for separately).	KG	338.0	279.0		
42	PWD	PWD BLD	2015	9.51.2	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with PVC/ neoprene gasket etc. complete. (Cost of aluminium snap beading shall be paid in basic item):With float glass panes of 5 mm thickness	SQM	708.0	50.4		
43	PWD	PWD BLD	2016	9.43.1	Providing and fixing in position chain linked steel wire fabric made of 4 mm dia G.I. wire of required width in mesh to concrete/ wooden/ angle iron posts including securing and screwing with 2mm dia G.I. wire, G.I. staples, G.I.U-nails or steel pins etc., complete.Aperture 50x50mm	SQM	331.0	115.4		
44	PWD	PWD BLD	2015	14.12	Applying one coat of cement primer on wall surface (applied @ 0.80 litres/10 sqm) complete.	SQM	23.0	2758.9		
45	PWD	PWD BLD	2015	14.1.1	Wall painting with acrylic premium emulsion (plastic) paint of required shade to give an even shade.On new work (two or more coats)	SQM	44.5	1486.2		
46	PWD	PWD BLD	2015	14.15.1	Painting exterior surface with ACRYLIC SMOOTH exterior paint of required shade as per manufacturer's specifications to give protective and decorative finish including cleaning washing of surface etc. complete with:On new work (Two or more coats applied @ 1.43 ltr/ 10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/ 10 sqm)	SQM	56.0	1272.7		
47	PWD	PWD BLD	2015	14.22.2	Painting on new work (two or more coats) to give an even shade with: Premium synthetic enamel paint	SQM	47.0	1356.4		
48	PWD	PWD BLD	2015	10.12	Supply and fixing of polymer precoated galvalume profile sheets (PPGL) of approved size, shape and pitch of corrugation, total coated thickness (TCT) 0.60 mm +/- 5%, epoxy primer on both side of the sheet and colour polyester top coat 18-20 microns and 6-7 microns on bottom. Sheet should have protective guard film of 25 microns minimum to avoid scratches while transportation and should be supplied in single length upto 12 metre or as desired by Engineer-in-charge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55mm) with EPDM seal or with polymer coated J or L hooks, bolts and nuts 8mm diameter with bitumen and G.I. limpet washers or with G.I. limpet washers filled with white lead complete upto any pitch in horizontal/ vertical or curved surfaces excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.	SQM	693.0	962.6		
49	PWD	PWD BLD	2015	10.16.1	Providing and fixing precoated galvanised steel sheet roofing accessories 0.50 mm +/- 5% total coated thickness (TCT), Zinc coating 120gsm as per IS: 277 in 240mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns using self drilling/ self tapping screws or with polymer coated J or L hooks, bolts and nuts and or G.I. seam bolts and nuts, G.I. plain and bitumen washers complete.Ridges plain (500-600mm)	METRE	552.0	173.8		
50	PWD	PWD BLD	2015	10.16.2	Flashings/ Aprons. (Upto 600 mm)	METRE	539.0	173.8		
51	PWD	PWD BLD	2015	10.16.6	Gutter. (600 mm over all girth).	METRE	629.0	173.8		

69	PWD	ELECT	2020	1.12.1	Wiring for power plug point with 3x6 sq mm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with modular type 32 Amp SPMCB "C" curve and 6 pin 20 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size wire etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5) Short Point	P	709.00	2.00		
70	PWD	ELECT	2020	1.12.2	Wiring for power plug point with 3x6 sq mm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with modular type 32 Amp SPMCB "C" curve and 6 pin 20 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size wire etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5) MEDIUM POINT	P	1171.00	2.00		
71	PWD	ELECT	2020	1.12.3	Wiring for power plug point with 3x6 sq mm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with modular type 32 Amp SPMCB "C" curve and 6 pin 20 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size wire etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5) long point	P	1705.00	2.00		
72	PWD	ELECT	2020	1.12.4	Wiring for power plug point with 3x6 sq mm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with modular type 32 Amp SPMCB "C" curve and 6 pin 20 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size wire etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5) extra long point I	P	2326.00	2.00		
73	PWD	ELECT	2020	1.12.5	Wiring for power plug point with 3x6 sq mm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with modular type 32 Amp SPMCB "C" curve and 6 pin 20 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size wire etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5) extra long point II	P	3016.00	2.00		
74	PWD	ELECT	2020	1.12.6	Wiring for power plug point with 3x6 sq mm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with modular type 32 Amp SPMCB "C" curve and 6 pin 20 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size wire etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5) extra long point III	P	3708.00	2.00		
75	PWD	ELECT	2020	1.13.1	Wiring for circuit/ sub main wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, wire in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5) 3 X 1.5 sq. mm in 20mm conduit	METRE	92.00	31.00		
76	PWD	ELECT	2020	1.13.2	Wiring for circuit/ sub main wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, wire in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5) 3 X 2.5 sq. mm in 20mm conduit	METRE	111.00	155.00		
77	PWD	ELECT	2020	1.13.3	Wiring for circuit/ sub main wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, wire in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5) 6 X 2.5 sq. mm in 25mm conduit	METRE	172.00	50.00		
78	PWD	ELECT	2020	1.13.4	Wiring for circuit/ sub main wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, wire in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5) 9 X 2.5 sq. mm in 32mm conduit	METRE	238.00	20.00		
79	PWD	ELECT	2020	1.13.12	Wiring for circuit/ sub main wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, wire in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5) 6 X 4 sq. mm in 32mm conduit	METRE	236.00	40.00		
80	PWD	ELECT	2020	1.13.13	Wiring for circuit/ sub main wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, wire in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5) 6 X 6 sq. mm in 32mm conduit	METRE	312.00	330.00		
81	PWD	ELECT	2020	1.14	Extra cost for point wiring in concealed in FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) at height above 4 meters from floor level for every 2 metres or part thereof, and IS: 694 (2010), IS: 9537 (2000 Part 5)	P	10.00	35.00		
82	PWD	ELECT	2020	1.15.1	Supplying and fixing of following sizes FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with accessories in concealed complete as per specification and IS: 9537 (2000 Part 5) 20 mm	METRE	42.00	35.00		
83	PWD	ELECT	2020	1.15.2	Supplying and fixing of following sizes FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with accessories in concealed complete as per specification and IS: 9537 (2000 Part 5) 25mm	METRE	53.00	35.00		
84	PWD	ELECT	2020	5.4.1	Supplying and fixing following modular switch, socket, other accessories on the existing modular plate & switch box including connections but excluding modular plate etc. as per specification. 5/6 amps one way switch	EACH	69.00	14.00		
85	PWD	ELECT	2020	5.4.4	Supplying and fixing following modular switch, socket, other accessories on the existing modular plate & switch box including connections but excluding modular plate etc. as per specification. 15/16 amp switch	EACH	89.00	5.00		
86	PWD	ELECT	2020	5.4.5	Supplying and fixing following modular switch, socket, other accessories on the existing modular plate & switch box including connections but excluding modular plate etc. as per specification. 3 pin 5/6 amp socket outlet	EACH	96.00	6.00		
87	PWD	ELECT	2020	5.4.6	Supplying and fixing following modular switch, socket, other accessories on the existing modular plate & switch box including connections but excluding modular plate etc. as per specification. 6 pin 15/16 amp socket outlet	EACH	120.00	4.00		
88	PWD	ELECT	2020	5.4.7	Supplying and fixing following modular switch, socket, other accessories on the existing modular plate & switch box including connections but excluding modular plate etc. as per specification. 6 pin 20 amp socket outlet	EACH	144.00	2.00		
89	PWD	ELECT	2020	5.4.9	Supplying and fixing following modular switch, socket, other accessories on the existing modular plate & switch box including connections but excluding modular plate etc. as per specification. Fan regulator (two module size) electronic stepped type moving all rounds	EACH	223.00	26.00		
90	PWD	ELECT	2020	6.1.4	Supplying, installation, testing and commissioning of following sizes ceiling fan including wiring the down rods of standard length up to 30 cm with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable, earthing etc. complete as required. P.F. should be greater than 0.9, with BEE Star rating from 3 star and above, IS: 374:2019 including all amendments. 1400 mm sweep	EACH	1773.00	26.00		
91	PWD	ELECT	2020	6.6.3	Supplying, installation, testing and commissioning of following sizes heavy duty (continuous running) 1400 rpm exhaust fan in existing opening in wall including earthing etc. complete as per specification. P.F. should be greater than 0.9. 450 mm sweep	EACH	3976.00	18.00		
92	PWD	ELECT	2020	6.11.2	Supplying and fixing following sizes of down rod of 15/20mm dia M.S. pipe of thickness 2 mm to ceiling fan including painting with matching colour etc. as per specification. 60 cm long	EACH	40.00	26.00		
93	PWD	ELECT	2020	6.17.6	Supplying, fixing, testing and commissioning of following LED lamps with inbuilt electronic driver heat sink and all other accessories in existing holder/ luminaries as per specification and P.F. should be greater than 0.9. LED chip efficacy ratio * 100 lumens /watt. 15 Watt	EACH	249.00	13.00		
94	PWD	ELECT	2020	6.19.3	Supplying, installation, testing and commissioning of following LED tube light fitting including batten with Electronic Driver Heat sink Capacitor complete with all other accessories on surface/ in false ceiling, including connection, earthing etc. complete as per specification and IP20, P.F. should be greater than 0.9. LED chip efficacy ratio * 100 lumens /watt. 18/20 watt (4 feet)	EACH	443.00	52.00		
95	PWD	ELECT	2020	6.27.1	Supplying, installation, testing and commissioning of following LED Bulk Head fitting complete with Electronic Driver Heat sink Capacitor and all other accessories, including connection, earthing etc. complete as per specification and P.F. should be greater than 0.9. LED chip efficacy ratio * 100 lumens /watt. IP65	EACH	1140.00	13.00		
96	PWD	ELECT	2020	6.29.2	Supplying of following 230/250 volts LED Flood light fitting with all accessories like driver, heat sink made of die cast aluminium with IP 66 protection and 15 KV surge protection on pole bracket, including connection, earthing. Separate housing for driver etc. complete as per specification and P.F. should be greater than 0.9. LED chip efficacy ratio n 120 lumens /watt.	EACH	2855.00	40.00		
97	PWD	ELECT	2020	9.1.4	Providing and fixing following rating and breaking capacity MCCB in existing cubicle panel board including drilling holes in cubicle panel, making connections, etc. as per specification, IS/ IEC: 60947-2 and Ics = 100 % Icu. 3 pole MCCB, 100A, Adjustable Thermal - Magnetic Release, 25KA	EACH	3734.00	1.00		

98	PWD	ELECT	2020	9.1.5	Providing and fixing following rating and breaking capacity MCCB in existing cubicle panel board including drilling holes in cubicle panel, making connections, etc. as per specification, IS/ IEC: 60947-2 and Ics = 100 % Icu.3 pole MCCB, 125A, Adjustable Thermal - Magnetic Release, 25KA	EACH	5740.00	0.00		
99	PWD	ELECT	2020	9.1.6	Providing and fixing following rating and breaking capacity MCCB in existing cubicle panel board including drilling holes in cubicle panel, making connections, etc. as per specification, IS/ IEC: 60947-2 and Ics = 100 % Icu.3 pole MCCB, 160A, Adjustable Thermal - Magnetic Release, 25KA	EACH	7623.00	1.00		
100	PWD	ELECT	2020	9.2.1	Supplying and fixing on surface/ recess following way, 240 volts SP&N MCB distribution board of sheet steel phosphatized and powder painted complete with tinned copper busbar, neutral busbar, earth bar, din bar, detachable gland plate, including interconnections, earthing etc. as per specification. (But without MCB/RCCB/Isolator) 4 way, Single door	EACH	567.00	18.00		
101	PWD	ELECT	2020	9.4.4	Supplying and fixing on surface/ recess horizontal type following way, 415 volts, TPN MCB distribution board of sheet steel phosphatized and powder painted, complete with tinned copper busbar, neutral busbar, earth bar, din bar, detachable gland plate, including interconnections, earthing etc. as per specification. (But without MCB/RCCB/Isolator) 4 way Double door	EACH	1716.00	1.00		
102	PWD	ELECT	2020	9.4.5	Supplying and fixing on surface/ recess horizontal type following way, 415 volts, TPN MCB distribution board of sheet steel phosphatized and powder painted, complete with tinned copper busbar, neutral busbar, earth bar, din bar, detachable gland plate, including interconnections, earthing etc. as per specification. (But without MCB/RCCB/Isolator) 6 way Double door	EACH	2038.00	1.00		
103	PWD	ELECT	2020	9.6.6	Supplying and fixing on surface/ recess vertical type following way, 415 volts, TPN MCB distribution board of sheet steel phosphatized and powder painted, with 200 amps tinned copper busbar, common neutral link, earth bar, din bar, detachable gland/ knock out plate, provision for 63/100 amp MCCB as incomer including interconnection between incomer MCCB and busbars, earthing etc. as per specification. (But without MCCB and MCB) (Note : Vertical type MCB TPDB is normally used where 3 phase outlets are required.) 9.6.6 12 way (4 + 36), Double door with provision for 100 amps MCCB as incomer	EACH	6805.00	2.00		
104	PWD	ELECT	2020	9.11.2	Supplying and fixing SP MCB, 240 volts, 'C' curve, suitable for inductive load in the existing MCB DB complete with connections, testing and commissioning etc. as per specification. 6 amps to 32 amps	EACH	148.00	30.00		
105	PWD	ELECT	2020	9.15.2	Supplying and fixing TP MCB, 440 volts, 'D' curve, suitable for inductive/ motor load in the existing MCB DB complete with connections, testing and commissioning etc. as per specification. 6 amps to 32 amps	EACH	686.00	18.00		
106	PWD	ELECT	2020	9.15.3	Supplying and fixing TP MCB, 440 volts, 'D' curve, suitable for inductive/ motor load in the existing MCB DB complete with connections, testing and commissioning etc. as per specification. 40 amps	EACH	1077.00	2.00		
107	PWD	ELECT	2020	9.15.5	Supplying and fixing TP MCB, 440 volts, 'D' curve, suitable for inductive/ motor load in the existing MCB DB complete with connections, testing and commissioning etc. as per specification. 63 amps	EACH	1084.00	2.00		
108	PWD	ELECT	2020	9.17.2	Supplying and fixing TP&N MCB, 440 volts, 'D' curve, suitable for inductive/ motor load in the existing MCB DB complete with connections, testing and commissioning etc. as per specification. 6 amps to 32 amps	EACH	933.00	18.00		
109	PWD	ELECT	2020	9.17.3	Supplying and fixing TP&N MCB, 440 volts, 'D' curve, suitable for inductive/ motor load in the existing MCB DB complete with connections, testing and commissioning etc. as per specification. 40 amps	EACH	1351.00	2.00		
110	PWD	ELECT	2020	9.17.5	Supplying and fixing TP&N MCB, 440 volts, 'D' curve, suitable for inductive/ motor load in the existing MCB DB complete with connections, testing and commissioning etc. as per specification. 63 amps	EACH	1326.00	2.00		
111	PWD	ELECT	2020	12.19.1	Providing maintenance free earthing with following size GI pipe including making bore pit of minimum 150mm dia, providing and laying approved make Earthing Electrode of Pipe-in-Pipe technology as per IS 3043(R 2016) -1987 made of corrosion free G.I. Pipes having outer pipe of 80mm dia and inner pipe of 50mm dia and filling with specified qty highly conductive compound around pipe and above that with soft soil in bore pit complete and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. as per specification: With 3 metre long GI Pipes and 50 kg back filling compound.	EACH	10955	4		
112	PWD	PWD BLD	2015	19.4.6	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge. INTERNAL WORK - EXPOSED ON WALL 50mm nominal outer dia Pipes	METRE	560	194		
113	PWD	PWD BLD	2015	19.4.2	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge. INTERNAL WORK - EXPOSED ON WALL 20mm nominal outer dia Pipes	METRE	151	170		
114	PWD	PWD BLD	2015	19.4.1	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge. INTERNAL WORK - EXPOSED ON WALL 15mm nominal outer dia Pipes	METRE	110	156		
115	PWD	PWD BLD	2015	19.14.3	Providing and fixing 15 mm nominal bore C.P. brass fittings of approved make and conforming to IS:8931 including C.P. brass extension if required: Long body bib cock (500 grams)	NOS	426	2		
116	PWD	PWD BLD	2015	19.17.2	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete : 20 mm nominal bore	EACH	394	10		
117	PWD	PWD BLD	2015	18.76.1	Providing and fixing on wall face or under floor UV stabilized Unplasticised Rigid PVC pipes (single socketed) having 3.2mm wall thickness conforming to IS : 13592 (4kg/sqcm) including required couplers, jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion etc complete. 75mm dia pipe	METER	182	40		
118	PWD	PWD BLD	2015	18.76.2	Providing and fixing on wall face or under floor UV stabilized Unplasticised Rigid PVC pipes (single socketed) having 3.2mm wall thickness conforming to IS : 13592 (4kg/sqcm) including required couplers, jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion etc complete. 110mm dia pipe	METER	267	158		
119	PWD	PWD BLD	2015	18.76.3	Providing and fixing on wall face or under floor UV stabilized Unplasticised Rigid PVC pipes (single socketed) having 3.2mm wall thickness conforming to IS : 13592 (4kg/sqcm) including required couplers, jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion etc complete. 150mm dia	METER	440	140		
120	PWD	PWD BLD	2015	18.77.1.1	Providing and fixing on wall face UV stabilized Unplasticised - PVC moulded fittings/ accessories having 3.2mm wall thickness for Rigid PVC pipes conforming to IS : 13592 (heavy) jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion. Tee/ Tee with door/ Bend 45°/ Bend 90°, 75mm	EACH	113	54		
121	PWD	PWD BLD	2015	18.77.1.1	Providing and fixing on wall face UV stabilized Unplasticised - PVC moulded fittings/ accessories having 3.2mm wall thickness for Rigid PVC pipes conforming to IS : 13592 (heavy) jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion. Tee/ Tee with door/ Bend 45°/ Bend 90°, 110 mm	EACH	154	70		
122	PWD	PWD BLD	2015	18.77.1.1	Providing and fixing on wall face UV stabilized Unplasticised - PVC moulded fittings/ accessories having 3.2mm wall thickness for Rigid PVC pipes conforming to IS : 13592 (heavy) jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion. Tee/ Tee with door/ Bend 45°/ Bend 90°, 150 mm	EACH	273	45		
123	PWD	PWD BLD	2015	18.77.6	Providing and fixing on wall face UV stabilized Unplasticised - PVC moulded fittings/ accessories having 3.2mm wall thickness for Rigid PVC pipes conforming to IS : 13592 (heavy) jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion. Nahani trap 110x75mm	EACH	90.5	9		
124	PWD	PHED	2020	28.1	Carrying out the resistivity survey by VES method using Schlumberger configuration for locating the proper spot with three soundings for drilling of tube well within the selected Habitation, including photography, interpretation of resistivity data and submission of report in the desired format along with resistivity readings, necessary graph and photographs.	P	1633	2		

125	PWD	PHED	2020	29.3	Drilling of perfectly vertical bore hole of a diameter suitable to receive 150 mm nominal diameter casing pipe upto desired depth below ground level inclusive of the labour charges for transporting, lowering and fixing of 150 mm nominal diameter and fixing of 150 mm nominal diameter M.S./ G.I. / U.P.V.C. casing pipe inside the bore hole including all works pertaining to drilling such as transportation, installation and removal of drilling machine etc.complete.In all type of collapsible strata consisting of soils, clays, sand , moorum, gravel, boulders etc.	METER	527	30		
126	PWD	PHED	2020	29.3	Drilling of perfectly vertical bore hole of a diameter suitable to receive 150 mm nominal diameter casing pipe upto desired depth below ground level inclusive of the labour charges for transporting, lowering and fixing of 150 mm nominal diameter and fixing of 150 mm nominal diameter M.S./ G.I. / U.P.V.C. casing pipe inside the bore hole including all works pertaining to drilling such as transportation, installation and removal of drilling machine etc.complete.In all types of rocks.	METER	639	0.6		
127	PWD	PHED	2020	29.4	Drilling of perfectly vertical bore hole of a diameter suitable to receive 150 mm nominal diameter casing pipe upto desired depth below ground level inclusive of the labour charges for transporting, lowering and fixing of 150 mm nominal diameter and fixing of 150 mm nominal diameter M.S./ G.I. / U.P.V.C. casing pipe inside the bore hole including all works pertaining to drilling such as transportation, installation and removal of drilling machine etc.complete.	METER	609	169.4		
128	PWD	PHED	2020	32.3	Measurement of yield of tube well by operating hand pump continuously for four hours manually.	EACH	700	2		
129	PWD	PHED	2020	32.4	Disinfection of tube well using bleaching powder solution as per the direction of the Engineer in Charge including the cost of bleaching powder and labour etc. complete.	EACH	61	2		
130	PWD	PHED	2020	29.9	Providing and fixing of well cap on top of the tube well for protection MS caps. 150 mm. dia	EACH	376	2		
131	PWD	PHED	2020	30.7	Construction of concrete block over dry tube wells for protection of size 0.45m x 0.45m x 0.45 m in M-15 cement concrete mix complete work.	EACH	629	2		
132	PWD	PHED	2020	6	ISI marked G.I. casing pipe (Plain) medium class in 4 to 7 meters length one end fitted with socket as per I.S.: 1239 (Part-2) 1992 with IV th revision (Up-to- date amendments), Part-C, General Note: 27.28.10 150mm dia	METER	1251	60		
133	PWD	PHED	2020	34.20.1	Supplying & Installation of Energy efficient live star BEE rating ISI Marked required capacity of Three Phase, 50 Hz, 415V, deep well submersible pump Steel body, suitable for 6"tube well with Control Panel Starter suitable for Submersible pump with dry run protection, single phase preventer, connections, including clamps, bore cap etc. as required as per specifications but excluding pipe and connection cable.5 H.P. WITH 10 TO 11 Stages , Head Mt. 101 - 40 Discharge LMP	EACH	45776	2		
134	NS				Providing & supplying of ISI marked UPVC colour pipe for delivery size 50mm inner dia (63mm dia OD) class 20 kg/cm2 socketed in built at one end with screwed and other end screwed only with rubber gasket, code ISI H5 910190-101819 in 3mtr length.	METER	290	120		
135	PWD	PHED	2020	34.20.107	Supplying and laying of submersible flat cable ISI marked 3 core copper wire of suitable size with proper clamping of approved make. 4.0 Sq.mm.multi strand	METER	170	150		
136	PWD	PHED	2020	34.20.109	Supplying and laying of approved make stainless steel wire rope 6 mm thick complete with binding for support of pump and motor.	METER	139	150		
137	CSIDC				Providing & Supplying of weather proof unarmoured PVC insulated, PVC sheathed aluminium. Conductor cable size 10mm ² solid single core. .	METER	9.24	240		
138	PWD	PHED	2020	34.18.4	Labour only for lowering of three phase submersible pumping set in the tube well with pipe line assembly, electrical cable, testing etc. completeincludingconnecting the electrical cable from pump & starter. 3 HP to 7.5 HP - Depth up to 150 mtr.	EACH	2192	2		
139	NS				Provision for transportation, testing, inter connection, accessories like nipple, plug, tee, reducer, bend, elbow, union, socket, pair of MS clamp, tube well cap, cable jointing with materials like m-seal, solvent, wooden board, electric fuse (gripe) 32amp, UPVC tape, kachcha rubber and MS adopter etc complete.	EACH	5000	2		
140	PWD	PHED	2020	18.15	Earth work in excavation for pipe trench in ordinary soil areas including dressing, watering, ramming and disposal of excavated earth lead up to 50m and lift up to 1.5m, disposal earth to be levelled, neatly dressed.	CUM	161	273.515		
141	PWD	PHED	2020	18.24	Supply & Filling moorum/river sand for pipe bedding or over the pipe (including supply)	CUM	693	48.9		
142	PWD	PHED	2020	9.1	Providing, Laying, Jointing & field testing of HDPE pipes (High Density Polyethylene Pipes) confirming to IS 4984/14151/12786/13488 with necessary jointing material like mechanical connector of jointing pipes by heating to the ends of pipes with the help of Teflon coated electric mirror/ heater to the required temperature and then pressing the ends together against each other, to form a monolithic & leak proof joint by thermosetting process. It may be required to be done with Jack/ Hydraulic Jacks/ Butt fusion machine. (50 mm & above fusion jointed & below 50mm mechanical jointed) class 06kg/cm ² - 63 mm dia -	METER	116	243		
143	PWD	PHED	2020	9.1	Providing, Laying, Jointing & field testing of HDPE pipes (High Density Polyethylene Pipes) confirming to IS 4984/14151/12786/13488 with necessary jointing material like mechanical connector of jointing pipes by heating to the ends of pipes with the help of Teflon coated electric mirror/ heater to the required temperature and then pressing the ends together against each other, to form a monolithic & leak proof joint by thermosetting process. It may be required to be done with Jack/ Hydraulic Jacks/ Butt fusion machine. (50 mm & above fusion jointed & below 50mm mechanical jointed) class 06kg/cm ² - 75 mm dia -	METER	167	43		
144	PWD	PHED	2020	9.1	Providing, Laying, Jointing & field testing of HDPE pipes (High Density Polyethylene Pipes) confirming to IS 4984/14151/12786/13488 with necessary jointing material like mechanical connector of jointing pipes by heating to the ends of pipes with the help of Teflon coated electric mirror/ heater to the required temperature and then pressing the ends together against each other, to form a monolithic & leak proof joint by thermosetting process. It may be required to be done with Jack/ Hydraulic Jacks/ Butt fusion machine. (50 mm & above fusion jointed & below 50mm mechanical jointed) class 06kg/cm ² - 90 mm dia	METER	236	114		
145	PWD	PHED	2020	9.1	Providing, Laying, Jointing & field testing of HDPE pipes (High Density Polyethylene Pipes) confirming to IS 4984/14151/12786/13488 with necessary jointing material like mechanical connector of jointing pipes by heating to the ends of pipes with the help of Teflon coated electric mirror/ heater to the required temperature and then pressing the ends together against each other, to form a monolithic & leak proof joint by thermosetting process. It may be required to be done with Jack/ Hydraulic Jacks/ Butt fusion machine. (50 mm & above fusion jointed & below 50mm mechanical jointed) class 06kg/cm ² - 110 mm dia	METER	395	38		
146	PWD	PHED	2020	9.1	Providing, Laying, Jointing & field testing of HDPE pipes (High Density Polyethylene Pipes) confirming to IS 4984/14151/12786/13488 with necessary jointing material like mechanical connector of jointing pipes by heating to the ends of pipes with the help of Teflon coated electric mirror/ heater to the required temperature and then pressing the ends together against each other, to form a monolithic & leak proof joint by thermosetting process. It may be required to be done with Jack/ Hydraulic Jacks/ Butt fusion machine. (50 mm & above fusion jointed & below 50mm mechanical jointed) class 06kg/cm ² - 140 mm dia	METER	572	51		
147	PWD	PHED	2020	9.2	Providing and laying including testing Bend 90 confirming to specification class 06 kg/cm ²	EACH	84	2		
148	PWD	PHED	2020	9.2	Providing and laying including testing Bend 90 confirming to specification class 06 kg/cm ²	EACH	131	2		
149	PWD	PHED	2020	9.2	Providing and laying including testing Bend 90 confirming to specification class 06 kg/cm ²	EACH	202	2		
150	PWD	PHED	2020	9.2	Providing and laying including testing Bend 90 confirming to specification class 06 kg/cm ²	EACH	268	1		
151	PWD	PHED	2020	9.2	Providing and laying including testing Bend 90 confirming to specification class 06 kg/cm ²	EACH	523	1		
152	PWD	PHED	2020	9.3	Providing and laying including testing Bend 45 confirming to IS specification.63 mm dia -	EACH	98	2		

153	PWD	PHED	2020	9.3	Providing and laying including testing Bend 45 confirming to IS specification.75 mm dia -	EACH	148	2		
154	PWD	PHED	2020	9.3	Providing and laying including testing Bend 45 confirming to IS specification.90 mm dia	EACH	214	2		
155	PWD	PHED	2020	9.3	Providing and laying including testing Bend 45 confirming to IS specification.110 mm dia	EACH	317	1		
156	PWD	PHED	2020	9.3	Providing and laying including testing Bend 45 confirming to IS specification.140 mm dia	EACH	664	1		
157	PWD	PHED	2020	9.4	Providing and laying including testing Equal Tee confirming to IS specification.63 mm dia -	EACH	104	2		
158	PWD	PHED	2020	9.4	Providing and laying including testing Equal Tee confirming to IS specification.75 mm dia -	EACH	172	2		
159	PWD	PHED	2020	9.4	Providing and laying including testing Equal Tee confirming to IS specification.90 mm dia	EACH	305	2		
160	PWD	PHED	2020	9.4	Providing and laying including testing Equal Tee confirming to IS specification.140 mm dia	EACH	674	2		
161	PWD	PHED	2020	9.8	Providing and laying including testing End Cap confirming to IS specifications.63 mm dia -	EACH	76	2		
162	PWD	PHED	2020	9.6	Providing and laying including testing Reducer: confirming to IS specifications.63 mm dia -	EACH	93	2		
163	PWD	PHED	2020	9.6	Providing and laying including testing Reducer: confirming to IS specifications.75 mm dia -	EACH	118	2		
164	PWD	PHED	2020	9.6	Providing and laying including testing Reducer: confirming to IS specifications.90 mm dia	EACH	127	1		
165	PWD	PHED	2020	9.6	Providing and laying including testing Reducer: confirming to IS specifications.140 mm dia	EACH	161	2		
166	PWD	PHED	2020	9.7	Providing butt fusion welded joint/joining by heating to the ends with the help of Teflon coated electric mirror/heater ends together etc. by thermosetting processes to HDPE Pipe and specials. (6 kg. 8 kg. 10 kg.) (50 mm & above fusion jointed & below 50 mm mechanical jointed) including testing 63 mm dia -	EACH	107	1		
167	PWD	PHED	2020	9.7	Providing butt fusion welded joint/joining by heating to the ends with the help of Teflon coated electric mirror/heater ends together etc. by thermosetting processes to HDPE Pipe and specials. (6 kg. 8 kg. 10 kg.) (50 mm & above fusion jointed & below 50 mm mechanical jointed) including testing 90 mm dia	EACH	148	1		
168	PWD	PHED	2020	9.7	Providing butt fusion welded joint/joining by heating to the ends with the help of Teflon coated electric mirror/heater ends together etc. by thermosetting processes to HDPE Pipe and specials. (6 kg. 8 kg. 10 kg.) (50 mm & above fusion jointed & below 50 mm mechanical jointed) including testing 140 mm dia	EACH	209	2		
169	PWD	PHED	2020	18.23	Filling available excavated earth in trenches, lead up to 50m and lift up to 1.5m in all kind of soil excluding Watering and ramming.	CUM	50	273.97		
170	PWD	PWD BLD	2015	9.57.2	Providing stainless steel railing/ grill made of S.S. flats, hollow S.S. pipe or square/ rectangular sections of approved design fixing in stair case, balcony or other places with metal fasteners and stainless steel bolts etc complete. SS Grade 304	KG	525.0	40.0		
171	PWD	PWD BLD	2015	12.14.3	Supplying and fixing C.I. cover without frame for manholes :560 mm diameter C.I. cover (heavy duty) the weight of the cover to be not less than 108 kg.	EACH	5648.0	1.0		
172	NS				2 Nos. of submersible pump of capacity- 10 BHP, 25 M head & 845.84 LPM discharge.	EACH	125000.0	2.0		
173	PWD	ELECT	2020	6.28.5	Supplying, installation, testing and commissioning of following 230/250 volts LED street light fitting with all accessories like driver, heat sink made of die cast aluminium with IP 66 protection and 15 KV surge protection on pole bracket, including connection, earthing, Separate housing for driver etc complete as per specification and P.F. should be greater than 0.9. LED chip efficacy ratio ~ 120 lumens /watt. 36 watt	EACH	2359	14		
174	PWD	PHED	2020	14.2.1	Supplying and laying HDPE pipe of 4kg/Sqcm in ground below road, path etc at a depth not less than 40 cm and upto 90 cm including excavation, dismantling of road if required and refilling the trench with excavated material, ramming and making the surface good etc. as per specification.63 mm outer dia	METER	124	150		
175	PWD	PHED	2020	14.5.3	Supplying and fixing G.I. pipe along with wall or pole/ support with 2 Nos MS clamps for protection of under ground cable in approved manner including bolts and nuts or metal dash fasteners complete as per specification.50 mm dia	METER	403	70		
176	PWD	PHED	2020	15.13.4	15.13 Supplying and laying following sizes one number FRLS PVC insulated, PVC sheathed, steel armoured, copper conductor control / power cable of 1.1 KV grade in exiting PVC/ GI pipe etc as per specification and IS: 694 (2010).4 x 10 sq. mm	METRE	419	10		
177	PWD	PHED	2020	15.13.5	Supplying and laying following sizes one number FRLS PVC insulated, PVC sheathed, steel armoured, copper conductor control / power cable of 1.1 KV grade in exiting PVC/ GI pipe etc as per specification and IS: 694 (2010).4 x 16 sq. mm	METRE	534	50		
178	PWD	PHED	2020	15.13.6	Supplying and laying following sizes one number FRLS PVC insulated, PVC sheathed, steel armoured, copper conductor control / power cable of 1.1 KV grade in exiting PVC/ GI pipe etc as per specification and IS: 694 (2010).4 x 25 sq. mm	METRE	777	60		
179	PWD	PHED	2020	15.13.7	Supplying and laying following sizes one number FRLS PVC insulated, PVC sheathed, steel armoured, copper conductor control / power cable of 1.1 KV grade in exiting PVC/ GI pipe etc as per specification and IS: 694 (2010).4 x 35 sq. mm	METRE	1012	10		
180	PWD	PHED	2020	15.13.8	Supplying and laying following sizes one number FRLS PVC insulated, PVC sheathed, steel armoured, copper conductor control / power cable of 1.1 KV grade in exiting PVC/ GI pipe etc as per specification and IS: 694 (2010).4 x 50 sq. mm	METRE	1327	30		
181	PWD	PHED	2020	15.14.4	Supplying and laying following sizes one number FRLS PVC insulated, PVC sheathed, steel armoured, copper conductor control / power cable of 1.1 KV grade on surface / existing cable tray with 1 mm thick GI saddle as per specification and IS: 694 (2010).4 x 10 sq. mm	METRE	424	5		
182	PWD	PHED	2020	15.14.5	Supplying and laying following sizes one number FRLS PVC insulated, PVC sheathed, steel armoured, copper conductor control / power cable of 1.1 KV grade on surface / existing cable tray with 1 mm thick GI saddle as per specification and IS: 694 (2010).4 x 16 sq. mm	METRE	540	6		
183	PWD	PHED	2020	15.14.6	Supplying and laying following sizes one number FRLS PVC insulated, PVC sheathed, steel armoured, copper conductor control / power cable of 1.1 KV grade on surface / existing cable tray with 1 mm thick GI saddle as per specification and IS: 694 (2010).4 x 25 sq. mm	METRE	783	8		
184	PWD	PHED	2020	15.14.7	Supplying and laying following sizes one number FRLS PVC insulated, PVC sheathed, steel armoured, copper conductor control / power cable of 1.1 KV grade on surface / existing cable tray with 1 mm thick GI saddle as per specification and IS: 694 (2010).4 x 35 sq. mm	METRE	1018	7		
185	PWD	PHED	2020	15.14.8	Supplying and laying following sizes one number FRLS PVC insulated, PVC sheathed, steel armoured, copper conductor control / power cable of 1.1 KV grade on surface / existing cable tray with 1 mm thick GI saddle as per specification and IS: 694 (2010).4 x 50 sq. mm	METRE	1333	4		
186	PWD	PHED	2020	15.15.1	Supplying and laying following sizes one number FRLS PVC insulated, PVC sheathed, steel armoured, copper conductor control / power cable of 1.1 KV grade on surface / existing cable tray with 1 mm thick GI saddle as per specification and IS: 694 (2010)2 x 1.5 sq. mm.	METRE	106	100		
187	PWD	PHED	2020	15.24.21	Supplying and making end termination with brass compression gland and copper lugs for following size armoured copper conductor power cable of 1.1 KV grade as per specification.4 x 10 sq. mm	EACH	110	2		
188	PWD	PHED	2020	15.24.22	Supplying and making end termination with brass compression gland and copper lugs for following size armoured copper conductor power cable of 1.1 KV grade as per specification.4 x 16 sq. mm	EACH	114	3		
189	PWD	PHED	2020	15.24.23	Supplying and making end termination with brass compression gland and copper lugs for following size armoured copper conductor power cable of 1.1 KV grade as per specification.4 x 25 sq. mm	EACH	164	3		
190	PWD	PHED	2020	15.24.24	Supplying and making end termination with brass compression gland and copper lugs for following size armoured copper conductor power cable of 1.1 KV grade as per specification.4 x 35 sq. mm	EACH	196	2		
191	PWD	PHED	2020	19.1.2	Supply of "H" beam steel pole as per IS specifications in standard length for over head line work: "H" beam steel pole 152x152x7x12 mm standard weight 37.1 kg /metre	METER	2002	130		
192	PWD	PHED	2020	19.10.4	Erection of STEEL TUBULAR or "H" BEAM/ ISMB pole in cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) foundation and cement concrete collar of size 0.4 metre dia and 0.50 metre height from ground level including excavation and refilling etc. as per specification of length: 7 metre to 10 metre	EACH	2610	17		
193	PWD	PHED	2020	19.15	Supplying and fixing of 32mm dia x 2 metre long G.I pipe (light) bracket for mounting street light fittings of all types on poles including bending the pipe to the required shape, 2 Nos 40x3mm flat iron clamps with bolts and nuts including wiring with 1.5 sq. mm W.P./PVC wire etc. as per specification.	EACH	902	17		
194	PWD	PHED	2020	20.1.4	Supply and fixing following overhead line accessories Turn buckle (19/20mmx60mm)	EACH	247	5		
195	PWD	PHED	2020	20.1.5	Supply and fixing following overhead line accessories MV Strain insulator	EACH	33	6		
196	PWD	PHED	2020	20.1.6	Supply and fixing following overhead line accessories Bow tightener	EACH	163	5		

197	PWD	PHED	2020	20.1.7	Supply and fixing following overhead line accessories MV Shackle insulator 75x90mm with G.I. bolts and nuts	EACH	45	85		
198	PWD	PHED	2020	20.1.8	Supply and fixing following overhead line accessories MV Shackle insulator 100x110mm with G.I. bolts and nuts	EACH	74	10		
199	PWD	PHED	2020	20.1.11	Supply and fixing following overhead line accessories Bituminous cable compound	KG	55	10		
200	PWD	PHED	2020	20.2.1	Supplying and erection of stay set complete (galvanized) with 19/20mm dia x 1.8 metre long stay rod, anchor plate of size 300mm x 300mm x 6.4 mm,thimble stay clamps, turn buckle (19/20mm x 600mm), strain insulator and specified G.I. stay wire etc. in cement concrete 1:3:6 (1 cement : 3 coarsesand : 6 graded stone aggregate 40 mm nominal size) foundation including excavation and refilling etc. as per specification.With 7/4.00 mm dia G.I. stay wire	EACH	3255	5		
201	PWD	PHED	2020	20.2.2	Supplying and erection of stay set complete (galvanized) with 19/20mm dia x 1.8 metre long stay rod, anchor plate of size 300mm x 300mm x 6.4 mm,thimble stay clamps, turn buckle (19/20mm x 600mm), strain insulator and specified G.I. stay wire etc. in cement concrete 1:3:6 (1 cement : 3 coarsesand : 6 graded stone aggregate 40 mm nominal size) foundation including excavation and refilling etc. as per specification.With 7/4.00 mm dia G.I. stay wire With 7/3.15 mm dia G.I. stay wire	EACH	3277	2		
202	PWD	PHED	2020	20.6	Supplying and erection of angle/channel iron cross arms/ bracket/ other fitting of approved size and shape including drilling of holes for insulator pins, bolts and nuts etc as per specification.	KG	77	1000		
203	PWD	PHED	2020	20.9.2	Supplying and erection of angle iron 50x50x6.0 (4.5kg/m) cross arm for overhead line complete with clamps, bolts and nuts including drilling of holes for insulator pins, bolts and nuts etc as per specification. For 4 wire overhead line (1.15m long)		460	17		
204	PWD	PHED	2020	20.10.1	Supplying and erection of galvanized 'D' iron complete with shackle insulator, G.I. bolts and nuts, coach screw etc. as per specification. Shackle insulator size 75mm x 90mm	SET	267	10		
205	PWD	PHED	2020	20.10.2	Supplying and erection of galvanized 'D' iron complete with shackle insulator, G.I. bolts and nuts, coach screw etc. as per specification. Shackle insulator size Shackle insulator size 100mm x 110mm	SET	293	7		
206	PWD	PHED	2020	20.11.1	Supplying and erection of shackle insulator with G.I. bolts, nuts and straps etc. as per specification.Size 75mm x 90mm	EACH	148	10		
207	PWD	PHED	2020	20.11.2	Supplying and erection of shackle insulator with G.I. bolts, nuts and straps etc. as per specification.Size 100mm x 110mm	EACH	181	7		
208	PWD	PHED	2020	20.13	Erection of shackle / pin insulator etc. as per specification.	EACH	23	85		
209	PWD	PHED	2020	20.14.2	Supplying and erection of guard for existing overhead lines as per specification including split insulator as per specification. Hexagonal type	EACH	41	80		
210	PWD	PHED	2020	20.15.1	Supplying and fixing guard insulator or split insulator complete 25x25 mm	PAIR	68	80		
211	PWD	PHED	2020	20.15.2	Supplying and fixing guard insulator or split insulator complete 37x37 mm	PAIR	73	5		
212	PWD	PHED	2020	20.15.3	Supplying and fixing guard insulator or split insulator complete 50x50 mm	PAIR	77	5		
213	PWD	PHED	2020	20.3	Supplying and erection of G.I wire of size 8 SWG to 4 SWG including binding etc. as per specification.	KG	105	100		
214	PWD	PHED	2020	20.31.1	Supplying and erection standards all aluminium. conductor of approved make (confirming to IS 398-1961) of approved make at existing insulator at height upto 14m from ground level including stringing, binding with insulator, jointing wherever required, jumpering, tearing off connection etc complete etc. as per specification including clearing off obstacle if any:7/1.96mm dia	KM	17810	0.5		
215	PWD	PHED	2020	20.31.2	Supplying and erection standards all aluminium. conductor of approved make (confirming to IS 398-1961) of approved make at existing insulator at height upto 14m from ground level including stringing, binding with insulator, jointing wherever required, jumpering, tearing off connection etc complete etc. as per specification including clearing off obstacle if any: 7/2.44mm dia	KM	26894	0.1		
216	PWD	PHED	2020	20.31.3	Supplying and erection standards all aluminium. conductor of approved make (confirming to IS 398-1961) of approved make at existing insulator at height upto 14m from ground level including stringing, binding with insulator, jointing wherever required, jumpering, tearing off connection etc complete etc. as per specification including clearing off obstacle if any: 7/2.79mm dia	KM	35493	0.1		
217	PWD	PHED	2020	20.31.4	Supplying and erection standards all aluminium. conductor of approved make (confirming to IS 398-1961) of approved make at existing insulator at height upto 14m from ground level including stringing, binding with insulator, jointing wherever required, jumpering, tearing off connection etc complete etc. as per specification including clearing off obstacle if any: 7/3.40mm dia	KM	50448	1.5		
218	PWD	PHED	2020	20.33	Supplying and erection standards all aluminium. conductor of approved make (confirming to IS 398-1961) of approved make at existing insulator at height upto 14m from ground level including stringing, binding with insulator, jointing wherever required, jumpering, tearing off connection etc complete etc. as per specification including clearing off obstacle if any: 7/3.40mm dia	EACH	56	17		
219	NS				Transformer cabling and deposit work	EACH	300000	1		
220	PWD	PHED	2021	14.2	Rate for Elevated Service Reservoirs up to 12m staging 23.4 Cost of 50000 lit capacity	JOB	1263055	1		
221	PWD	PHED	2021	14.15	Below mentioned rates are for foundations, with individual footing with bearing capacity of 20 t/sqm. However, for raft foundations, these rates shall be increased by:- (ii) 7.5 % where SBC is more than 5 t/sqm and up to 10 t/sqm,		94729.125	1		
222	PWD	PHED	2021	14.17	The rates are applicable for staging height of 12 m. These rates shall be increased or decreased for per metre variation in this staging height as below:- (ii) More than 12 m to 15 m staging - 6 % per metre		75783.3	1		
						TOTAL AMOUNT				0.00

PACKAGE - C										
SERIAL No.	Department	SOR	Year	ITEM CODE	DESCRIPTION	UNIT	SOR RATE	TOTAL QTY.	Rate Quoted by Bidder	Total Amount Non Editable
1	PWD	PWD BLD	2015	1.1.1	Excavation for all types and sizes of foundations, trenches and drains or for any other purpose including disposal of excavated stuff upto 1.5 m lift and lead upto 50m (at least 5m away from the excavated area), including dressing and leveling of pits. 1.1.1) In all types of soil	CUM	185	268.3818		
2	PWD	PWD BLD	2015	1.2	Surface dressing of the ground including removing vegetation and making up undulations and in-equalities not exceeding 15 cms in depth/ height including disposal of rubbish upto 1.5 m lift and lead upto 50m (at least 5m away from the dressed area).	SQM	7.2	1974		
3	PWD	PWD BLD	2015	1.6.1	Extra for every additional lift of 1.5M or part there of. 1.6.1 All types of soil	CUM	26.5	65.7196		
4	PWD	PWD BLD	2015	1.17	Filling from available excavated stuff (excluding rock) in trenches, plinth, sides of foundation etc. in layers not exceeding 20 cm in depth consolidating each deposited layer by ramming and watering with a lead upto 50 m. and lift upto 1.5 M.	CUM	65	0		
5	PWD	PWD BLD	2015	1.18	Providing and filling in plinth with sand /crusher dust and hard moorum under floor in layers not exceeding 20 cm in depth and consolidating each deposited layer by ramming and watering, including dressing etc. complete.	CUM	371	511.35064		
6	PWD	PWD BLD	2015	1.25.1	Diluting chemical emulsion (chlorpyrifos/ lindane) in water as per manufacturers recommendation and injecting for pre-constructional curative cum preventive anti-termite treatment:(Five year service guarantee bond to be signed by contractor) Surface treatment by spreading emulsion under floor, over the plinth area before laying base concrete @ 5 litres / sqm	SQM	27.5	965.5316		
7	PWD	PWD BLD	2015	1.25.3	Treatment of outer side of plinth masonry wall using diluted chemical emulsion @ 1.5 litre per hole, including drilling 12 mm diameter holes in plinth wall at the junction of floor at the interval of 300 mm and plugging with cement mortar 1 : 2 (1 cement : 2 Coarse sand).	METER	13.5	140		
8	PWD	PWD BLD	2015	2.1.1	Providing and fixing formwork including centering, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for: Foundations, footings, bases of columns plinth beam, curtain wall in any shape and size and all type of wall below plinth level.	SQM	139	338.736		

9	PWD	PWD BLD	2015	2.1.5	Providing and fixing formwork including centering, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for: Columns, Pillars, Piers and likes- rectangular or square in shape	SQM	297	218.4		
10	PWD	PWD BLD	2015	2.1.7	Providing and fixing formwork including centering, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for: Suspended floors, roofs, access platform, balconies (plain surfaces) and shelves (cast in situ)	SQM	235	713.3		
11	PWD	PWD BLD	2015	2.1.8	Providing and fixing formwork including centering, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for: Beams, Intels, Cantilevers & Walls.	SQM	202	453.0714		
12	PWD	PWD BLD	2015	2.1.13	Providing and fixing formwork including centering, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for: Weather shade, chhajja, Cornices and mouldings	SQM	294	45.945		
13	PWD	PWD BLD	2015	2.1.13	Providing and fixing formwork including centering, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for: Weather shade, chhajja, Cornices and mouldings	SQM	230	18.84		
14	PWD	PWD BLD	2015	3.1.3	Providing and laying nominal mix plain cement concrete with crushed stone aggregate using concrete mixer in foundation, plinth and at ground level excluding cost of form work.	CUM	2970	13.39839		
15	PWD	PWD BLD	2015	3.2	Providing and laying nominal mix reinforced cement concrete with crushed stone aggregate using concrete mixer in all works upto plinth level excluding cost of form work.	CUM	4298	72.39802		
16	PWD	PWD BLD	2015	3.4	Extra for laying PCC/RCC of any grade in superstructure above plinth level for every floor or part thereof in addition to rate for foundation and plinth: ground floor	CUM	4395.5	168.80534		
17	PWD	PWD BLD	2015	3.12.1	Providing and placing in position reinforcement for R.C.C. work including straightening, cutting, bending, binding etc. complete as per drawings including cost of binding wire all complete: Thermo-Mechanically treated bars FE 415	KG	54.5	18873.14585		
18	PWD	PWD BLD	2015	3.13	Providing and laying damp proof course (upto 50mm thick) with plain cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded crushed stone aggregate 20mm nominal size) including formwork.	CUM	4237	2.99		
19	PWD	PWD BLD	2015	3.15	Applying a coat of hot bitumen VG-10 using @ 1.7kg/ sqm on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.	SQM	93.5	59.8		
20	PWD	PWD BLD	2015	3.16	Making 50mm thick plinth protection of plain cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded crushed stone aggregate 20mm nominal size) over 75mm bed of dry brick ballast 40mm nominal size well rammed and consolidated and grouted with sand including finishing the top smooth.	SQM	273	91.8		
21	PWD	PWD BLD	2015	7.5.4	Brick work with modular fly-ash lime bricks (FALG Bricks) conforming to IS:12894-2002 of class designation 40 in foundation and plinth in:7.5.4 Cement Mortar 1:6 (1 cement : 6 coarse sand)	CUM	3263	177.967899		
22	PWD	PWD BLD	2015	7.6.	Extra for brick work in superstructure Above plinth level for every floor or part thereof in addition to rate for foundation and plinth:	CUM	3384	188.9059		
23	PWD	PWD BLD	2015	11.2	Providing and making 12mm.thick cement plaster of mix : In Cement Mortar 1:4(1 Cement :4 fine Sand)	SQM	103	968.69		
24	PWD	PWD BLD	2015	11.3	Providing and making 15mm.thick cement plaster on the rough side of single or half brickwall of mix. 1:1.3:4.) In Cement Mortar 1:4 (1 cement : 4 fine sand)	SQM	120	555.3		
25	PWD	PWD BLD	2015	11.9	Extra for providing and mixing water proofing materials in cement plaster work in proportion as recommended by manufacturer	KG	43.5	586.3		
26	PWD	PWD BLD	2015	12.2	25mm thick cement concrete flooring with 1:2:4 cement concrete (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5 mm nominalsize) finished with floating coat of neat cement.	SQM	165	675		
27	PWD	PWD BLD	2015	12.6.1	Cement plaster skirting upto 30 cm. height with cement mortar 1:3 (1 cement : 3 fine sand) finished with a floating coat of neat cement	SQM	200	21.6		
28	PWD	PWD BLD	2015	9.2	including rounding of junction with floor.18 mm thick in two layers of 12mm and 6mm					
29	PWD	PWD BLD	2015	9.15	Structural steel work riveted or bolted or welded in built-up sections, trusses and frames work upto a height of 5m above plinth level, including cutting, hoisting, fixing in position and applying a priming coat of red oxide zinc chromate primer.	KG	66.0	9137.6		
30	PWD	PWD BLD	2015	9.27.1	Providing and fixing M.S. grill of approved pattern made of M.S. flats or square or round bars welded to steel frame of windows etc. including applying a priming coat welded to frame with all necessary fitting complete including applying a priming of red oxide zinc chromate primer.	KG	68.0	468.0		
31	PWD	PWD BLD	2015	9.28	Supplying and fixing rolling shutter of approved makes made of M.S. laths interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and out side locking with push and pull arrangement complete but excluding the cost of top cover and spring.80x1.25mm M.S. Laths	SQM	1691.0	21.6		
32	PWD	PWD BLD	2015	9.29	Providing and fixing 27.5cm long wire spring for rolling shutters.	EACH	362.0	4.0		
33	PWD	PWD BLD	2015	9.3	Providing and fixing M.S. sheet top cover for rolling shutter	SQM	540.0	4.0		
34	PWD	PWD BLD	2015	9.31	Providing and fixing ball bearing for rolling shutters.	EACH	423.0	8.0		
35	PWD	PWD BLD	2015	9.47.2	Providing and fixing mechanical device chain and crank operation for operating rolling shutters.	SET	5672.0	4.0		
36	PWD	PWD BLD	2015	9.51.2	Providing and fixing aluminium work for doors, windows, ventilators and partitions made out of extruded aluminium standard sections (main section with minimum 1.5mm thickness) conforming to IS: 733, IS: 1285 mitred and jointed mechanically including aluminium cleats, neoprene weather stripping gasket beveled edge beading, screws duly fixed in wall/ floor with fixing clips or hold fasteners or bolts and nuts as required aluminium sections shall be anodized transparent or dyed to approved shade according to IS: 1868, minimum anodic coating shall be of grade AC-15. (Glazing to be paid for separately:For shutter of doors, windows & ventilators including providing and making provision for fixing of fitting wherever required including the cost of PVC/ neoprene gasket required (Fittings shall be paid for separately).	KG	338.0	185.8		
37	PWD	PWD BLD	2015	14.12	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with PVC/ neoprene gasket etc. complete. (Cost of aluminium snap beading shall be paid in basic item):With float glass panes of 5 mm thickness	SQM	708.0	33.6		
38	PWD	PWD BLD	2015	14.1.1	Applying one coat of cement primer on wall surface (applied @ 0.80 ltrs/10 sqm) complete.	SQM	23.0	1524.0		
39	PWD	PWD BLD	2015	14.15.1	Wall painting with acrylic premium emulsion (plastic) paint of required shade to give an even shade.On new work (two or more coats)	SQM	44.5	968.7		
40	PWD	PWD BLD	2015	14.22.2	Painting exterior surface with ACRYLIC SMOOTH exterior paint of required shade as per manufacturer's specifications to give protective and decorative finish including cleaning washing of surface etc. complete with:On new work (Two or more coats applied @ 1.43 ltr/ 10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/ 10 sqm)	SQM	56.0	555.3		
41	PWD	PWD BLD	2015	10.12	Painting on new work (two or more coats) to give an even shade with: Premium synthetic enamel paint	SQM	47.0	897.4		
42	PWD	PWD BLD	2015	10.16.1	Supply and fixing of polymer precoated galvalume profile sheets (PPGL) of approved size, shape and pitch of corrugation, total coated thickness (TCT) 0.60 mm +/- 5%, epoxy primer on both side of the sheet and colour polyester top coat 18-20 microns and 6-7 microns on bottom. Sheet should have protective guard film of 25 microns minimum to avoid scratches while transportation and should be supplied in single length upto 12 metre or as desired by Engineer-in-charge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55mm) with EPDM seal or with polymer coated J or L hooks, bolts and nuts 8mm diameter with bitumen and G.I. limpet washers or with G.I. limpet washers filled with white lead complete upto any pitch in horizontal/ vertical or curved surfaces excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.	SQM	693.0	787.5		
43	PWD	PWD BLD	2015	10.16.2	Providing and fixing precoated galvanised steel sheet roofing accessories 0.50 mm +/- 5% total coated thickness (TCT), Zinc coating 120gsm as per IS: 277 in 240mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns using self drilling/ self tapping screws or with polymer coated J or L hooks, bolts and nuts and or G.I. seam bolts and nuts. G.I. plain and bitumen washers complete.Ridges plain (500-600mm)	METRE	552.0	155.0		
44	PWD	PWD BLD	2015	10.16.6	Flashings/ Aprons. (Upto 600 mm)	METRE	539.0	155.0		
45	PWD	PWD BLD	2015	10.16.6	Gutter. (600 mm over all girth).	METRE	629.0	155.0		

45	NS				<p>Supply, installation, testing and commissioning of Roof Air Ventilator of 1100CFM at 2 m/s wind velocity etc. complete as required as per technical specification including all taxes and duties , loading, unloading, transportation, insurance to project site at CSIDC Jamgaon-M, Durg District.</p> <p>ROOF AIR VENTILATOR</p> <p>Base Ring MOC- SS 304 (min 0.5mm thickness) Top Plate MOC- SS 304 (min 0.5mm thickness) Vanes MOC- Aluminium Alloy (Min 0.45mm thickness) Rotation - Pivot Mechanism (EN 8 grade) Centre Shaft- M.S. with electro zinc plating Centre pipe - M.S. with powder coat. Rubber Seal- Black nylon (M28RC grade) Dusting cap- U type (for dust free operation) Inner Arm- M.S. sheet with powder coated min 2mm thick Outer Arm- M.S., Rod with Electro zinc plating</p> <p>Ventilators to be made out of good quality aluminum and stainless steel gr.304, inside structure is mild steel painted, with Teflon bush for friction free smooth movement. Fibre Glass Reinforced Plastic (FRP) Base plate of transparent/ivory shade Thickness- 1.5 mm Shade - As per architect's requirement</p> <p>Exhaust Rate: 1100 CFM (minimum) at 2 m/s wind velocity.</p> <p>Ventilators to be made out of good quality aluminum and stainless steel gr.304, inside structure is mild steel painted, with Teflon bush for friction free smooth movement. Contractor to consider high roof heights (15 meter minimum) where turbofans are to be installed.</p>	EACH	5900	4		
46	PWD	ELECT	2020	1.7.1	Wiring for light/ fan/ exhaust fan / call bell point with 3x1.5 Sqmm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) with 5/6 amp modular switch, modular base and cover plate, suitable size G.I. box as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5) Short Point	P	266.00	10.00		
47	PWD	ELECT	2020	1.7.2	Wiring for light/ fan/ exhaust fan / call bell point with 3x1.5 Sqmm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) with 5/6 amp modular switch, modular base and cover plate, suitable size G.I. box as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5) Medium Point	P	424.00	16.00		
48	PWD	ELECT	2020	1.7.3	Wiring for light/ fan/ exhaust fan / call bell point with 3x1.5 Sqmm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) with 5/6 amp modular switch, modular base and cover plate, suitable size G.I. box as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5) Long Point	P	588.00	622.00		
49	PWD	ELECT	2020	1.9	Extra for providing and fixing light plug point on board in concealed FRLSPVC conduit (heavy duty, thickness of pipe should be 2 mm) point wiring with modular type 3 pin 5/6 amp socket outlet and 5/6 amp switch including cost of base and cover plate and G. I. box etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5)	P	216.00	25.00		
50	PWD	ELECT	2020	1.10.1	Wiring for light plug point with 3x2.5 sq mm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with modular type 6 Amp switch and 3 pin 6 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size wire etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5) Short Point	P	442.00	1.00		
51	PWD	ELECT	2020	1.10.2	Wiring for light plug point with 3x2.5 sq mm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with modular type 6 Amp switch and 3 pin 6 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size wire etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5) Medium Point	P	659.00	1.00		
52	PWD	ELECT	2020	1.10.3	Wiring for light plug point with 3x2.5 sq mm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with modular type 6 Amp switch and 3 pin 6 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size wire etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5) Long Point	P	922.00	4.00		
53	PWD	ELECT	2020	1.10.4	Wiring for light plug point with 3x2.5 sq mm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with modular type 6 Amp switch and 3 pin 6 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size wire etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5) Extra Long Point I	P	1302.00	1.00		
54	PWD	ELECT	2020	1.10.5	Wiring for light plug point with 3x2.5 sq mm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with modular type 6 Amp switch and 3 pin 6 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size wire etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5) Extra Long Point II	P	1657.00	1.00		
55	PWD	ELECT	2020	1.10.6	Wiring for light plug point with 3x2.5 sq mm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with modular type 6 Amp switch and 3 pin 6 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size wire etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5) Extra Long Point III	P	1995.00	1.00		
56	PWD	ELECT	2020	1.11.1	Wiring for power plug point with 3x4 sq mm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with modular type 16 Amp switch and 6 pin 16 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size wire etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5) Short Point	P	589.00	1.00		
57	PWD	ELECT	2020	1.11.2	Wiring for power plug point with 3x4 sq mm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with modular type 16 Amp switch and 6 pin 16 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size wire etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5) Medium Point	P	942.00	1.00		
58	PWD	ELECT	2020	1.11.3	Wiring for power plug point with 3x4 sq mm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with modular type 16 Amp switch and 6 pin 16 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size wire etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5) Long Point	P	1350.00	1.00		
59	PWD	ELECT	2020	1.11.4	Wiring for power plug point with 3x4 sq mm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with modular type 16 Amp switch and 6 pin 16 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size wire etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5) Extra Long Point I	P	1807.00	1.00		
60	PWD	ELECT	2020	1.11.5	Wiring for power plug point with 3x4 sq mm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with modular type 16 Amp switch and 6 pin 16 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size wire etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5) Extra Long Point II	P	2315.00	1.00		
61	PWD	ELECT	2020	1.11.6	Wiring for power plug point with 3x4 sq mm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with modular type 16 Amp switch and 6 pin 16 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size wire etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5) Extra Long Point III	P	2825.00	1.00		

62	PWD	ELECT	2020	1.12.1	Wiring for power plug point with 3x6 sq mm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with modular type 32 Amp SPMCB "C" curve and 6 pin 20 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size wire etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5) Short Point	P	709.00	1.00		
63	PWD	ELECT	2020	1.12.2	Wiring for power plug point with 3x6 sq mm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with modular type 32 Amp SPMCB "C" curve and 6 pin 20 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size wire etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5) MEDIUM POINT	P	1171.00	1.00		
64	PWD	ELECT	2020	1.12.3	Wiring for power plug point with 3x6 sq mm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with modular type 32 Amp SPMCB "C" curve and 6 pin 20 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size wire etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5) long point	P	1705.00	1.00		
65	PWD	ELECT	2020	1.12.4	Wiring for power plug point with 3x6 sq mm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with modular type 32 Amp SPMCB "C" curve and 6 pin 20 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size wire etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5) extra long point I	P	2326.00	1.00		
66	PWD	ELECT	2020	1.12.5	Wiring for power plug point with 3x6 sq mm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with modular type 32 Amp SPMCB "C" curve and 6 pin 20 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size wire etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5) extra long point II	P	3016.00	1.00		
67	PWD	ELECT	2020	1.12.6	Wiring for power plug point with 3x6 sq mm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with modular type 32 Amp SPMCB "C" curve and 6 pin 20 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size wire etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5) extra long point III	P	3708.00	1.00		
68	PWD	ELECT	2020	1.13.1	Wiring for circuit/ sub main wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, wire in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5) 3 X 1.5 sq. mm in 20mm conduit	METRE	92.00	64.00		
69	PWD	ELECT	2020	1.13.2	Wiring for circuit/ sub main wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, wire in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5) 3 X 2.5 sq. mm in 20mm conduit	METRE	111.00	102.00		
70	PWD	ELECT	2020	1.13.3	Wiring for circuit/ sub main wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, wire in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5) 6 X 2.5 sq. mm in 25mm conduit	METRE	172.00	25.00		
71	PWD	ELECT	2020	1.13.4	Wiring for circuit/ sub main wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, wire in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5) 9 X 2.5 sq. mm in 32mm conduit	METRE	238.00	10.00		
72	PWD	ELECT	2020	1.14	Extra cost for point wiring in concealed in FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) at height above 4 meters from floor level for every 2 metres or part thereof, and IS: 694 (2010), IS: 9537 (2000 Part 5)	P	10.00	15.00		
73	PWD	ELECT	2020	1.15.1	Supplying and fixing of following sizes FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with accessories in concealed complete as per specification and IS: 9537 (2000 Part 5) 20 mm	METRE	42.00	15.00		
74	PWD	ELECT	2020	1.15.2	Supplying and fixing of following sizes FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with accessories in concealed complete as per specification and IS: 9537 (2000 Part 5) 25mm	METRE	53.00	15.00		
75	PWD	ELECT	2020	5.4.1	Supplying and fixing following modular switch, socket, other accessories on the existing modular plate & switch box including connections but excluding modular plate etc. as per specification. 5/6 amps one way switch	EACH	69.00	6.00		
76	PWD	ELECT	2020	5.4.4	Supplying and fixing following modular switch, socket, other accessories on the existing modular plate & switch box including connections but excluding modular plate etc. as per specification. 15/16 amp switch	EACH	89.00	3.00		
77	PWD	ELECT	2020	5.4.5	Supplying and fixing following modular switch, socket, other accessories on the existing modular plate & switch box including connections but excluding modular plate etc. as per specification. 3 pin 5/6 amp socket outlet	EACH	96.00	3.00		
78	PWD	ELECT	2020	5.4.6	Supplying and fixing following modular switch, socket, other accessories on the existing modular plate & switch box including connections but excluding modular plate etc. as per specification. 6 pin 15/16 amp socket outlet	EACH	120.00	2.00		
79	PWD	ELECT	2020	5.4.7	Supplying and fixing following modular switch, socket, other accessories on the existing modular plate & switch box including connections but excluding modular plate etc. as per specification. 6 pin 20 amp socket outlet	EACH	144.00	1.00		
80	PWD	ELECT	2020	5.4.9	Supplying and fixing following modular switch, socket, other accessories on the existing modular plate & switch box including connections but excluding modular plate etc. as per specification. Fan regulator (two module size) electronic stepped type moving all rounds	EACH	223.00	14.00		
81	PWD	ELECT	2020	6.1.4	Supplying, installation, testing and commissioning of following sizes ceiling fan including wiring the down rods of standard length up to 30 cm with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable, earthing etc. complete as required. P.F. should be greater than 0.9, with BEE Star rating from 3 star and above, IS: 374:2019 including all amendments. 1400 mm sweep	EACH	1773.00	14.00		
82	PWD	ELECT	2020	6.6.3	Supplying, installation, testing and commissioning of following sizes heavy duty (continuous running) 1400 rpm exhaust fan in existing opening in wall including earthing etc. complete as per specification. P.F. should be greater than 0.9 450 mm sweep	EACH	3976.00	14.00		
83	PWD	ELECT	2020	6.11.2	Supplying and fixing following sizes of down rod of 15/20mm dia M.S. pipe of thickness 2 mm to ceiling fan including painting with matching colour etc. as per specification. 60 cm long	EACH	40.00	14.00		
84	PWD	ELECT	2020	6.17.6	Supplying, fixing, testing and commissioning of following LED lamps with inbuilt electronic driver heat sink and all other accessories in existing holder/ luminaries as per specification and P.F. should be greater than 0.9 LED chip efficacy ratio * 100 lumens /watt. 15 Watt	EACH	249.00	3.00		
85	PWD	ELECT	2020	6.19.3	Supplying, installation, testing and commissioning of following LED tube light fitting including batten with Electronic Driver Heat sink Capacitor complete with all other accessories on surface/ in false ceiling, including connection, earthing etc. complete as per specification and IP20, P.F. should be greater than 0.9 LED chip efficacy ratio * 100 lumens /watt. 18/20 watt (4 feet)	EACH	443.00	44.00		
86	PWD	ELECT	2020	6.27.1	Supplying, installation, testing and commissioning of following LED Bulk Head fitting complete with Electronic Driver Heat sink Capacitor and all other accessories, including connection, earthing etc. complete as per specification and P.F. should be greater than 0.9 LED chip efficacy ratio * 100 lumens /watt. IP65	EACH	1140.00	3.00		
87	PWD	ELECT	2020	6.29.2	Supplying of following 230/250 volts LED Flood light fitting with all accessories like driver, heat sink made of die cast aluminium with IP 66 protection and 15 KV surge protection on pole bracket, including connection, earthing. Separate housing for driver etc. complete as per specification and P.F. should be greater than 0.9 LED chip efficacy ratio n 120 lumens /watt.	EACH	2855.00	21.00		
88	PWD	ELECT	2020	9.1.4	Providing and fixing following rating and breaking capacity MCCB in existing cubicle panel board including drilling holes in cubicle panel, making connections, etc. as per specification, IS/ IEC: 60947-2 and Ics = 100 % Icu. 3 pole MCCB, 100A, Adjustable Thermal - Magnetic Release, 25KA	EACH	3734.00	1.00		
89	PWD	ELECT	2020	9.6.6	Supplying and fixing on surface/ recess vertical type following way, 415 volts, TPN MCB distribution board of sheet steel phosphatized and powder painted, with 200 amps tinned copper busbar, common neutral link, earth bar, din bar, detachable gland/ knock out plate, provision for 63/100 amp MCCB as incomer including interconnection between incomer MCCB and busbars, earthing etc. as per specification. (But without MCCB and MCB) (Note : Vertical type MCB TPDB is normally used where 3 phase outlets are required.) 9.6.6 12 way (4 + 36), Double door with provision for 100 amps MCCB as incomer	EACH	6805.00	1.00		

90	PWD	ELECT	2020	9.11.2	Supplying and fixing SP MCB, 240 volts, 'C' curve, suitable for inductive load in the existing MCB DB complete with connections, testing and commissioning etc. as per specification. 6 amps to 32 amps	EACH	148.00	14.00		
91	PWD	ELECT	2020	12.19.1	Providing maintenance free earthing with following size GI pipe including making bore pit of minimum 150mm dia, providing and laying approved make Earthing Electrode of Pipe-in-Pipe technology as per IS 3043(R 2016) -1987 made of corrosion free G.I. Pipes having outer pipe of 80mm dia and inner pipe of 50mm dia and filling with specified qty highly conductive compound around pipe and above that with soft soil in bore pit complete and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. as per specification: With 3 metre long GI Pipes and 50 kg back filling compound.	EACH	10955	2		
92	PWD	PWD BLD	2015	19.4.6	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge. INTERNAL WORK - EXPOSED ON WALL 50mm nominal outer dia Pipes	METRE	560	138		
93	PWD	PWD BLD	2015	19.4.2	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge. INTERNAL WORK - EXPOSED ON WALL 20mm nominal outer dia Pipes	METRE	151	110		
94	PWD	PWD BLD	2015	19.4.1	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge. INTERNAL WORK - EXPOSED ON WALL 15mm nominal outer dia Pipes	METRE	110	106		
95	PWD	PWD BLD	2015	19.14.3	Providing and fixing 15 mm nominal bore C.P. brass fittings of approved make and conforming to IS:8931 including C.P. brass extension if required: Long body bib cock (500 grams)	NOS	426	6		
96	PWD	PWD BLD	2015	19.17.2	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete : 20 mm nominal bore	EACH	394	7		
97	PWD	PWD BLD	2015	18.76.1	Providing and fixing on wall face or under floor UV stabilized Unplasticised Rigid PVC pipes (single socketed) having 3.2mm wall thickness conforming to IS : 13592 (4kg/sqcm) including required couplers, jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion etc complete. 75mm dia pipe	METER	182	52		
98	PWD	PWD BLD	2015	18.76.2	Providing and fixing on wall face or under floor UV stabilized Unplasticised Rigid PVC pipes (single socketed) having 3.2mm wall thickness conforming to IS : 13592 (4kg/sqcm) including required couplers, jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion etc complete. 110mm dia pipe	METER	267	138		
99	PWD	PWD BLD	2015	18.76.3	Providing and fixing on wall face or under floor UV stabilized Unplasticised Rigid PVC pipes (single socketed) having 3.2mm wall thickness conforming to IS : 13592 (4kg/sqcm) including required couplers, jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion etc complete. 150mm dia	METER	440	130		
100	PWD	PWD BLD	2015	18.77.1.1	Providing and fixing on wall face UV stabilized Unplasticised - PVC moulded fittings/ accessories having 3.2mm wall thickness for Rigid PVC pipes conforming to IS : 13592 (heavy) jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion. Tee/ Tee with door/ Bend 45°/ Bend 90° 75mm	EACH	113	54		
101	PWD	PWD BLD	2015	18.77.1.1	Providing and fixing on wall face UV stabilized Unplasticised - PVC moulded fittings/ accessories having 3.2mm wall thickness for Rigid PVC pipes conforming to IS : 13592 (heavy) jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion. Tee/ Tee with door/ Bend 45°/ Bend 90°, 110 mm	EACH	154	65		
102	PWD	PWD BLD	2015	18.77.1.1	Providing and fixing on wall face UV stabilized Unplasticised - PVC moulded fittings/ accessories having 3.2mm wall thickness for Rigid PVC pipes conforming to IS : 13592 (heavy) jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion. Tee/ Tee with door/ Bend 45°/ Bend 90°, 150 mm	EACH	273	44		
103	PWD	PWD BLD	2015	18.77.6	Providing and fixing on wall face UV stabilized Unplasticised - PVC moulded fittings/ accessories having 3.2mm wall thickness for Rigid PVC pipes conforming to IS : 13592 (heavy) jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion. Nahani trap 110x75mm	EACH	90.5	22		
104	PWD	PWD BLD	2015	11.9	Extra for providing and mixing water proofing materials in cement plaster work in proportion as recommended by manufacturer 6mm plaster		43.5	175.695172		
105	PWD	ELECT	2015	6.1.2	Supplying, installation, testing and commissioning of following sizes ceiling fan including wiring the down rods of standard length up to 30 cm with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable, earthing etc. complete as required. P.F. should be greater than 0.9, with BEE Star rating from 3 star and above, IS: 374:2019 including all amendments.	EACH	1656	2		
106	PWD	ELECT	2015	6.1.3	Supplying, installation, testing and commissioning of following sizes ceiling fan including wiring the down rods of standard length up to 30 cm with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable, earthing etc. complete as required. P.F. should be greater than 0.9, with BEE Star rating from 3 star and above, IS: 374:2019 including all amendments.	EACH	1697	1		
107	PWD	ELECT	2020	1.13.1	Wiring for circuit/ sub main wiring along with earth wire with the following sizes of FR PVC insulated copper conductor, single core cable in concealed steel conduit as required. 3 X 2.5 sq. mm in 20mm conduit	EACH	110	22		
108	PWD	ELECT	2020	6.19.4	Supplying installation testing and commissioning of following led tube light fitting including better with electronic driver heat sink capacitor complete with all other accessories on surface in fall ceiling including connections earthing et	EACH	718	2		
109	PWD	ELECT	2020		3 Pole MCCB, 100 A, Adjustable Thermal - Magnetic Release, 25 KA	EACH	3734	2		
110	PWD	PWD BLD	2015	12.9	Providing and laying ceramic glazed floor tiles conforming to IS : 15622 of approved size, make, colour, shade laid on 20 mm thick Cement Mortar 1:4 (1 cement : 4 coarse sand) including pointing the joints with white cement mixed with matching pigment etc. complete.	SQM	692	48.5		
111	PWD	ELECT	2020	6.5.2	Supplying and fixing of wall cabin fan including connections etc as per specifications of sholud be greater than 0	EACH	2040	10		
112	PWD	ELECT	2020		Supplying installation testing and commissioning of following led tube light fitting including better with electronic driver heat sink capacitor complete with all other accessories on surface in fall ceiling including connections earthing et	EACH	718	8		
113	PWD	PWD BLD	2015	18.1.4	Providing and fixing water closet squatting pan (Indian type W.C. pan), 100mm sand cast Iron P or S trap, 10 litre low level P.V.C. flushing cistern (same colour) conforming to IS : 7231, with flush bend and other fittings and fixtures complete including cutting and making good the walls and floors wherever required :	EACH	3545	5		
114	PWD	PWD BLD	2015	18.13	Providing and fixing white vitreous china urinal basin with waste fitting as per IS : 2556, and other couplings in C.P. brass complete:	EACH	1776	3		
115	PWD	PWD BLD	2015	18.14.1	Flat back half stall urinal of size 460x380x250mm	EACH	1183	2		
116	PWD	PWD BLD	2015	18.2	Providing and fixing white vitreous china WASH basin with waste fitting as per IS : 2556, and other couplings in C.P. brass complete:	EACH	4095	5		
117	PWD	RES	2015	20.14.1	Supplying and fixing C.I. cover without frame for manholes : 455x610 mm rectangular C.I. cover (light duty) the weight of the cover to be not less than 23 kg. (SOR I/20.14.1, P/192)	EACH	1222	3		
118	PWD	RES	2015	20.14.3	Supplying and fixing C.I. cover without frame for manholes : 560 mm diameter C.I. cover (heavy duty) the weight of the cover to be not less than 108 kg. (SOR I/20.14.3, P/192)	EACH	5648	3		
119	PWD	RES	2015	1.19	Providing filling and compacting local earth (from approved source pit) in layers not exceeding 20cm in depth consolidating each deposited layer by ramming and watering, including dressing etc. complete.	CUM	242	6.91488		
							TOTAL AMOUNT		0.00	

SCHEDULE– D
Section-II
Scope of work

WORKS REQUIREMENT

This section contains the brief idea of scope of work, supplementary information, drawings etc. regarding the work to be executed under instant tender and may vary as per site requirement. In case of any change the decision of Officer-in-Charge will be final and binding to the contractor. The work however shall be executed as per BOQ, working drawings and technical specifications.

A. GENERAL REQUIREMENTS APPLICABLE FOR ALL SCOPES OF WORK

1. **WORKING DRAWINGS :** The Contractor shall at all times maintain on site, in good order and condition, a complete set of all drawings duly laminated and documents necessary for the proper execution and checking of the Works. These drawings and documents shall be made available on request to the Officer-in-Charge or other authorized persons on site. Any amendment shall be indicated on the drawing, dated and signed by the Authorized person in charge, with reasons stated if possible.
2. **AS-BUILT DRAWINGS:** The Contractor shall supply four hard copies & a soft-copy of the approved built-up drawings on completion of work. The cost of preparing all such items of work shall be deemed to have been included in the respective rates/ prices quoted by the Contractor in the "Bill of Quantities.
3. **SHOP DRAWINGS:** The contractor shall also provide shop drawings for various sub-parts of the tender for approval by the Officer- in-Charge. Areas of detailing shall include (but will not be limited to) MEP / ELV and Landscaping Works. The shop drawings shall be conformance to the actual site conditions.
4. **SAMPLES:** The contractor shall submit to the Officer in Charge samples of all materials for approval and no work shall commence before such samples are duly approved. The cost of the samples shall be borne by the contractor.
5. **TESTS:** The entire mandatory test shall be carried out at the frequency as mentioned in the relevant Indian Standards or equivalent standards/ code of practices. All materials and methods of tests shall conform to the latest rules, regulation and/or individual specifications as laid out in the technical specifications. The Officer-in-Charge will have the option to have any of the materials tested and if the test results show that the materials do not conform to the specifications, such materials shall be rejected. A reasonable number of representative tests will be deemed to be included in the rates tendered.
6. **SITE CLEANING:** Upon completion of the scope of the work all the areas should be cleaned. All floors, doors, windows, surface, etc. shall be cleaned down in a manner which will render the work acceptable to the Officer in Charge and employer. All rubbish due to any reason, shall be removed daily from the site at the cost of the contractor and all such costs are deemed to have been included in the price quoted by the contractor.
7. **MAINTENANCE IN DEFECT LIABILITY PERIOD:** The Contractor shall be obliged to remove / repair / replace/ the defects for the entire system during defect liability period (DLP) of twenty four (24) months after the final official hand over date of the civil work/other installation, duly approved by the Officer-in-Charge, consultants and project managers. This period shall include maintenance replacement of parts, regular periodic visit by qualified personnel of the Contractor and attending to emergency call at short notice.
8. **WARRANTIES/GAURANTEES-** The contractor shall also make available to CSIDC all the warranties/guarantees by the respective manufacturers for all material and equipment installed in the

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project along with the user/training manuals, test reports, contact details etc. as along with the built-up drawings of the project upon completion of project.

9. Maintaining the work in finished condition against defects for a minimum of specified defect liability from the date of commissioning and imparting training to the workers/staff as asked for maintaining the work as per IS requirement and exercising.
10. Items not covered under these specifications due to any ambiguity or misprints, or additional works, the work shall be carried out as per specifications or the latest N.B.C. manual up to date amendments as applicable in the work.
11. The contractor shall be responsible for making good the wall/slab/beam/column chases and cut-outs wherever provided on account of plumbing, fire protection system, electrical, HVAC, ELV and shall hand-over the site in finished condition.
12. The bidder/ contractor shall refer/ read the bill of quantities (BOQ) along with the technical specifications of corresponding item. Any missing data in the bill of quantities shall be read in the technical specifications or as per the Indian Standards or relevant codes.

B. GENERAL SCOPE OF WORK

1. SCOPE OF WORK

Construction of MFP Based Common Incubation Facility at Deobhog, District-Gariyaband (C.G.) in the following packages

1. **PACKAGE- A** : *Building for Processing Units*
2. **PACKAGE- B** : *Buildings for Processing Units, Water Supply and Electrification*
3. **PACKAGE- C** : *Warehouse and Amenities*

The broad scope for the proposed work shall include but not limited to the following.

- i. Construction of buildings, Internal Electrification, complete in all respects.
- ii. Site Levelling
- iii. Water supply including Borewell, Overhead Tank, Underground Sump, Distribution pipeline.
- iv. External Electrification including Street Light Work
- v. Gate Structure

i) Civil Works

The work to be carried out under this contract shall consist of various items as per description of works contained in the Bill of Quantities. Any discrepancy between the details given in Bill of Quantities and

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that provided in Technical Specifications of the corresponding items, the provisions of the Bill of Quantities shall take precedence.

The item rates quoted by the Contractor shall, unless otherwise specified also include compliance with/supply of the following:

- a) General works such as setting out, clearance of site before setting out and clearance of works after completion.
 - b) A detailed program for the construction and completion of works (using CPM/PERT techniques) including updating of all such activities on the basis of decisions taken at the periodic site review meetings as directed by the Officer-in-Charges.
 - c) Samples of various materials proposed to be used on the work for conducting tests thereon is required as per the provisions of the contract.
 - d) Design of mixes as per relevant clauses of the specifications given proportions of ingredients, source of aggregates and binder along with accompanying trial mixes to be submitted to the Officer-in-Charge for his approval before use on the works.
 - e) Setting of field-testing laboratory with all required apparatus and staffs for conducting day-to-day quality control tests.
 - f) The execution of the activities on compliance to the execution drawings and bill of quantities.
 - g) The construction of buildings such as Warehouse, Admin and access control building, Maintenance office cum store, Substation, Toilet Block, Overhead tank, Underground Sump and Pump Room.
 - h) The procurement of building materials as per the requirement specified shall also be in accordance with the GRIHA norms.
 - i) Construction of CC Roads, Drains, Boundary wall, Fencing, Gate, Paver blocks etc.
 - j) Execution of proper water proofing treatment for water retaining structures and construction of expansion joints in buildings shall be completed by the contractor in all respects.
 - k) The preparation of As- built drawings.
 - l) Any other item of work which is not specifically provided in the Bill of Quantities, but which is necessary for complying with the provisions of the contract.
- ii) PHE Works (Plumbing)**
- a) Providing, laying, jointing, and commissioning of rising mains from borewell to underground sump cum pump House.

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- b) Supply, Erection and Commissioning of internal and external water supply network.
- c) The pipelines laid should be hydraulically tested on successfully competition.
- d) Supply, Installation, Testing and Commissioning of Pumps.
- e) Supply, Installation, Testing and Commissioning of Sanitary items.

iii) **Electrical Works**

The work to be carried out under this contract shall consist of various items as per description of works contained in the Bill of Quantities. Any discrepancy between the details given in Bill of Quantities and that provided in Technical Specifications of the corresponding items, the provisions of the Bill of Quantities shall take precedence.

The following electrical facilities are considered in this project. The supply, installation, testing and commissioning of following components.

- LT Panels boards
- UPS System
- IP-54 Sandwich Busduct
- Cables & Cabling
- Wiring & Accessories
- MCB and MCB distribution Boards.
- Light Fixtures and Fans
- Earthing
- Lightning Protection

vi) **OHT and Sump and Pump room**

The works include the following, as specified, or as directed.

- a) The overhead water tank at 15 meter staging for storing water for various services.
- b) The water will be flown to different requirements through gravity through down water pipes.
- c) Testing of water tightness as per IS 3370.
- d) The underground sumps storing and handling water for various services with compartments.

C. PAYMENT TERMS

The Contractor, at the time of bidding, will be responsible to ensure the completeness and adequacy of his Bid Price to fulfil the entire responsibilities as described above.

D. HOURS OF WORKS

- i. The Contractor's onsite support shall be standard hour of service.

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- ii. Timings for Emergency Support shall be 24 hours a day, 7 days a week though out the contract period.

E. ADDITIONAL WORKS

Any new work added within the defined limits will be included within the scope of contractor at mutually agreed terms by both contractor and CGMFP.

F. FACILITIES PROVIDED TO THE CONTRACTOR

The Contractor will be permitted to use the premises for use by his staff during operation and maintenance to the extent agreed and approved by CGMFP's Representative.

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SCHEDULE– D

Section-III Technical Specification of Works

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All the specification for item of works for Building works, Road works and Electrical works has been followed with reference to the CG PWD Guidelines. However, for any specification not available under CGPWD Guideline in such case CPWD, CPHEEO and relevant IS Specifications shall be followed.

Workmanship- The work shall be carried out according to the specification referred to hereinafter and according to sound engineering practice. The decision of the Officer in charge, in respect of workmanship will be final.

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SCHEDULE– D
Section-IV
Special Conditions of Contract

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Special Conditions of Contract

1. GENERAL

The Special Conditions of Contract are to be read in conjunction with General Conditions of Contract. If there are any variations or discrepancies or conflicting provisions, the provisions in Special Conditions shall take precedence over the provisions in the General Conditions of Contract.

All additional facilities/equipment/ office etc to be provided by the contractor, as mentioned in the tender, document outside the BOQ shall not be paid separately, and shall be deemed to have been included in the rates quoted by the contractor.

2. **Clarification Regarding Bank Guarantees (BGs):** - Any bank guarantee drawn from a nationalized bank/ Scheduled Bank, which will be submitted by contractor related with the said works, for any of the title such as Earnest Money Deposit, Performance Guarantee, Security Deposit, Mobilization advances etc, must be Operatable/Encashable **at Raipur with their local branch address mentioned** in bank guarantee (BG).

3. ACCESS

The Contractors are to verify the work site details including: -

- a) Access,
- b) Availability of water supply and electrical energy,
- c) Space for dumping stores and materials and
- d) Space for erection of site office,

The Contractors are deemed to have catered for all contingencies connected with the site, access, water & electricity.

4. SUPPLY OF WATER

Water will not be supplied by CGMFP and the Contractor shall make his own arrangements. CGMFP will give recommendatory letter to the concerned authority if so requested by the Contractor. However, CGMFP shall be in no way responsible for obtaining permission and no claim on account of this will be entertained.

5. ELECTRIC SUPPLY

- (a) Electric power both for construction and lighting shall not be made available to contractor. Contractor shall arrange at his own cost power with necessary switch boards, energy meter etc. and shall be responsible for their maintenance.
- (b) Further distribution by the Contractor at his cost shall be done as per approved layout. He shall provide required clearances for overhead lines to facilitate easy movement of heavy machinery such as cranes etc. These shall be shifted and rerouted at Contractors cost during execution of work if the same are found to obstruct any other work of any agency working at site or requires shifting due to unforeseen reasons.
- (c) On completion of the work the Contractor shall remove all wiring installed by him and make good to the satisfaction of Officer-In-Charge and PMC Engineer if any disturbance or damage is done.

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- (d) The Contractor shall employ an Electrical Agency as approved by the Officer-In-Charge and PMC Engineer for carrying out this work.
- (e) The Contractor has to keep alternative arrangement ready at his own cost for any failure/ interruption of electric power that takes place and under no circumstances can this be deemed to be reason for any consequential delay in the works.
- (f) Any disputes in sharing of power obtained directly/ indirectly from CSEB with other agencies shall be resolved by the contractor at his risk and cost. CGMFP shall not be responsible or a party for such disputes.

6. DEFECT LIABILITY

The Contractor shall be responsible for rectification of defects, during the defect liability period as per clause 17 of GCC after the certified date of completion by the CGMFP. This period shall be known as Defects Liability period as defined in CLAUSE No. 17 of the General Conditions of Contract. Subsequent to the taking over of the works and after it has been in use, its removal/correction of defects would be the responsibility of the Contractor. Any defects or failures during this period shall be rectified by Contractor within one week of intimation in writing. If the same is not carried out in the stipulated time, CGMFP shall have the right to get it repaired departmentally or through any other agency, entirely at the risk and costs of the Contractor as detailed in the GCC clause. No. 17.

The defect liability period (DLP) for all works (except maintenance and O & M of E & M works) costing more than 10 lakhs shall be 24 months and for works costing less than 10 lakhs shall be 12 months from the date of completion of project. Fifty percent (50%) Security Deposit (SD) shall be released after a successful completion of one(1) year from the date of completion of project and balance fifty percent (50%) shall be released after completion of defect liability period (DLP).

7. SAMPLES

7.1 Material

(a) The Contractor shall furnish to Officer-In-Charge and PMC Engineer for approval, with reasonable promptness and with reasonable time for consideration, adequate numbers of samples of all the materials to be used in the work, irrespective of whether material/product is from approved list given in tender. He shall permit and account for all costs in his quotation toward supply, testing, examination at site or at any approved place by the Officer-In-Charge and PMC Engineer. The choice of approval of materials rests with CGMFP unless otherwise specified.

(b) All material samples shall be delivered to the Officer-In-Charge/PMC Engineer's office at the Contractor's cost. Each sample shall be in duplicate and properly labelled as under-

- Name of Project
- Name of Contractor
- Name of Product
- Name of Manufacturer
- Item reference of BOQ
- Date of Submission

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- (c) Samples shall be accompanied with technical specifications/ catalogues/ test results of manufacturer.
- (d) In case the Contractor intends to keep an approved sample in his possession, he shall submit additional set of samples for Officer-In-Charge/PMC Engineer's approval.

7.2 Standards of Acceptability

- (a) In order to establish the standards of acceptability for materials and finishes, the Contractor shall finish in all respect a mock up for each pro-type room, where ever required the material used in this shall be as approved and special attention shall be paid to establish the workmanship and finishing standards to be achieved for the project. Works such as form finished concrete & finishing items such as joinery, floor finishes, false ceiling, wall finishes, toilets including sanitary fittings and fixtures, electric fitting and fixtures etc. shall be provided as per drawings and specifications. All mock-ups, except for exposed concrete finish to be made within the building blocks. For exposed concrete finish a maximum of 3 (three) mock-ups (approx. 36 (thirty six) SqM each), independent of the main building block shall be prepared for approval by Officer-In-Charge and PMC Engineer's approval.
- (b) The Contractor shall give notice in writing in this respect and shall obtain approval through Officer in Charge from the CGMFP. Approval should be taken well in advance so as not to delay execution of work.

7.3 Submission of Invoice:

On request of engineer in charge the contractor shall be bound to supply of invoice as a proof of source of material being procured.

8. TESTING OF MATERIALS IN OTHER LABORATORY

As a valedictory measure, in addition to establishing testing a full-fledged site laboratory, 10 % (ten percent) of the samples shall be sent every month for testing in one of the following laboratory: -

- i) Chief Engineer (PWD) Laboratory, Raipur
- ii) National Institute of Technology, Raipur
- iii) Govt. Engineering College, Raipur

8.1 In case, certain testing facility for typical/ special materials are not available in Chhattisgarh, then it can be tested at a recognized laboratory anywhere in India.

8.2 All testing charges for the above shall be borne by the Contractor. In case, the testing charges demanded by the testing authorities is not paid by the Contractor within 15 (fifteen) days, then the same will be paid by CGMFP with due recovery from the Contractor's bill for the project.

9. CRECHE FACILITIES FOR THE CHILDREN OF CONSTRUCTION LABOURER

Contractor undertakes to provide creche facilities for the children of construction labour through a volunteer agency **within one month from start of work**. The facility is open to children of construction labourers employed by the Contractor.

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In case the Contractor fails to provide this facility within stipulated time, following charge shall be levied on the Contractor.

	Range of Contract Amount	Amount of Creche fund
	Upto Rs. 50 lacs	Nil
	Above Rs. 50 lacs to Rs. 5 Crores	Rs. 50000/-
	Above Rs. 5 Crores	Rs. 5 lacs.
9.1	The amount shall be recovered if such facility is not provided by the Contractor from running account bills in one or more instalments but not exceeding 6 (six) instalment.	
9.2	If the facility is provided after 3 months, 50% of the amount shall be refunded to the contractor, after 6 month 25% will refunded.	

10. SUBMISSION OF DETAILED BAR/ PERT CHART OF COMPLETION

The Contractor shall, within the stipulated time in Tender, submit to the Engineer for his approval a detailed programme covering-

- a) Descriptive note explaining sequence of various activities.
- b) Network (PERT/ CPM), bar chart.
- c) Quarterly programme of supply of materials by the Employer.
- d) Quarterly cash flow indicating money to be earmarked by the Employer for the purpose of the contract.
- e) Programme for supply of working drawing.
- f) Phased requirements of plant and equipment to be deployed by the Contractor.

11. Method of Working

After Contract award and before starting Work at the site, Contractor, CGMFP's representative or Officer-in-Charge and PMC Engineers, shall together make a thorough survey of the grounds where Work under this Contract will occur and areas to be used as access ways to the Work areas. Contractor shall list, and photograph, if Contractor desires, existing conditions not requiring alterations, shall note discrepancies between Drawings and existing conditions, and shall designate areas of storage and routes of access agreed upon by CGMFP. The Contractor shall, within the stipulated time in Tender, submit to the Officer-In-Charge for his approval the following information,

- a) A general tentative lay-out plan of construction plant and equipment for the execution of work within time period stipulated in schedule.

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- b) Drawings or prints showing the location of major plants and other facilities which he propose to put up at the site, including any changes in the general layout, at least 15 (fifteen) days prior to the commencement of the respective work.
- c) Layout and details of temporary works that the Contractor wants to carry out to fulfil his obligation under the contract.
- d) Indication of shuttering system to be followed.

12. Project Monitoring

- 12.1 Within 7 (seven) days the Engineer shall give their approval to proceed with the work, with or without modification. However, acceptance of programme and method of working as submitted by the Contractor or with any modification there to in the opinion of the Officer in Charge, shall not relieve the Contractor of any of his contractual obligation.
- 12.2 All these programmes and plans submitted by the Contractor and approved by the Officer in Charge and PMC Team shall become part of the contract.
- 12.3 The acceptance of programmes as submitted by the Contractor or with any modification thereto in the opinion of the Officer-In-Charge, shall not relieve the Contractor of any extension of time unless delay, if any, is expressly sanctioned by the Officer in Charge.

12.4 Construction Photographs-

A General: Contractor will provide construction photographs taken, developed, printed, and mounted by a recognized commercial photographic studio or reputable photographer acceptable to Owner, in the number and type and at construction stages enumerated below: -

- (i) Before Starting Work: Have photographs taken at site from different points of view sufficient in number to show site (and conditions at existing structures) but not fewer than 30 photographs.
- (ii) During Progress of the Work: Have not fewer than 15 photographs taken at least once a week from points of view (both inside and outside), as necessary to show progress of construction and site development for each part of the Work. Co-ordinate taking photographs with utility Work and back filling. Photograph each buried utility line before back filling. During later stages of the Work, have photographs taken from suitable locations inside the building showing the progress of various stages of the Work, such as piling, centering, reinforcement, water proofing, concreting, etc. Size of photographs will be 125 mm X 250mm. Photographs shall be supplied with negatives/ CD to the Officer-In-Charge. Each photograph shall be attached with date of photograph and location of work. These photographs shall be from location as fixed by the Officer-In-Charge and PMC Engineer at start of work.

13. QUARRY RELATED DEDUCTIONS

The royalty for Minor minerals used in the work like murrum, stone metals, sand, rubble etc. will be levied as per prevailing practice in PWD of Chhattisgarh and shall be recovered suitably through R.A./ Final bill and will be kept in deposit. The above royalty charges kept under deposit shall be refunded as soon as the Contractor submits relevant royalty clearance certificate/ NOC from concerned office of the mining department.

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14. CONTRACTORS ALL RISK POLICY (C.A.R. POLICY)

The successful Contractor shall take out a C.A.R. policy from any approved company by IRDA India. Chhattisgarh Govt., administered by Directorate of Insurance. The policy so obtained shall cover the entire period of construction (including all extensions) and also shall cover the defects liability period. The policy shall be for the total contract amount including cost of free supply material by CGMFP, if any. All amounts/ charges towards premium etc. on this account shall be borne by the Contractor.

15. INDEMNITY BOND

The Contractor shall require to execute an Indemnity Bond for satisfactory performance of the entire project on stamp paper of Rs.100/- (Rupees Hundred only) in the format approved by the CGMFP Ltd. This Indemnity Bond shall remain in force for the Defect Liability period after completion of the project to be furnished in contract form E of GCC.

16. ACCIDENTS

Should any accidents, fatal or otherwise occur, a detailed report about the same shall be made promptly by the Contractor to the Officer-In-Charge/PMC Engineer. The Contractor should at all times during execution of work keep the CGMFP fully indemnified against all risks, claims, litigations and financial burdens arising out of all incidental operations on work and accidents.

17. TRAFFIC

The Contractor shall have to make all necessary arrangements for regulating traffic day and night during the period of construction and to the entire satisfaction of the Engineer. This includes the construction and maintenance of diversion, if necessary, at no extra cost to the CGMFP. The Contractor shall provide necessary caution boards, barricades, flags and lights, watchmen etc. so as to comply with the latest Motor Vehicle Rules and Regulations and for traffic safety. The Contractor shall be responsible for all claims for the accidents which may arise due to his negligence whether in regulating traffic, in stacking materials on the road or by any other reason. The contractor must comply with the following: -

A. General: Plan and control use of site and access to site in co-operation with Owner and other contractors working at site to minimise disruption of use of other facilities; portions of buildings and site areas affected by this Contract and to remain in use; and the work of other contractors.

B. Temporary Access Drives: Construct on the premises as necessary, and maintain in good usable condition; remove when no longer needed. Until permanent improvements have been completed, when necessary to prevent excessive dust, periodically water temporary unpaved access roads.

C. Construction Site Access: Use most direct route from public streets as agreed to by Owner. Construction traffic elsewhere on Owner's property is prohibited.

D. Driveways Between and Around Combustible Storage Piles: Maintain at least 15 feet wide and free of accumulation of rubbish, equipment, and materials.

F. Access for Fire-Fighting Equipment: Maintain.

G. Access: Refer to other sections for requirements to keep access to site and buildings open to Owner, other contractors, and fire-fighting equipment.

H. Use of Streets and Sidewalks on Public Property: Make arrangements with authorities having jurisdiction for use. Restrictions shall be those of the Municipal Authorities. Be solely responsible for adherence.

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J. Roadways, Driveways, and Walkways: Where outside indicated Contract limit on Owner's property and on public property, keep open to pedestrian and vehicular traffic at all times. When temporary closing of a roadway, driveway, or walkway is absolutely unavoidable, provide alternative access routes. Such temporary closings shall be approved by Owner in each case and shall be for the shortest possible time. Strictly adhere to requirements of governmental authorities having jurisdiction.

K. Parking: Owner will issue temporary parking permits for use by construction personnel and will make available, at the location shown. Construction personnel shall not park in any other location on Owner's property, even when bearing permits. Access to allocated parking spaces shall be by most direct route from public streets. Construction personnel shall not drive vehicles elsewhere on Owner's property and shall take the most direct pedestrian way along walks and roadways (not on lawns) from parking lot to construction site.

L. Barricades and Signs: Should barricades or directional signs for traffic control be necessary, prepare and install such signs and barricades of approved size, colour, and lettering or other markings. Remove signs when no longer needed, or at Substantial Completion, whichever is latest.

M. Restricted Use of Premises: Enforce Contract requirements, local ordinances and Owner's instructions pertaining to signs, fires, smoking, trucking, parking, and other use of premises.

N. On-Site Storage:-

1. General: Extent of Work and site area available limits amount of on-site material and equipment storage. Do not unnecessarily encumber job site with excess materials or equipment and means of delivery of materials, equipment, and supplies, removal of rubbish, and, hours during which deliveries may be made. Determine, and take into account in the Work, limitations on storage space and of times, rates, and means of deliveries to and removals from the job site whether such limitations are imposed by laws, rules, ordinances, or physical conditions. Owner will not pay extra amounts due to such limitations. Co-ordinate arrangements for delivery and storage of materials.

2. Paved Areas: Do not use paved areas on Owner's property to stockpile excavated materials or to store construction materials except where shown. Use of paved areas on public property is subject to requirements of authorities having jurisdiction, and arrangements for such use are solely Contractor's responsibility.

3. Protection and Repair: Protect roadways, walks, and other permanent site improvements, and access ways subject to damage. Satisfactorily repair improvements and surfaces damaged during construction operations, or remove damaged improvements or surfaces and provide new acceptable improvements or surfaces. Except where new Work is required, return areas used for temporary access to original condition.

18. ALIGNMENT AND BENCHMARKS

The alignment of the work to be carried out under the contract shall be marked on the ground as per the drawing and as per the instructions of the PMC Engineers and Officer-In-Charge. For the purpose of facilitating the work, the series of temporary bench marks on masonry pillars will have to be established. These pillars will be constructed along with the alignment and such other locations as may be initiated by the Engineer. The temporary bench-marks shall be established for the work line-out and its connections to other existing roads in the surrounding areas using the DGPS instrument and Total Station software. All

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expenses involved in the process of marking alignment on ground, checking the alignment, constructing masonry pillars in establishing bench marks thereon, shall be borne by the Contractor. It will be responsibility of the Contractor to ensure that the masonry pillars so constructed are not damaged during the period of work in progress.

19. PREVENTION OF MOSQUITO BREEDING AT CONSTRUCTION SITE

The Contractor shall on the respective construction site install mosquito proof and accessible water storage tanks or to cover/protect the present water storage tanks properly. The Contractor shall periodically give larvaecidal treatment to water storage tanks, sites of water stagnation, water collection.

Any expenditure that may be incurred by CGMFP to ensure that the above conditions are fulfilled by the Contractor will be debitable to Contractor's account and will be recovered from the bills of the Contractor from time to time.

20. INSPECTION OF SITE AND SUFFICIENCY OF THE TENDER

If the CGMFP is not in a position to deliver to the Contractors the site of the Contract work for any reason whatsoever at the agreed time, delaying the commencement of the contract work, or part thereof not beyond 50 % (fifty percent) of contract period for completion, such omissions of the CGMFP shall not be breach of any its obligations under the contractor and the Contractor shall not be entitled to claim from the CGMFP for loss or damage, if any, caused thereby, but shall be entitled to a reasonable extension of the period agreed for the completion of contract work. If the contractor shall be obstructed in the execution of the work by any person other than an agent or servant of the CGMFP, the Contractor shall exclusively deal with such set by the due process of law but shall not be entitled to attribute thereby the beach of any obligation under the contract to the CGMFP compensation for damage or loss, if any, thereby suffered but shall be entitled to an appropriate extension of period agreed for the completion of the contract work, provided that the contractor has reported to the CGMFP every such act of obstruction with particular soon after its occurrence and the CGMFP has after enquiry found the same to be substantially true and has determined the duration of such obstruction.

21. PROGRESS OF WORK

The Contractor shall carry out the work as per the programme approved by the Department from time to time. He will also not be allowed to proceed with the work in a scattered manner.

22. FIELD LABORATORY

The Contractor shall establish a field laboratory for the various field tests for items like concrete cubes, cement, aggregates, sand, blocks for masonry, tiles, wood and for similar items as directed by the PMC Engineer/Officer-In-Charge. A Site Laboratory of approximately **5.00m x 3.00 m.** area with platform, display boards, storages, IS Codes, etc. shall be constructed for items similar as directed by the Officer-In-Charge.

In addition to the general measuring and checking instruments such as plumb bob, setsquare, measuring tapes, screw drivers, hammers, total station, spirit level etc. the Laboratory must have the following equipment's;

Slump Cone	2 nos. as per ISI
Cube moulds for concrete	06 nos.
Cube moulds for cement mortar	02 nos.

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Weighing Balance (Digital)	1 nos.
IS Sieves for sand & metals	1 sets for each
Glass-measuring Cylinders	3 nos.
Micrometre	2 no.
Vernier callipers	2 no.
Rebound Hammer	1 Set

In addition to above if any other equipment are required for the testing and quality control during construction, the same shall be procured by the contractor at his cost.

Construction of Laboratory building well-equipped with equipment's as listed above is incidental to the work and no separate payment will be made for this.

The Contractor shall carry out other various tests for various items and materials at National Institute of Technology or any other approved laboratory as directed by the Engineer at Contractor's own cost. At the end of each month for each category of the work, e.g. RCC work, masonry work, etc. the Contractor shall give statistical analysis of all the test results in the format prescribed by the Engineer and take corrective action in the work in accordance with these results.

The Contractor shall keep all relevant IS/ BIS/ special publications at site lab for various items of works covered in the present Contract.

23. ENGINEER

23.1 Engineer for this project shall be the Engineer or the person nominated or appointed by CGMFP along with PMC engineering team from time to time and shall include any person duly authorised by them.

23.2 Engineer shall be responsible for the execution of the project with regards to management and supervision. Instructions issued by the Engineer to the Contractor shall be deemed to be the Employer's instructions in respect of-

1. Day to day supervision including material testing using ISO formats proforma of which should be got approved from Engineer.
2. Approval of material and workmanship using ISO formats proforma of which should be got approved from Engineer.
3. Matter of urgency involving safety or protection of person or property.
4. Monitoring progress of work using System Application of Projects (SAP). (Refer 3.5 hereunder).
5. Interpretation of drawings
6. Interpretation of specifications
7. Issue of additional drawings
8. Certification of measurements and bills and issue of certificates accordingly for interim and final bills.

23.3 Engineer shall hold fortnightly progress meetings at site for evaluation and execution of works. The Contractor shall assist in providing revised programmes, cash flow charts in the format required by Officer-In-Charge/ CGMFP.

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23.4 The Engineer shall coordinate works at site of all agencies appointed by the Employer.

24. EXCAVATED OBJECTS

All the materials obtained during the process of excavation shall remain the property of the CGMFP and shall be disposed off as instructed by the PMC Engineer/Officer-In-Charge. The Contractor is supposed to use the selected materials for filling in plinth, pipe bedding, and providing embankment where required, filling the trenches and also filling low lying areas. All operations including loading, unloading, transportation of materials where required with all leads and lifts and handling them and levelling at disposal site etc., shall be included in the quoted cost and no extra payment whatsoever shall be made to the Contractor on the account.

25. AS BUILT DRAWINGS

The Contractor shall during the course of execution, prepare and keep updated a complete set of 'as- built' drawings recording all works on the blueprints, which shall be corrected daily, if necessary, to show each and every change from the Contract Drawings as a approved working drawings, shop drawings and the exact 'as-built' location, sizes and kinds of work etc. This set of drawings shall be kept on the site and shall be used for record purposes. Changes recorded shall be countersigned by the PMC Engineer and the Contractor. Copies of 'as-built' drawings shall be supplied to the Officer-In-Charge or CGMFP on request.

The Contractor shall submit complete 'as-built' drawings on reproducible tracings and ammonia prints 10 (ten) sets in form of hard copies and Compact Discs 2 nos. for building work and all services as directed by the Engineer within 30 (thirty) days of the completion of entire work by using AutoCAD facility. Maintenance manuals and original warranties shall be submitted at the time of submitting the As-built drawings. In case the Contractor fails to submit complete 'as-built' drawings as aforesaid [in form of hard copies [10 (ten) sets] and Compact Discs [2 (two) nos.], he shall be liable to pay a sum equivalent to 0.1 percent of the value of work subject to maximum of Rs.10 lakhs (Rupees ten lac only) or as may be fixed by CGMFP and this decision shall be final and binding. Pre-final & Final Bill shall not be released until all the as-built drawings are submitted & approved.

26. ENGINEER'S SITE OFFICE

The Contractor shall provide site office for the Officer-In-Charge/PMC Engineer's use of area measuring minimum 240 Sqft. carpet area with Air Coolers & ceiling insulation for entire office premises including Meeting Table (Upto 06 person) as per the detailed drawings approved for the site office and shall be removed on completion of work. Toilet facilities shall be provided exclusive for Officer-in-charge and PMC usages.

Broad details about construction of office and other facilities to be provided at the minimum shall be as follows: -

- (a) This shall include individual cabins, Meeting Hall and Computer working station approved by Officer in Charge.
- (b) The above office shall be fully furnished including furniture, fittings, fixtures etc. such as Lockers, Chairs, Sofas for waiting, Cabinets for storage of drawings/tracings, Cabinets for storage of books, Cupboards for storage of box files & flat

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presentations, Soft boards – 2 nos for display of CPM charts, White board – 2 nos, 1 no. Refrigerator, RO Filter (Aquaguard /Kent) and water Cooler (Blue star) of 1 nos. of induction & Gas arrangement, Office stationary incl. papers, CDs, envelopes, pen holders etc. Minimum equipment's required for providing tea/ coffee/ snacks etc shall be arranged by the contractor. The items shall be approved by EIC.

The Contractor shall arrange to maintain this office by daily sweeping the floor and keeping the premises clean. The Contractor shall also arrange to deploy 1 (one) office boy for the pantry and for CGMFP's Officer-in-Charge's office. The Contractor is also required to provide One computer operator with computers for CGMFP's Office-in-Charge's office. The provisions shall be approved by Officer-in-Charge. Cost of all this shall be deemed to have been included in the tender as incidentals and no separate payment shall be made for providing these facilities.

If the facilities are not provided by the contractor, the same will be got executed by OIC at the cost of the contractor and will be recovered from their RA bills.

27. TRANSPORTATION - DELETED

28. PROVIDING COMPUTER & OTHER EQUIPMENTS AT SITE OFFICE

The contractor shall install the required configured computers and other equipment's and operators for the office of Officer-in-Charge/PMC Engineer including necessary stationery and furniture as under: -

- a) 1 (One) Nos. SONY/DELL/ LENOVO Desktop with Intel I-7 Processor, 8GB Ram, 1 GB Graphics Card, Hard drive 1TB, 17" TFT LCD Color Monitor and 3 years warranty. (Latest Model)
- b) LICENSED SOFTWARE LICENSED SOFTWARE: (Latest versions, where available), Window 10 Professional AutoCAD 2016 or above, Microsoft Office 2016 or above, Microsoft Project 2016 or above.
- c) PRINTERS AND OTHER PERIPHRALS including tonner, cartridges + backup till end of Defect liability period,(Latest Model with warranty)
 - (i) HP Laser Jet: A3 Latest Model Printer 1 Nos
 - (ii) UPS for all equipment's
- d) Other Electronic Peripherals Equipment's with software.
- e) Safety Helmets 10 Nos., not required in road.

Note: If the facilities are not provided by the contractor, the same will be got executed at the cost of the contractor and will be recovered from their RA bills. The above facility shall be withdrawn after 3 months, from the date of completion of work.

29. TELEPHONE CONNECTION-DELETED

30. TIME SCHEDULE FOR COMPLIANCES

The tenderers should please note the following time schedule for various compliances and follow the same:

- a) The Initial Security Deposit shall be paid within 15 (fifteen) days of receipt of Letter of Acceptance.

The Contractor should construct the site office within 1 (one) month of date of work order. The site office should be as per relevant clause in the tender document.

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The CAR policy and Labour license shall be taken by the Contractor within 1 (one) month from the date of work order.

d) The M.S. Project formatted programme (Physical and Financial Programme) shall be submitted by the Contractor within 10 (ten) days of the date of work order and detailed breakup of quantities. The successful tenderer has to furnish Quality Assurance Manual along with programme within 15 (fifteen) days from the date of paying Initial Security Deposit.

31. APPROVAL OF ENGINEER

The foundation strata as well as steel reinforcement provided in all RCC members shall be got approved from the Officer-In-Charge and PMC Engineer or his authorised representative. At every stage of work, approval of the Officer-In-Charge and PMC Engineer shall be taken by the Contractor. Before starting any work like concreting, block masonry, water proofing, concrete, etc. detailed information of the work in the prescribed proforma shall be given to the Engineer and his approval shall be taken by the Contractor. It is the responsibility of the Contractor to get all the hidden measurements like foundation work, reinforcement, etc. recorded before covering the same. All the measurements shall be taken jointly by PMC Engineer and the Contractor's authorized representative and then only the measurements will be forwarded by the PMC Engineer, who will forward it for payment to Officer appointed by the CGMFP/Managing Director, CGMFP through Officer-In-Charge, CGMFP and directions on any matter whether mentioned explicitly or otherwise.

32. PERMISSION FOR CONSTRUCTION OF SITE OFFICE/ GODOWN/ LABOUR HUTS:

The Contractor shall be permitted to construct temporary structures such as site office, godown, labour huts, Engineer site office, etc. on the land of CGMFP, nearest to the site.

The Contractor will have to submit requirement of land for Godown/ Labour Camp/ Batching Plant etc. with logistic layout in Technical Bid. The land shall be provided to the Contractor on Prevailing lease rates as decided by CGMFP with Lease Agreement as per CGMFP format. However the Contractor shall require permission of CGMFP for erecting site office, labour huts. In the event the Contractor fail to remove site office/ godown and labour huts from the land immediately after construction is over, CGMFP will charge rent as per the rules prevalent at the time. No final bill payment shall be made, unless the site is cleared by the contractor in all respects.

The Contractor shall number the structures and display name of the Company, period for which permission is granted, etc. at such approved sites.

No final bill payment shall be made unless the site is cleared in all respects by the Contractor.

33. CONDITIONAL TENDER

The tenderer shall note that the tender should be submitted without any conditions. The Tender submitted with conditions would be summarily rejected.

34. SITE ORDER BOOK & OTHER BOOKS REQUIRED

The PMC Engineer will maintain Site Order Book at the site of work. The Contractor or his authorized representative shall sign all the instructions received therein, in token of having received the same and shall comply with them forthwith.

All other books of record at site shall have to be maintained as required in the CPA Code of works.

35. POURCARD SYSTEM

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Pour card system/RFI system to be introduced for approval of individual activity.
Format to be got approved from engineer before start of work.

36. **CLEANING Of SITE**

- a) All water which may accumulate on the site during the progress of the works or in trenches and excavation shall be removed from the site to the satisfaction of the PMC Engineer/Officer-In-Charge at the Contractor's cost. Site shall be maintained free from rubbish. Proper stacking of scaffolding material, shuttering material bricks/ brickbats, steel pieces, etc. needed for work on day to day basis shall be organized in proper stacks. Heaps of material lying around in unplanned manner and disorderly fashion shall not be permitted. PMC Engineer's decision in this matter shall be final.
- b) The Contractor shall not, at any time, do cause or permit any nuisance on the site or do anything which shall cause unnecessary disturbance or inconvenience to Employer, tenants or occupiers of other properties near the site and to the public in general. The Contractor shall install mosquito proof and accessible water storage tanks for construction and drinking water.
- c) The Contractor shall periodically give largasidal treatment to water storage tanks, sites of water stagnation, water collection.
- d) Prior to handing over the contractor shall appoint Professional Cleaning Agency to clean the building works prior to handing over. The Agency shall have minimum 5 (five) years prior experience in the hospitality industry and shall be appointed with the prior approval by the PMC Engineer.
- e) Any expenditure that may be incurred by CGMFP to ensure that the above conditions are fulfilled by the Contractor will be debitable to Contractor's account and will be recovered from the running bills of the Contractor from time to time.
- f) Cleaning: Remove staining or reactive materials from new surfaces immediately during course of the Work.
- g) Debris: Remove hazardous accumulations of debris promptly, at least daily.
- h) Dust: Confine dust producing operations during painting and finishing .Vacuum immediately after completion.
- i) **TRASH DISPOSAL**
- j) General: Keep new buildings and site free from accumulations of waste materials.
- k) Removal: Remove cartons, crates, wrappings, lunch trash, and other trash from each room daily. Provide trash receptacles on each floor of each building and in convenient locations on the site.
- l) Burning: Do not burn trash or other materials on Owner's property.
- m) **EXCESS MATERIAL**; General: Remove excess materials, including demolished materials, excess earth, and excess building materials from Owner's property and dispose of legally.
- n) Clean: Keep paved drives on Owner's property and public streets and alleys clean, by cleaning daily, or more often if necessary, of earth and debris spillage from trucking involved in construction operations.

37. **FENCING**

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During the construction, care shall be taken so that, areas around are not polluted and where required Hessian cloth shall be tied around, while work is in progress.

Further, it is obligatory on the part of the Contractor to fence the area allotted and earmarked by CGMFP for labour camp, batching plant of the Contractor within a month of issuance of work order. The temporary fencing shall be provided in the area as directed by PMC Engineer or Officer-In-Charge using vertical blinds using corrugated GI sheets about 3m high with necessary metal frame work and staging to cordon off the view of the premises. The Contractor shall maintain the fencing properly throughout the construction period.

38. WATCH AND WARD

The Contractor shall make necessary watch and ward arrangement for a period of three months from the date of total completion of work. No claim shall be paid to the Contractor towards the watch and ward during this period.

Protection General Requirements:

- a) **Laws:** Comply with applicable laws, ordinances, rules, regulations, and orders of authorities having jurisdiction for safety of people and protection of property from damage, injury, or loss.
- b) **Responsibility:** Be solely responsible for initiating, maintaining, and supervising safety precautions and programs concerning Project security, but obtain Owner's approval of methods to be used and location of safeguards. Submit to CGMFP, through Engineer, drawings and written description of methods and devices Contractor intends to use and do not begin Work at the site until such means and methods are mutually agreed on by Owner and Contractor.
- c) **On Public Property:** In addition to other means used in the interest of safety or security, comply with the requirements of governmental agencies having jurisdiction
- d) **Safeguards:** Erect and maintain, as required by conditions and progress of the Work, necessary safeguards, for safety and protection, including temporary fences, guards, railings, barricades, canopies, lighting, shoring, directional and danger signs, signals, and other warnings against hazards.
- e) **Security:** Protect and secure the site, new materials and equipment from theft and damage by whatever reasonable means are effective. Use methods such as the following, singly or together: locks, fences, signs, patrols, radio, alarms, locked storage on-site, and off-site warehousing.
- f) **Wall Closures:** Unless other acceptable means are provided, provide temporary closures for openings in walls along adjoining to make the building and site secure. Secure temporary closures when Work is not in progress using suitable means such as dead bolts inaccessible from the public side or locks or padlocks construction master keyed in accordance with Section, "Finish Hardware."
- g) **Entrances:** Do not block entrances to premises to remain in use or in any way inhibit access to them.
- h) **Design Live Loads:** Do not permit placing materials or equipment on new to exceed design load of structure or endanger structure or people.
- i) **Trenches:** Do not permit trenches to remain open for prolonged periods without adequate board covering or fencing.
- j) **Broken Glass:** Be responsible for glass broken during construction period; at completion, replace broken glass.
- k) **Weather Protection:** During construction, provide protection against weather

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(rain, wind, storms, frost, or heat), and maintain work, materials, apparatus, and fixtures free from damage. At end of each workday, cover new work likely to be damaged.

- l) **Dust:** Take precautions necessary to keep Work under this Contract and adjoining property reasonably free of dust.
- m) **Protection of Construction Materials:** Refer to other specification sections for specific requirements.
- n) **Materials Hoist:** Do not permit transporting of people on materials hoisting facilities.
- o) **Removals:** Except for fences, remove temporary construction and protection specified in this section promptly when no longer needed and when removal is approved.
- p) Maintain temporary fences until date of Substantial Completion, unless approval is obtained for earlier removal; then remove the temporary fence.
- q) **Damaged Site Improvements:** Repair and restore to condition at beginning of construction, or better, existing site improvements, such as pavements, curbs, buildings, fences, lawns, plantings, and lighting which are not to be removed under this Contract but are damaged or defaced by Contractor's operations, except where new Work is required by the Contract.
- r) **First Aid Equipment:** Provide at the site. Also provide continually available trained and qualified personnel to render first aid when needed.
- s) **Emergency Signs:** Provide signs posted at telephones listing telephone numbers of emergency medical services, physicians, ambulance services, and hospitals.

39. MOBILISATION PERIOD [DELETED]

40. METHOD OF CARRYING OUT THE WORKS

The Contractor shall, within 15 (fifteen) days of receipt of the Employer's order to commence work under respective clause of General Conditions of Contract submit for his approval a detailed programme and statement with drawings and diagrams showing how he proposes to carry out the works based on the tender programme. The statement shall describe the methods to be employed in carrying out the works, the Constructional Plant and temporary works which the Contractor intends to supply or use and shall include a list, classified into trades of labour force envisaged. The programme shall give the estimated dates on which the various sections of the works will commence together with the estimated date of completion and estimated output so that the whole of the works may be completed within the Contract Period.

- a) In addition, the Contractor shall submit to the Engineer drawings and full particulars of Temporary Works he intends to construct at least 8 (eights) days before he intends to commence such works. The Engineer may require modifications to be made if he considers the proposals to be insufficient and the Contractor shall give effect to such modifications at his own cost but shall not be relieved of his responsibility for the sufficiency thereof.
- b) The Contractor shall prepare a detailed survey of existing services on the site which he shall clearly mark up on a drawing for the approval by the relevant service authorities prior to commencement of the works.
- c) The Contractor is to progress the works thoroughly and to take such action as is necessary in order to ensure that the approved programme is strictly

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adhered to in all its stages. The Contractor shall submit detailed programmes of the various sections of the works as and when required by the PMC Engineer/Officer-in-Charge, the Contractor shall take all precautions and cover all contingencies to ensure that adequate spare equipment and materials are available at all times to ensure completion of this work in accordance with the agreed programme.

- d) The acceptance of programmes as submitted by the Contractor or with any modification thereto, in the opinion of Engineer, shall not relieve the Contractor of his responsibility to complete the work within period specified in as per Annexure 'A' unless extension of time limit is expressly sanctioned under respective clause of standard General Conditions of Contract or Special Conditions of Contract.
- e) The Contractor shall prepare the CPM programme on computer and the same to be monitored by proper installation of PC and printer facilities at the site.
- f) The bills shall be on computer and the programme will incorporate the deductions of Mobilisation Advance and other items.

41. CONTRACTOR RESPONSIBLE FOR SUFFICIENCY OF MEANS EMPLOYED

The Contractor shall take upon himself the full and entire responsibility for the sufficiency of plant, centering, scaffolding, timbering, machinery, tools or implements and generally for all means used for the fulfilment of the Contract. In the event of any of these means proving insufficient, the Contractor is still fully and entirely responsible for the sufficiency of these means notwithstanding any previous approval or recommendation that may have been given by the PMC Engineer and Officer-in-Charge.

42. DRAWINGS

The Contractor will receive from the Officer-In-Charge/PMC Engineer, 2 (two) prints of the tender drawings listed hereof, together or thereafter with any further drawings issued for Road, Water Supply Net Work, Sanitation Electrical, Landscaping Works, etc. Working drawings shall be progressively issued as per the approved construction schedule submitted by the contractor & approved by Officer-in-Charge/CGMFP.

43. STANDARDS

In various places throughout this specification and the bills of quantities, reference is made to the standards, specifications and byelaws issued by the Indian Standard Institutions and other similar organizations. These references shall in every case be deemed to include the latest edition or issue of such standards, specifications and byelaws including all revisions, amendments and addendum subsequently issued. Where materials are not specified and standard exists in respect of such materials, then the materials shall in all respects comply with relevant and current I.S.I. In such cases where I.S.I. do not exist, the best manufacturers' specification shall be followed; in absence of all these, Officer-in-Charge/PMC Engineer's instruction shall be followed.

44. SUPERVISORY STAFF (As per clause 36 (i) of schedule F of the tender)

The Contractor shall engage on the work a qualified and experienced Engineers, Supervisor, capable of managing and guiding the work properly as detailed in Clause 36(i) of schedule F of the tender Form F-1. This supervisor shall be authorized by the Contractor in writing to

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receive the orders issued by the Engineer from time to time. The Contractor shall be responsible for carrying out these orders promptly.

45. FIRE PRECAUTIONS

The Contractor shall comply with fire regulations of the controlling authority in force at the site of the works relating to the precautions to be taken against fire hazards.

46. USE OF SITE

The Contractor shall not use any portion of the site for purpose not connected with the works without the prior written approval of the Officer-in-Charge/PMC Engineer. He shall maintain permanent and site access roads free of spillage and shall not interfere with the flow of traffic. Also, same shall apply to terraces and other developed areas. This clause shall be read in conjunction with clause no. 15 of the Special Conditions of Contract.

47. SAFETY ENGINEER

The Contractor shall employ and depute at site on full time basis a fully qualified Safety Engineer(s) who shall be responsible to ensure observance of safety precautions and measure required to be taken at site. Further he shall make sure stipulations laid down in safety code as provided in GCC.

48. QUALITY ASSURANCE MANUAL AND SAFETY MANUAL

Successful tenderers will be required to submit Quality Assurance Manual and Safety manual made as per applicable specification for various items of work and get the same approved from Engineer before start of work and the adhere the same during actual execution of work.

i. Quality Assurance Manual (QAM)-

A quality assurance manual constituting a base document outlining quality policy of the agency, procedures, name of action, compliance, acceptance criteria and documentation etc. Shall be prepared by the successful tenderer and submitted to the Officer-in-Charge/PMC Engineer for approval within 15 (fifteen) days from the date of receipt of work order. The QAM shall be prepared in such a way that it follows all the applicable specifications. The document shall generally cover aspects listed below, but not limited to the same.

Scope of work

- a) Planning for items to be executed including method statement and resource deployment both physical and financial.
- b) Identification of all parties involved in QA and their inter-relationship.
- c) Execution plan of Quality System giving reference - standard - frequency and acceptance criteria.
- d) Levels of cross checking/ verification in case of multiple verifications/ controls, including systems of inspection and audit, wherever applicable.
- e) Organization of personnel, responsibilities and lines reporting for QA purpose.
- f) Testing and statistical analysis.
- g) Inspection reports at the end and during defect liability period/ maintenance period.
- h) Items to be covered for maintenance manual,
- i) Check list viz. Forms and formats.

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ii. Inspection of Works at Factory/ Workshop

For any visits that maybe necessary for the purpose of performance of testing, inspection of factory made goods/ equipments, at a location other than the site or Raipur, the actual cost of travel (to & fro airfare/ train A/c 1st class), boarding & lodging, local transport & per diem (per person per day) costs at the rate of Rs. 3000 (Rupees three thousand only) for any visit made by officials from CGMFP/ PMC/ Architect/ Consultant (maximum 3 (three) persons per instance), shall be borne by the Contractor. Such visits may be necessary for the inspection of chillers, panels, elevators, transformers, DG sets, fabricated doors, etc. that require inspection prior to shipping from the place of its manufacture. Any other item which is required to be tested before being processed/ fabricated in the factory, such visits shall require the prior written approval from the CGMFP.

49. QUALITY ASSURANCE SYSTEM

A quality assurance procedure covering all aspects of the work shall be adopted for this work to ensure the desired quality. Details of the procedure shall be decided by mutual consultation between the PMC Engineer, Officer-in-Charge and the contractor at the start of the works.

- a) The contractor shall submit within the time stipulated by the PMC Engineer and Officer-In-Charge in writing, the details of actual methods that would be adopted by the contractor for the execution of any item as required by the Engineer at each of the locations, supported by necessary detailed drawings and sketches including those of the equipment and machinery that would be used, their locations, arrangements for conveying and handling materials etc., and obtain prior approval of Officer-In-Charge and PMC Engineer well in advance of starting of such item of work.
- b) The Engineer reserves the right to suggest modifications or make complete changes in the methods proposed by the contractor, whether accepted previously or not, at any stage of work, to obtain the desired accuracy, quality safety and progress of work which shall be binding on the contractor and no claim on account of such change in method of execution will be entertained by the Employer so long as Specifications of the items remains unaltered.
- c) The Contractor shall furnish within the period of 15 (fifteen) days a detailed programmed schedule using PERT/ CPM technique in quadruplicate including the date of actual start, the monthly progress expected to be achieved and the anticipated completion date of each major item of work to be done by him, also indicating, plant and machinery and material procurement schedule.
- d) The schedule is to be such as is practicable of achievement towards the completion of the whole work in the time limit and of the particular items, if any, on the due date specified in the contract and shall have the approval of the Engineer. No revised schedule shall be operative without such acceptance in writing. The Engineer is further empowered to ask for more detailed schedule or schedules say weekly for any item or items, in any case of urgency of work as will be directed by him and the contractor shall supply the same as and when asked for.
- e) The contractor shall furnish sufficient plant, equipment and labour as may be necessary to maintain the progress schedule. The working and shift hours for operations to be done under.
- f) Further, the contractor shall submit the progress of work in forms and statements

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etc. at periodical intervals in the form of progress charts, forms, statements and/ or reports as may be approved by the Engineer.

- g) The contractor shall maintain proforma, charts, details regarding machinery, equipment, labour, materials, periodical returns thereof as may be specified by the Engineer.

50. EQUIPMENT MAINTENANCE MANUAL

The Contractor shall mention the list of machinery procured at site for the work in this manual. This manual shall also reflect the name of the manufacturer, age of machinery and the agency entrusted with the maintenance work of the machinery listed in the manual.

51. MINIMUM PLANTS, EQUIPMENTS AND SHUTTERING

As per “FORM-7 : List of Key Equipment’s/Machines for construction work” in Schedule-D, Section I- Technical Tender Forms.

52. SUBMITTALS

Unless otherwise specified or directed by CGMFP, the Contractor shall submit to CGMFP for his review and approval all Co-ordinated services drawings, shop drawings, samples, materials lists, equipment data, instruction manuals, record documents, manufacturers' equipment manuals, design calculations for proprietary items of work, technical submittals, and other information required by the Contract Documents. Submittals and their contents including deviation shall be properly prepared, identified, and transmitted as provided herein or as the Owner may otherwise direct. Except for record documents and instruction manuals for operation and maintenance, submittals including deviation shall be approved before the material or equipment covered by the submittal is delivered to the site. The contractor shall furnish an authority if required from material suppliers.

53. PLANT, MACHINERY AND SHUTTERING

As per “FORM-7: List of Key Equipment’s/Machines for construction work” in Schedule-D, Section I- Technical Tender Forms.

54. SUB-CONTRACTORS

All specialised works will be carried out by licensed (where applicable) sub contractors approved by CGMFP.

- i. It may be noted that the contractors will have to submit credential of the selected contractors to CGMFP for approval.
- ii. It may further be noted that even if the contractor has in house licensed sub-contractors for these works, they will have to select and engage contractors with prior approval of CGMFP.
- iii. All specialists, merchants, tradesmen, and other agency executing any work or supplying and fixing any goods which items have been included in the Schedule of Quantities and/ or Specifications or for Extra/ Substituted items of works, who may be nominated or selected by the Officer-in-Charge PMC Engineer/ Contractor are hereby declared to be Sub-contractors employed by the Contractors. nominated Sub-contractor shall be employed on or in connection with the works against whom the contractor shall make reasonable objection or (save where the PMC Engineer/Officer-In-Charge and contractor shall otherwise agree) who will not enter a contract provided:

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1. That the nominated sub-contractor shall indemnify the Contractor against the same obligations in respect of the sub-contractor as the contractor is under in respect of this contract.
2. That the nominated sub-contractor shall indemnify the Contractor against claims in respect of any negligence by the Sub-contractor, his servants or agents or any misuse by him or them or any scaffolding or other plant, the property of the Contractor or under any Workmen's Compensation Act in force.
3. That the nominated sub-contractor shall submit his bills to the Contractor.
4. That the Contractor shall make payment to the nominated Sub-Contractor within 3 (three) days of the Contractor's receipt of the payment from CGMFP against the PMC Engineer /Officer-In-Charge certificates of payment providing that before any Certificate is issued, the Contractor shall upon request, furnish to the Engineer proof that the nominated sub-contractor's accounts included in previous certificates have been duly discharged in default whereof CGMFP may pay the nominated Sub-contractors upon a certificate of the Engineer and deduct the amount thereof from any sums due to the Contractor. The exercise of this power shall not create privity of contract as between CGMFP and Sub-Contractors.
5. The PMC Engineer in his absolute discretion may recommend payment to the nominated Sub-Contractor directly by CGMFP and deduct the amount thereof from any sums due or which may become due to the Contractor or recover the same amounts from the Contractor.
6. No Labour contracts shall be permitted.
7. Prior approval of the Sub-contractor by the CGMFP is mandatory.
8. Required 2 No. of contractors as choice would be of CGMFP
9. Further sub-contracting/ sub-letting of the work shall not be permitted.
10. CGMFP shall not permit under any circumstances Assigning, Transferring or Subletting of entire work or substantial part of work to be executed under this contract. If the Contractor attempts or assigns, transfers and sublets the entire or substantial work, the contract shall be terminated by the CGMFP without prejudice to any right or remedy which shall have accrued or shall accrue thereafter to the CGMFP.
11. The Contractor shall not be permitted to give power of attorney for executing the work to any other agency or person on their behalf. The power of attorney for executing the work shall only be given to regular employee of the agency with prior approval of CGMFP.

iv. Works to be Sub-Contracted & Prequalification criteria: -

The details of work to be subcontracted and PQ criteria shall be governed as mentioned in detailed NIT

v. ESSENTIAL CONDITIONS FOR ELETRICAL WORKS: -

1. The Sub-contractor for carrying out the electrical works under the contract should strictly be in accordance with the above criteria.
2. All above referred works will have to be carried out under the supervision of Engineer.
3. Power supply distribution scheme given in tender document is only for guideline purpose. However, successful agency will be responsible for obtaining necessary sanctions to overall power supply distribution scheme, from CSEB/applicable local authority and Engineer before starting execution of work. No extra charges will be paid for obtaining necessary approvals/ sanctions to power supply distribution scheme sanctioned by concerned power supply authority CSEB/ applicable local authority, successful agency will have to take up and complete the work accordingly.
4. Successful agency will have to obtain the required approvals to the total electrical works such as, HT/ LT distribution, Sub-station, Meter rooms, DG sets, etc

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from CSEB/ applicable local authority/ concerned power supply authority, Electrical Inspector, authority or any other statutory body at their own cost before starting execution of the work and the original sanctions obtained should be submitted to CGMFP's concerned Electrical Division before execution of the work. Any statutory cost for obtaining the approval will be reimbursed on production of original receipts.

5. It will be the responsibility of the agency to get the energy meters of the DG sets approved/ tested/ sealed from the necessary authorities.

6. The electrical works under the scheme should be carried out strictly in Co-ordination with the concern CSEB/ applicable local authority and necessary approvals should be obtained from time to time.

7. Activity Bar Chart and the makes of material should be submitted for electrical works for necessary approvals from the competent authority from CGMFP before execution of the work and work should be started only after the approvals.

8. It will be the agency's responsibility to obtain the following listed documents from CSEB/ applicable local authority. Electrical Inspector authority and other concerned Statutory Body towards completion of the work at their own cost, without which work will not be treated as completed.

a) Sanction papers for the total external electrification works along with BOQ of material, demand note for supervision charges, if any.

b) Charging permission of the installation.

c) Inspection report of the various equipments & material supplied under the electrification work certified by CSEB / applicable local authority and CGMFP authorities.

d) Manufacturers test certificates and guarantee certificates in original for all the equipments and material supplied for execution of electrification work under the scheme.

e) As Built drawings as stated Volume I for substation, HT/LT network, meter room, etc. showing all the details and certified by CSEB, Electrical Inspector authority (along with soft copy).

f) As Built Drawings as stated Volume I for internal electrification work, area lighting work, water pumps, etc. (along with soft copy)

g) Earth test report for the total installation.

h) Work completion report from CSEB/ applicable local authority for the total electrification work including substation, HT/LT distribution, Meter Room etc. should be submitted.

i) Handing over of the total electrification work under the scheme, such as substations, including equipments, HT/LT distribution, meter room with energy meters to CSEB/ applicable local authority. The letter in writing for taking over of the installation as above addressed to Engineer should be obtained from CSEB and should be submitted along with details of scheme.

j) Separate guarantee, from the electrical agency should be submitted to CGMFP against the electrical works carried out under the scheme, for a period of 18 (eighteen) months including defects liability period in order to avoid any inconvenience in connection with releasing and common services under the scheme and also to attend any defects in installation during this period.

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- k) Required electrician/ Helpers are to be deployed round the clock for Operation & Comprehensive Maintenance of total Utility works & installations for a period of 18 (Eighteen) months from the date of completion OR taking over of the installation whichever is later.
9. All material & equipments to be supplied under this contract shall be offered for inspection at the manufacturing place. No material shall be supplied by the agency without the clearance from the PMC Engineer.
10. The total electrification work under the scheme will have to be carried out as per the terms & conditions mentioned in various sections of the Tender Document.
11. Electrical works under the contract will not be treated as completed unless and until above listed activities are completed by successful agency.
55. Subject work is strictly to be completed within stipulated work completion Period and in accordance with the activities listed below completely as per the directives from Engineer. The charges and the expenses for completing the following listed activities should be included in the quoted offer and no separate payments against this will be made.
1. Successful agency will have to obtain and submit the Contractor All Risk Insurance Policy (CAR) in original within 1 (one) week from date of work order from Director of Insurance, Government Insurance Fund, (Location), Chhattisgarh. The Contractors All Risk (CAR) Policy as said above shall be inclusive of insurance coverage under workman's compensation insurance policy for all workmen employed by contractor to complete the works covered under present contract. Further the contractors All Risk Policy period completely as stated in the tender. In case of time period extension (If any), it is essential that, premium of CAR policies should be timely paid by agency in order to ensure the continuity of CAR policy without any break in the same, suitable action will be taken against defaulters as per General Conditions of Contract unless and until the Contractors All Risk Policy as stated in above manner is submitted to the office of Engineer no payments will be released against any work executed.
2. Obtaining necessary scheme sanctions in detail towards execution and completion of subject work in all respect, from concerned CSEB/ applicable local authority. This activity includes required co-ordination and follow-up with concerned CSEB/ applicable local authority for obtaining necessary scheme sanctions. The scheme sanction should be inclusive of specifications and required layout and other drawings etc. completely as per the requirement.
- The payment towards the supervision charges of CSEB/ applicable local authority shall be paid directly to CSEB/ applicable local authority on behalf and in the name of CGMFP by the agency.
- The original scheme sanctions along with original certified drawings, specification details, quotations, payment receipt against supervision charges etc. should be submitted to the PMC Engineer.
- The supervision charges paid in the name of CGMFP as mentioned above shall be reimbursed on submission of original payment receipts.
3. If required, preparation and submission of execution drawing in co ordination with concerned planning authority of CGMFP by engaging Govt. approved Surveyor for confirmation and marking of proposed cable routes, location of control pillar, existing services along the proposed route under the present contract as per the sanctioned

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scheme obtained from CSEB Reports and marked computerized plans duly certified by surveyor in 3 sets of should be submitted after carrying out the details survey as mentioned above.

4 Obtaining necessary road/ soil/ footpath etc. cutting permission for cable trenching from concern authorities like CGMFP/ CSEB/applicable local authority/ RMNN/ PWD etc. as applicable along the approved route and submit the approval in original along with the drawings and permission to Engineer.

The charges required for obtaining the approvals and permission as mentioned above should be directly paid on behalf and in the name of CGMFP by the agency.

The charges paid in the name of CGMFP as mentioned above shall be reimbursed on submission of original payment receipt to the Engineer

5. Preparation and submission of shop/ execution drawing to Engineer for approvals. Submitting list of Makes of various items and material to be used under present contract for approvals.

6. The Contractor or his qualified engineer having updated technical knowledge for execution of the subject work should invariably remain present and co-ordinate during every inspection and testing programme at manufacturers works, similarly during every joint site visits and when required.

7. After supply of material at site, all the documents such as delivery challan, excise gate pass, material test report (in original), etc. should be submitted to Engineer for obtaining installation clearance.*

8. The complete work under the present contract shall be carried out with required supervision, stage-wise inspection from concerned authority of CSEB/ applicable local authority & Electrical Inspector authority in co-ordination with Engineer complete with required power shutdowns. The record of all inspection and shutdowns shall be submitted to Engineer.

9. The execution work of cable trenching/ foundation for poles/ foundation of feeder pillar/excavation and trenching in all types of surfaces rocks, soils etc. shall be carried out as per approved route plan by using appropriate tools and machines in close co-ordination with concerned authorities from CGMFP, CSEB/ applicable local authority, etc. completely as per the requirement so as to avoid the damages to the existing services.

Obtaining clearance certificate from concern authority of CGMFP, RNN, PWD, CSEB/ applicable local authority, etc. As applicable, towards completion of re-surfacing work of cable trenches, excavated surfaces and removal of debris and submission of this clearance certificate in this regard obtained from concerned authorities to Engineer.

In absence of activity No. 1 to 9 above, the payment towards cable trenches erection and installation will not be released.

10. Arranging and carrying out pre & post testing and commissioning of the completed installation in presence of Engineer, his representative and the representative of any other statutory authorities like CSEB/ applicable local authority & Electrical Inspector etc. as required.

11. Excess saving statement as per final execution of work, item wise measurement break up in detail and escalation claim as applicable along with detail calculations and copies of confirmed indices etc. to be submitted to Engineer.

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It is mandatory to complete all the activities listed above from Sr. No. 1 to 11 for releasing the final payment.

56. Following conditions are the essential conditions of contract for carrying out and completing the subject work in all respect within stipulated time period. The successful agency will be responsible for completing the same as per the directives of Engineer. The charges and expenditure if any required for completing the same should be including in the quoted offer, and no separate payments against this will be made.

1. The contractor shall visit the site before quoting the offer.
2. Scheme specifications and quantity of the material to be used for the subject work under the contract and specified in the tender document is only for guideline purpose. However, it will be the responsibility of the successful agency to obtain the measurements and specifications in detail of each and every item before starting the execution of work and complete the work in accordance with the approvals, clearances obtained for the same. All cost required for completion of work as per statutory approval, shall deemed to have included in the offer quoted.
3. The foundation and excavation for feeder pillar and control pillar, grouting of frames in wall/ ground etc, are required to be carried out by the agency, and cost for the same shall be include in the offer quoted.
4. It will be Agency's responsibility to obtain necessary sanctions and permissions by paying necessary charges towards.
 - a) Obtaining necessary scheme sanctions and permissions for completing the subject work in all respect from any concerned statutory authority.
5. The successful agency will be completely responsible for accidents occurred if any during the execution of work as well as during 24 (twenty four) months defect liability period under this contract. It will also be the responsibility of agency, for making police complaints against any thefts and accidents etc. under intimation to CGMFP.
6. Charges against following listed activates should be included in the quoted offer itself and no separate payments will be made against same.
 - a) Arranging and carrying out the material inspecting at respective manufactures unit as stated in Annexure - I.
 - b) Arrangements for performing site visits and other connected activities as and when required by Engineer or his representative.
 - c) Carrying out necessary co-ordination and follow up with concern authorities for obtaining necessary sanctions and permissions as required towards completion of work in all respects.
 - d) Appointing Govt. Approved surveyor for carrying out site survey and preparation of computerized shop drawing, Execution drawing, As built drawing etc. with soft copy.
 - e) Any other incidental charges required towards completion of work in all respect.

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7. Bills submitted against the executed and completed works at site, will be processed further by Officer-In-Charge, after necessary scrutiny and physical site verification by PMC Engineer.
57. The services/ tasks/ works as referred to under clauses shall be suitably applicable to all Utility services executed by the contractor, whether specifically mentioned herein above or no.
58. **Safety, Security and Protection of the Environment**
The Contractor shall, throughout the execution and completion of the Works and the remedying of any defects therein:
- (a) Have full regard for the safety of all persons entitled to be upon the Site and keep the Site (so far as the same is under his control) and the Works (so far as the same are not completed or occupied by the Employer) in an orderly state appropriate to the avoidance of danger to such persons,
 - (b) provide and maintain at his own cost all lights, guards, fencing, warning signs and watching, when and where necessary or required by the PMC Engineer or by any duly constituted authority, for the protection of the Works or for the safety and convenience of the public or others, and
 - (c) take all reasonable steps to protect the environment on and off the Site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of his methods of operation.

59. **HANDING OVER PROCESS: -**

The handing over process shall be based on a performance comprising individual activities. The process shall be approved by the Officer-In-Charge and PMC Engineer.

60. **EROSION AND SEDIMENTATION CONTROL**

- i. **General:** Prevent pollution of land, air, and water; control erosion, washout, and surface runoff of earth and stockpiled materials. Preclude sedimentation in general and especially in existing on-site and public storm-water system and public right of way.
- ii. **Procedures:** Perform erosion, sedimentation and temporary storm-water control. Follow procedures stipulated in local laws and regulations and as shown on Site work drawings.
- iii. **Maintenance:** Maintain controls in place until permanent controls are functioning. Remove when no longer needed.

61. **NOISE AND VIBRATION CONTROL**

Noise and Existing Building Structure Vibration Generated by Construction Procedures, Equipment, Tools, and Operations: Keep to minimum practicable during demolition and removal from building and site, including loading and removing storage containers. Equipment generated noise levels shall not exceed the following in decibels:-

- 1. Concrete mixer: 85
- 2. Concrete pump: 82
- 3. Crane: 83
- 4. Materials elevator: 85
- 5. Pumps: 76

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6. Generators: 78
7. Compressors: 81
8. Pneumatic tools: 86
9. Saws: 78
10. Vibrators: 76
11. Other tools: 85
- i. Operation of Air Hammers, Compressors, and Reciprocating Equipment: Not permitted inside existing buildings unless specifically approved in writing by Owner.
- ii. Laws: Comply with applicable noise control laws, ordinances, and regulations.
- iii. Acoustical Enclosures: Stationary equipment may be enclosed to produce required sound attenuation subject to continued maintenance of such enclosures to ensure that specified sound levels are not exceeded.
- iv. Violations: Where field sound measurements reveal sound levels exceeding those specified, cease operating such equipment and repair or replace it with equipment that complies with the sound levels specified.
- v. Cutting and Drilling Concrete: Use only rotary or core drilling for holes through concrete. Do not use impact tools to cut or otherwise remove concrete or to install inserts.
- vi. Power-Activated Tools: Not permitted in or immediately adjacent to existing buildings, except with Owner's written approval in each specific case, except where such use is specifically specified.

62. EXISTING CONDITIONS

i. Contractors Examination of Site:-

1. By executing Contracts, Contractor and subcontractors represent that they have:
 - a. Visited the site and made due allowances for difficulties and contingencies;
 - b. Compared Contract documents with existing conditions and informed themselves of conditions to be encountered, including work by others, if any, being performed; and
 - c. Notified Architect of ambiguities, inconsistencies, and errors they have discovered within Contract documents or between Contract documents and existing conditions.
2. Failure to visit the site and become familiar with conditions shall not relieve Contractor or a subcontractor from furnishing materials or equipment or completing the Work in accordance with Contract documents at no additional cost.
3. Contractor or subcontractors will not be given extra payment for Work related to conditions they can determine by examining the site and Contract Documents.
4. Contractor or subcontractors will not be given extra payment for work related to ambiguities, inconsistencies, or errors within Contract documents, or between Contract documents and existing conditions, when such ambiguities, inconsistencies, or errors are known to Contractor or subcontractor before Contract execution unless Contractor or subcontractor has notified CGMFP in writing of such condition before execution of

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Agreement Between Owner and Contractor.

- ii. Make use of public property and make arrangements for that use. No extra compensation will be paid due to costs associated with using public property.
- iii. Access by Contractor to portions of Owner's property beyond the actual area of Work under this contract is denied, except where necessary to perform the Work, and then only with specific written approval in each case. Refer to other sections for additional requirements.
- iv. Contractor shall accept the site in the condition in which they exist at the time Contractor is given access to begin the Work.
- v. Damage caused by Contractor to existing structures, grounds plants, pavements, utilities, work by others, fixtures, or furnishings, shall be repaired by Contractor and left in as good condition as existed before the damaging, unless such existing work is shown to be removed or replaced by new Work.
- vi. Immediately upon entering the site for purposes of beginning Work, locate general reference points and take such action as is necessary to prevent their destruction; lay out Work and be responsible for lines, elevations, and measurements, and Work executed under this Contract. Exercise proper precautions to verify figures shown on Drawings before laying out Work. See Section "Field Engineering" for additional requirements.
- vii. Contractor and each subcontractor, before starting work, shall verify governing dimensions at the premises, including floor elevations, floor-to-floor heights, and column locations and shall examine adjoining Work on which Contractor's or subcontractor's Work is in any way dependent. No "Extra" or additional compensation will be allowed on account of differences between actual measurements and dimensions shown. Submit differences discovered during the Work to Architect for interpretation before proceeding with associated Work.
- viii. Employment of local labour shall be given priority wherever possible. However,
- ix. This shall not in any way affect/ dilute the Contractors obligations listed within the Tender document.

LAMINATION OF DRAWINGS

All drawings issued to site shall be kept in lamination condition.

1. Maintainance of installed equipments, macheneries and fixtures:

The Contractor, at the time of bidding, will be responsible to ensure the completeness and adequacy of his Bid Price to fulfil the entire responsibilities for Maintaining the installation of all installed equipment's, machineries and fixtures minimum for a period of 1 year from the date of commissioning and imparting training to the workers/ staff as asked for maintaining the installations as per IS requirement and exercising.

2. Handing Over:

At the time of handing over after completion of work, all the equipment, spare including standby equipment etc. must be in good working order as were taken over before commencement of defect liability period.

3. Penalties for failure to achieve the functional guarantees during Defect liability Period:

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In case of failure to deliver the required quality of work, liquidated damages shall be imposed for such failure to meet the performance criteria, as described below. The Employer will be entitled to recover any such damages from the security deposits of the contractor or any other sum due to him. However, the contractor shall be allowed to take up routine/ periodical maintenance as per IS guidelines, with prior permission of the Authority.

63. ORDER OF PRECEDENCE

In case of any discrepancy between the items mentioned in the BoQs/Specifications/Drawing, the Order of precedence should be as follows:

- i. Item details as mentioned in the BoQs, read along with the specification shall prevail. However, in case of conflict specification shall hold good.
- ii. Drawings.

64. PAYMENT

- I. The Contractor, at the time of bidding, will be responsible to ensure the completeness and adequacy of his Bid Price to fulfill the entire responsibilities as described above.
- II. On completion of work i.e., after **Defect liability Period**, the contractor shall handover all the machineries, equipment's & fixtures such as bore well, pump, motor, sprinklers fountain accessories etc. in good working condition to CGMFP, including plant/hedges/tree/lawn etc.

65. RECOVERY OF SECURED ADVANCE

~~The material on which secured advance is given, shall be either incorporated or used in the work within 120 days. Otherwise, the advance so given shall be recovered in next running bill after 120 days.~~

Signature of Tenderer

Date :

Signature of Contractor.....

Signature of CGMFP.....

SCHEDULE– D
Section-V
General/ISI Specification & list of approved makes

GENERAL/ISI SPECIFICATIONS

The following list of Indian Standard as per latest amendment shall be applicable to the work in general. However for other items also I.S.I. Specifications shall be followed, wherever applicable even though the I.S Code is not specified below. Items not covered in the Indian Standards shall be referred in British / American standards, as amended and in addition particular conditions and specifications shall be followed.

S.No.	INDIAN STANDARD	SUBJECT
1.	1200 PT I-1974	Method of Measurement of Earth work.
2.	8112 & 12269	Ordinary, rapid hardening & low heat Portland cement.
3.	383-1970	Coarse & fine aggregates from natural sources for concrete.
4.	455-1976	Portland blast furnace slag cement
5.	650-1976	Standard sand for testing of cement
6.	1489-1967	Portland Pozzolana Cement.
7.	1727-1967	Methods of tests for Pozzolanic materials.
8.	2386-PT III-1963	Methods of test for aggregates for Concrete.
9.	2386-PT I-1963	Particle size and shape.
10.	2386-PT II-1963	Estimation of deleterious materials and Organic impurities.
11.	4031-1968	Methods of physical tests for Hydraulic cement.
12.	4032-1968	Method of chemical analysis of hydraulic cement.
13.	383-1970	Coarse and fine aggregates from natural sources for concrete.
14.	456-1978	Code of Practice for Plain and reinforced concrete.
15.	1322-1970	Bitumen felts for water proofing and damp proofing.
16.	1200 (PT II) 1974	Method of Measurements of cement concrete work.
17.	2386 (PT I) 1963	Test for Practical size and shape.
18.	2386 (PT II) 1963	Test for Estimation of deleterious, materials and organic impurities.
19.	2386 (PT III) 1963	Test for specific gravity, density, voids, absorption and bulking.
20.	2386	Method of test for aggregate for concrete.
21.	2386 (PT-IV) 1963	Mechanical Properties.
22.	2645-1975	Specifications for integral water proofing compounds.

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23.	432-1966	Mild steel and medium tensile steel bars & hard drawn steel wire & concrete reinforcement.
24.	432 (PT-I) 1966	Mild steel and medium tensile bards.
25.	516-1959	Methods of test for strength of Concrete.
26.	1139-1966	Hot rolled mild steel, medium tensile steel & high yield strength steel deformed bars for concrete reinforcement.
27.	1199-1959	Method of sampling & analysis of concrete.
28.	1566-1967	Hard drawn steel wire fabric for concrete reinforcement.
29.	1786-1979	Cold drawn steel wire fabric for concrete reinfoimcements.
30.	1200 (PT-V) 1972	Method of Measurement of cement concrete work.
31.	1200 (PT-V) 1972	Method of Measurement of form work.
32.	2502-1963	Code of Practice for bending and fixing of bars for concrete reinforcement.
33.	1077-1970	Common burnt clay building bricks.
34.	1200 (PT-III) 1970	Method of Measurement of Brick work.
35.	2212-1962	Code of Practice for Brick work.
36.	3102-1971	Classification of burnt clay solid bricks
37.	3495 (PTS-I to V)	Method of test for clay building work.
38.	5454-1974	Method for sampling of clay building bricks.
39.	1122-1974	Methods for determinationof specification of specific gravity & porosity of natural building stones.
40.	1124-1974	Methods of test for water absorption of natural bldg.stones.
41.	1130-1969	Marble (CAPACIs, slabs & tiles)
42.	205-1966	Non Ferrous metal butt hinges.
43.	206-1973	Tee and strap hinges.
44.	287-1973	Recommendation for maximum permissible moisture contents of timber used for different purposes.
45.	303-1975	Plywood for General Purpose.
46.	451-1972	Technical supply condition for wood screws.
47.	723-1972	Steel counter sunk head wire nails.
48.	1003	Timber paneledand glazed shutters.
49.	1003 (PT.I) 1966	Door Shutters.
50.	1003 (PT.II) 1966	Window&VentilatorShutters.

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51.	1141-1973	Code of Practice for seasoning of Timber.
52.	1200	Method of Measurement of Bldg. & Civil Engineering works.
53.	1200 (PT.XIV) 1970	Glazing
54.	1200 (PT.XXI) 1973	Wood Work and Joinery.
55.	1328-1970	Veneered Decorative Plywood.
56.	1341-1970	Steel Butt Hinges.
57.	1659-1969	Fiber Hard Board.
58.	1659-1969	Block Board.
59.	1761-1960	Transparent sheet glass for glazing & framing purpose.
60.	1911-1967	Schedule of unit weights of building material.
61.	2191	Wooden Flush Door Shutter (Cellular & Hollow Core Type).
62.	2191 (PT.I) 1973	Plywood Face Panels.
63.	2202	Wooden Flush Door Shutters (Solid core type).
64.	2202 (PT.I) 1973	Plywood face panels for wooden flush door shutters.
65.	3618-1966	Phosphate treatment of iron & steel for protection against corrosion.
66.	4021-1967	Timber door, window and ventilator frames.
67.	63-1964	Whiting for paints.
68.	226-1975	Structural Steel (Standard Quality).
69.	277-1962	Specification for galvanized steel sheet (Plain & corrugated).
70.	800-1984	Code of Practice for use of structural steel in General building Construction.
71.	806-1968	Code of Practice for use of steel tube in General building Construction
72.	813-1961	Scheme of Symbols for welding.
73.	813-1974	Covered Electrodes for metal arc welding of structural steel.
74.	814 (PT.II) 1974	For welding sheets.
75.	815-1966	Classification and Code of covered electrodes for metal arc welding of mild steel and low alloy high tensile steel.
76.	818-1968	Code of Practice for safety & health requirements in electric and gas welding and cutting operation.
77.	1938-1975	Steel doors, windows & Ventilators.
78.	1161-1968	Steel tubes for Structural purposes.

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79.	1200 (PT.VIII) 1974	Method of Measurements of steel work and iron works.
80.	1599-1974	Method for bend test for steel products other than sheet, strip, wire and tube.
81.	1608-1972	Method of Tensile testing of steel products.
82.	1977-1975	Structural Steel (Ordinary Quality).
83.	2062-1984	Structural Steel (Fusion Welding Quality).
84.	4351-1967	Steel door frames.
85.	777-1970	Glazed earthen ware tiles.
86.	1130-1969	Marble (blocks, slabs and tiles).
87.	120 (PT.XI) 1971	Method of Measurements of paving and floor finishes.
88.	1237-1959	Cement Concrete Flooring Tiles.
89.	1443-1972	Codes of Practice for laying & finishing of cement concrete floor in Tiles.
90.	1661-1972	Code of Practice for Application of cement lime plaster finishes.
91.	2571-1971	Code of Practice for laying in situ cement concrete.
92.	102-1962	Ready mixed paint, brushing, Red, lead nonsetting, priming.
93.	103-1962	Ready mixed paint, brushing, white lead, for priming and general purposes.
94.	133-1975	Enamel, interior (A) under coating (n) Finishing colour as required.
95.	137-1965	Ready mixed paint, brushing, matt or egg shell flat, finishing, interior to Indian Standard colour as required.
96.	158-1968	Ready mixed paint, brushing bituminous, black, lead free, acid alkali water and heat resisting for general purposes.
97.	218-1961	Creosote and anthracene oil for use as wood preservative.
98.	1200 (PT.XII) 1971	Method of Measurements of plastering and pointing.
99.	1200 (PT.XIII) 1970	Method of Measurements of White washing, colour washing, distempering and other finishes.
100.	1200 (PT.XV) 1968	Method of Measurement of Painting.
101.	5410-1969	Cement Paint, colour as required.
102.	5411 (PT.I) 1969	Plastic emulsion paint for interior use.
103.	6278-1971	Code of Practice for white washing & colour washing.
104.	5916-1970	Safety of Practice for white washing & colour washing.

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|------|-------------------|---|
| 105. | 3764-1966 | Safety Code for excavation works. |
| 106. | 3696 (PT.I) 1969 | Safety Code for Scaffolds. |
| 107. | 3696 (PT.II) 1969 | Safety Code for Ladders. |
| 108. | 7293-1974 | Working with construction machinery safety code for |
| 109. | 6313 (PT.II) 1971 | Anti Termite treatment. |
| 110. | 7215-1974 | Tolerances for fabrication of steel structures. |
| 111. | 7205-1974 | Safety Code for erection of structural steel. |
| 112. | 2502-1963 | Code of Practice for Bending and fixing of bars for Concrete Reinforcement. |
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For the items missing in the list, the relevant IS Code and specification should be binding on the contractor. The contractor should take approval wrt the approved vendor list prior to any procurement from the Engineer in charge. Further, contractor shall procure “or equivalent as approved” after getting the approval of Engineer in Charge, only if the approved makes mentioned in the “list of approved makes” is not available in the market. All makes mentioned below in various sections will be applicable for the entire work package irrespective of sections.

A. APPROVED MAKE LIST FOR CIVIL WORKS

Sr. No.	Item	Approved Make (As required according to the project)
1.	Cement	Ultra Tech, Zuari, Ramco, ACC, India Cements, Dalmia, Ambuja, J.P. Rewa, Vikram, Shri Cement, Century India Cement, Birla Jute and Cement Corporation of India, Chettinadu, JSW Cement, Panna cement etc. or any other approved brand. Cement from mini cement plants shall not be allowed.
2.	Steel (TMT)	Tata, Vizag, SAIL, TISCO, IISCO, RINL, Jindal Steel and Power Ltd, ESSAR, JSW Steel Ltd. or Equivalent.
3.	Structural Steel	Tata, Vizag, SAIL, Jindal Steel & Power Ltd, ESSAR, Bhushan, JSW Steel Ltd. or Equivalent.
4.	Welding rode	ESAB, Advani, Best Arc.
5.	Teak Wood	Best Quality Plantation teak
6.	Hard Wood	Best Quality treated Sal Wood, Bijasal, benteak, khair, haldu
7.	Adhesive For Wood Work	Fevicol, Vamicol, Dunlop.
8.	Bricks and Brick tiles	Best quality available conforming to class 75
9.	Fly-ash Bricks	Brick Shall be as per IS 12894
10.	Vitrified tile	Nitco, Kajaria, RAK Ceramics India, Ltd, Orient Bell, ASIAN, Somany, Johnson.
11.	Ceramic Tiles	Nitco, Kajaria, RAK Ceramics India, Ltd, Orient Bell, Somany, Johnson.
12.	Cement Concrete floor tiles	Ultra Spectra, Eurocon, Duracrete, Excello.
13.	Paver tile	Kajaria Ceramics Ltd, Pavit Ceramic Pvt. Ltd.
14.	Tile Breaker /Transition profile/Expansion Joint cover	Euro-Arch systems and solutions Pvt. Ltd, Straton.
15.	Tile Adhesive /Epoxy Grout	ArdexEndura (India) Pvt. Ltd, MYK Laticrete, Kerakoll India Pvt. Ltd, Eurobuild Construction Chemicals & Coating, Bostik, MAPEI BASF,

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Sr. No.	Item	Approved Make (As required according to the project)
		Pidilite, Sunanda Speciality Coatings Pvt. Ltd, Kunal Conchem Private Ltd. .
16.	Self levelling compound/ Bonding primer	ArdexEndura (India) Pvt. Ltd, MYK Laticrete, Pidilite Industries Limited, Kerakoll India Pvt. Ltd, Fosroc Chemical India, Sika India, BASF, Eurobuild Construction Chemicals & Coating, Bostik, Sunanda Speciality Coatings Pvt. Ltd, KunalConchem Private Ltd .
17.	Industrial Flooring	Euro Build, BASF, Fosroc, Sika, Pidilite .
18.	Concrete Paver blocks	Ultra Spectra, Eurocon,Duracrete ,BasantBeton, Conwood, Automatic, ..
19.	Metallic Hardener	BASF, Fosroc ,Sika, Kironite, Eurobuild Construction Chemicals & Coating .
20.	Integrated water proofing	India water proofing, Sika, Pidilite, BASF, Fosroc, Euro Build, Bostik, MAPEI, The Structural Waterproofing co. Pvt.Ltd. / CHRYSO .
21.	Water proofing compound	Roffe, Fosroc, Sika, Pidilite, Structural Waterproofing Co.Pvt. Ltd, BASF , Eurobuild Construction Chemicals & Coating, Bostik, MAPEI, CICO Technologies Ltd., Sunanda Speciality Coatings Pvt. Ltd, KunalConchem Private Ltd., The Structural Waterproofing co. Pvt.Ltd. / CHRYSO, MYK Schomburg .
22.	Paint & Primer, Distemper	ICI (Akzonobel), Berger, Asian, Jotun .
23.	Water Proof Cement paint	Super Snowcem, Supercem .
24.	Cement Based Paint	Super Snowcem (Killick Nixon Ltd.),Duracem, Berger .
25.	Cement Board	Everest/Bison/Hyderabad Industries
26.	Sealers	ICI (Akzonobel), Berger, Asian, Euro Build .
27.	Wall Putty	Birla White, NCL, Altek, Berger, ICI .
28.	Primer	Altek, Berger, Asian, ICI ,Jotun .
29.	Melamine Polish	Duco, MRF, ICI .
30.	Synthetic Enamel Paints & Primer	ICI (Akzonobel), Asian Paints, Berger, Jotun,KansaiNerolac Paints (Nerolac) .
31.	Synthetic textured paint	Spectrum, Renovo .
32.	Concrete Additive	Sika /STP/CICO / Fosroc/Roffe/ Pidilite
33.	Fire retardant paint	Akzonobel, Berger, Asian ,Promat .
34.	PVC Water stopper	Fosroc, Sika, Euro Build, BASF ..
35.	Water Proofing Materials	Shalimar Tar Products (STP), SIKAIWL (India)

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Sr. No.	Item	Approved Make (As required according to the project)
		Ltd.,Lloyd Insulations India Ltd.,Chemisol Adhesive Pvt. Ltd. Mumbai Chemistik), CICO, Choksey ,Fosrock ,Dr.Fixit, BASF, AkzoNobel (Dulux) .
36.	White Cement	JK, Birla .
37.	Precast concrete tiles / Paver Blocks	Ultra, Eurocon, Duracrete .
38.	Road Signages and Overhead Gantry (Fulfilling the requirement of IRC : 67)	Bajaj Electrical , 3M .
39.	Door hardware	Dorma, Ozone Overseas Pvt. Ltd., Dorset Kaba Security Systems Pvt. Ltd., ASSA ABLOY India Pvt. Ltd., Hafele, Godrej, Everite Agencies, Dyna, Door king, Hettich India Pvt. Ltd .
40.	Patch Fittings	Dorma, Savex, Niki, Ozone, D-line, ASSA ABLOY India Pvt. Ltd., Hafele, Kinlong ..
41.	Rolling Shutter	Shakti Met-DorLimited,Rama Rolling Shutters ,Gandhi Automation Pvt. Ltd. ,
42.	Ball bearings	SKF, FAG, KOYO .
43.	Steel doors /windows	Shakthihormann, Indigatech, Ozone Overseas Pvt. Ltd, NCL Alltek&Seccolor Ltd, Kutty Flush Doors & Furniture Co. Pvt. Ltd , Sukri, Navair .
44.	Glazed Doors with patch fittings	Dorma, Ozone Overseas Pvt. Ltd, ASSA ABLOY India Private Ltd., Dorset Kaba Security Systems Pvt. Ltd. .
45.	UPVC Rain Water Pipe	Supreme,Finolex,KML Classic .
46.	Fire Rated Doors	SaktiHorman, Indigatech, Ozone Overseas Pvt. Ltd, Sukri, Navair , Signum, Kutty Flush Doors & Furniture Co. Pvt. Ltd., Promat International (Asia Pacific) Ltd .
47.	Flush Doors	Godrej & Boyce Mfg. Co. Ltd, Kutty Flush Doors & Furniture Co. Pvt. Ltd, Merino , Green Ply Industries/Sarda Plywood Industries Ltd (Duro Door)/Archid ,Jacsons, Century, Kitply .
48.	Galvalume Roofing sheet/PUF panels	Tata Blue Scope, Interarch, LLOYD Insulations, Metecno India Private Limited, Aditya Profiles Pvt.Ltd .
49.	Pre engineered Building system	Kirby, Pebspennar, Lloyd Insulations (India) Ltd., Octomec, Zamil steel India, TATA Bluescope
50.	High pressure compact laminate	Greenlam, Merino, FunderMax India Pvt. Ltd,

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Sr. No.	Item	Approved Make (As required according to the project)
		Century, Yemag raised flooring, Alfa ICA India Ltd, Century .
51.	Laminates	Kitply, Formica, Greenlam, National, Century, Decolam, Merino, Archid ply .
52.	Plain float glass /lacquered glass & Mirror	Saint Gobain, Asahi, Pilkington ,Modiguard .
53.	Marine Plywood	Century, Kitply, Anchor, Green Ply, Apple Ply ,Archid ply .
54.	Pre Laminated Ply	Greenlam, Merino Industries Ltd, Kitply, Century .
55.	Frosted Film	Birla 3M, Lumar, Garware, Ultra Mark ..
56.	Veneers	Century, Kitply, Anchor, Green ply, Kenwood ,Jacsons .
57.	Pre-Laminated Particle Board	Anchor,Merinolam,Archid,Novopan,Greenply,Kitl am Jacksons (Exterior grade), Associate .
58.	Resin Based Cement	Killick Nixon/Berger/Nerolac/ICI/Pidilite.
59.	Bison board	Bison panel, PE,NCL .
60.	Silicon Sealant	Dow corning, GE Silicon, Euro Build, CIPY Polyurethanes Pvt Ltd, WackerChemie,Pidilite, MYK Schomburg .
61.	Epoxy chemical for anchoring grout	HILTI India Pvt. Ltd, Fisher, Euro Build, Pidilite, Fosroc .
62.	Stainless Steel Screws	Kundan,Puja,Atul,Northfold .
63.	Chemical /Mechanical Anchor Fasteners	HILTI, Fisher, MKT (Germany), Black and Decker India Ltd., MAPEI, SS Fasteners Pvt.Ltd ..
64.	Plasticisers, Non shrink grout	Fosroc, BASF, Krishna conchem, Fairmate, Eurobuild Construction Chemicals & Coating, MYK Schomburg .
65.	Admixtures	FOSROC, Polygon, STP, BASF, CERACHEM, Don Chemicals, Sika, Eurobuild Construction Chemicals & Coating, MAPEI, Bostik, MYK Schomburg, SunandaSpeciality Coatings Pvt. Ltd, KunalConchem Private Ltd., The Structural Waterproofing co. Pvt.Ltd. / CHRYSO .
66.	High Performance Glass / Clear Glass/Reflective glass	Saint Gobain, ASAHI India Glass Ltd, Emirates Glass L.L.C .
67.	Insulation	UP TWIGA, Lloyd, Owens Corning,

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Sr. No.	Item	Approved Make (As required according to the project)
		Paramount, Rockwool (India) Ltd .
68.	Polyurethane insulation and waterproofing	BASF/ BAYER/Huntsman (ICI)/Lloyd Insulations
69.	EPDM Gaskets	Osaka Rubber Private Limited, AMEE Rubber Industries Pvt. Ltd .
70.	Glass Processing	AIS Glass Solutions Ltd, Gold Plus Group, GSC Toughened Glass Pvt. Ltd., Sejal Architectural Glass Limited, Impact Safety Solutions Ltd, TPRS Enterprises Pvt. Ltd, FUSO Glass india Pvt. Ltd .
71.	Metallic Ceiling/ Louvers / Performance Louver (metal)	Hunter Douglas India Pvt. Ltd, Armstrong World Industries (India) Pvt. Ltd, Lindner Middle East L.L.C, Chicago Metallic Corporation, Construction Specialties.
72.	Polycarbonate Sheets	Lexan from Sabic,G.E.,Wilson,Sunpal, Bayer.
73.	Aluminium Structural Members	Hindalco Industries Ltd, Jindal Aluminium Ltd, IndalcoAlloys .
74.	Aluminium Accessories	Classic,Argen,Oxford,Nulite,Crown,EBCO ..
75.	Aluminium composite panel	ALUCOBOND/ALSTONE/Eurobond
76.	Anti-Termite Treatment	Pest Control India Ltd/Pest Control Service of India/Pest India Corporation/ Godrej
77.	Fibre Glass Wool	UP Twiga, KIMCO, Rock wool ..
78.	GI Section for Partitions & False Ceiling	Saint Gobain – Gyproc ..
79.	Stainless steel	Salem Steel, Hindalco, Jindal .
80.	Expansion Joint Filler	SilFex of Supreme Industries Ltd. .
81.	Floor hardeners	Fosroc, Roffe, Fairmate, STP Ltd, Apurva India Ltd, Eurobuild Construction Chemicals & Coating, Pidilite .
82.	Bolts /Screws (SS 316)	HILTI, Fischer, MKT (Germany), S.S. Fasteners Pvt Ltd .
83.	Fixtures for structural glazing	Dorma, Giesse, Cottswold .
84.	Glass Hardware	Dorma , Ozone, Hafele, Kinlong .
85.	Sanitary Fixtures	Duravit, Kohler, Queo, Artize, Jaquar, Toto, Hindware, Cera, Roca, Kerovit .
86.	Plumbing Fittings	Kohler, Jaquar,Artize, Toto, Grohe .
87.	Concealed flush	Geberit, Grohe, Artize,Jaquar, Kohler, Queo .

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Sr. No.	Item	Approved Make (As required according to the project)
88.	Toilet accessories	Bobrick, Euronics, Simex, Jaquar, Best Practice Wash Room Pvt.Ltd .
89.	Fixtures for specially abled	Hindware, Toto, Cera, Roca .
90.	Eye wash & shower	Simex, Euronics .
91.	Stainless Steel Sink & fittings	Nirali, Diamond, Cera .
92.	Polyethylene water storage tank	Hycount, Sintex Aqua Tech .
93.	Water purifier	Eureka Forbes, Kent, Purit .
94.	Water Heater	Racold, V-Guard, Jaquar .
95.	Manhole cover	Neco/ Thermodrain .
96.	MS/GI Pipe & specials	Tata, Zenith, Jindal .
97.	PVC, CPVC, PPR Pipe specials	Astral/Ajay/Ashirvad.
98.	CI Pipe & specials	Electro steel, SAIL .
99.	CI valve	Kirlosker, L & T, Leader .
100.	Polyethylene Storage Tank	Syntex, Hycount .

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B. APPROVED MAKE LIST FOR PLUMBING WORKS

Sr. No.	Item	Approved Make(As required)
1	Automatic variable temperature control/ fixed temperature control faucets	Jaguar/Kohler/Hindware
2	Ball Valves /Globe valves	ITAP (Italy)/TBS Engineers Ltd./Zoloto/RB (Italy)/Leader/Surya/ DRP -M
3	Battery operated Autosensor Urinal flushing system	Parry/UTech Systems/AOS Systems/Jaguar/Kohler/Hindware
4	Brass stop & Bib Cock	Jaquar/Hindware/Kohler
5	Ball valve with floats	Zoloto/ Leader/ Sant/ Jayco
6	C.I. Spun Pipe (IS 8329)	Electro Steel/ IISCO/Lanco / HAPCO
7	Centrifugally Cast CI Soil Waste Pipe And Vent Pipes (IS 3989)	Neco/Anand/ HAPCO /Ashutosh Casting
8	CPVC Valves up to 50 mm Dia	ASTRAL /Finolex/KML Classic
9	CPVC Pipes & Fittings above 50 mm dia	ASTRAL /Finolex/KML Classic
10	CPVC Pipes & Fittings up to 50 mm dia	ASTRAL /Finolex/KML Classic
11	Chlorinator	Ion Exchange/Thermax Limited.
12	C.I. Rainwater inlet fitting/Bronze gratings etc.	Sage Metals/GMGR
13	Copper Fittings (Capillary)	Yorkshire Imperial/ U.K./Rajco Metal Works/ Mumbai/IBP Conex Ltd.
14	Copper Pipes	Rajco Metal Works/ Mumbai/IBP Conex Ltd.
15	C.I. Sluice Valve (Fully Way Checked And Globe Valve)	Leader/Kirloskar/Upadhyay
16	C.P. Fitting And Accessories	Jaquar/Parry/GEM/Kohler/Hindware / Artize
17	Cockroach Trap	Chilly/Player/Jayna
18	Centrifugal Pump	Crompton/Kirloskar/KSB/Grundfos
19	C.I. Fitting	Unik/Neco/Hepco
20	C.I. Sluice Valve& Non- Return Valve	Kirloskar/TVC/Leader/Electrostat
21	C.I. Spun Pipe (IS 8329)	Electro Steel/Kesoram/IISCO/Lanco/Neco/Hepco
22	Centrifugally Cast CI Soil Waste Pipe And Vent Pipes (IS 3989)	Neco/Anand/HEPCO/Ashutosh Casting
23	D.I. Pipe Fitting	Electro Steel Casting Limited/Lanco Industries Ltd./Jindal
24	Ductile Iron(DI) pipe	Electro steel casting ltd./Jindal saw ltd.
25	FRP/GRP	EVERLAST /TECHNOCRATS /THERMOSET /BAJAJ
26	Flush Valves	Jaquar/Kohlar/Hindware
27	Filtration Plant / Softening Plant	Thermax Limited./Ion Exchange
28	G.I. Pipe With Anti Corrosive Coating	Jindal/Zenith/Hissar/Tata
29	G.I. Fitting	R Brand/Zoloto/Unik/Surya/KC

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Sr. No.	Item	Approved Make(As required)
30	Gun Metal Valves (Fully Checked And Globe Valve)	Zoloto/Leader/Surya Gold
31	G.I. Pipes	Jindal-Hissar/ Tata/Zenith
32	G.I. Fittings	Unik/ K.C./ Zoloto/Leader/Surya
33	Gunmetal Valves	Zoloto/ Leader/ Sant/ Kilburn
34	Hand Dryer	Kopal/UTech Systems , Blue Circle (India) Pvt. Ltd./Kohler
35	Hydro Pneumatic System	HBDGM/ Grundfos /Salmson /Nocchi
36	HDPE pipe	Duraline/ Jain/Time Tech/KML Clasic/Supreme
37	Liquid Soap Container	UTech Systems/Blue Circle (India) Pvt. Ltd. Kimberly Clark/Jaguar/Hindware/ Kohler
38	Level Controller	21st Century/Advance Auto/Sridhan International
39	Motor	Crompton/Kirloskar/Siemens/Jyoti
40	Manhole Covers & Frame SFRC	K.K/ PERGITY/Neco/SRIF/Pratibha/Bajaj
41	Non Clog Centrifugal Pump	Crompton/Kirloskar/KSB
42	PVC Flushing Cistern	Johnson Pedder/Parryware/Hindware
43	Plastic Seat And Cover (Solid Heavy Duty)	Hindware/Johnson/Pedder/ Parryware / Juquar / Kohler
44	PVC Pipes & fittings SWR Soil/ Waste & Vent Pipes and Fittings/ Type B PVC Casing & Screen Pipes	Supreme /Finolex//KML Classic
45	Polyethylene Water Storage Tank	Sintex /Rotex /Fusion /Storex/Plasto/Ocean (ISI)
46	PVC Insulated Tank 3-layer	Frontier/Euro/Diplast
47	P.T.M.T. Fitting	Prince/India /Symet
48	PP-R pipes (PN - 16)	Amitex polymers Pvt. Ltd./Prince/Supreme
49	PVC Flushing Cistern	Johnson Pedder/Parryware / HINDWARE
50	Plastic Seat And Cover (Solid Heavy Duty)	Hindware/Johnson/Pedder/Parryae
51	RCC Hume Pipe	Indian Hume Pipe/Pragati Concrete Udyog/Equivalent/(ISI Mark) /Jain Spun /Dewan spun
52	R.O. System	Ion Exchange/Sterling India Ltd/Pentair Water
53	Stainless Steel Sinks	Jayna/Neelkanth/Nirali/Franke
54	SFRC Manhole Cover And Frame, Gully Trap covers & SFRC Casings	K.K. Manhole/Pratibha/Everlast
55	Submersible Water Pump	Raindrop/KSB/Grundfos/Kirloskar
56	Submersible Drainage Pump	Mody/Grundfos/HBDGM/Zenit
57	Stone Ware Pipes And Gully Traps (ISI Marked)	Perfect/Burn/R.K.&Equivalent, approved as per Engineer Incharge /pragati
58	Self-Closing Taps/Pillar cocks	Italy/Kohlar/Hindware/Jaguar
59	Self-Closing Mixers	Italy/Kohlar/Hindware/Jaguar
60	Solar Hot Water System	Tata BP Solar/EPL INDIA LIMITED/Solahart (India)

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Sr. No.	Item	Approved Make(As required)
61	Specification for EPDM Gasket	AnandReddiplex/ Enviro Seals
62	S.S. Sink (SS-304)	Franke / Jayna / Nirali
63	Turbine Pump	Jyoti/Kirloskar/KSB/Crompton/ Grundfos
64	Thermal insulation	K-flex/Vidoflex
65	Vitreous China Sanitary Ware	Parryware /Hindware/Kohlar/ROCA
66	Water level controller	Elegant controls/Active Controls
67	WC connections	Multi KWik (U.K) / Prince/Supreme
68	uPVC Pipes and fittings	Prince/Supreme / jain/KML Classic
69	Pipe clamp and support	Chill / euro clamping / Hi-tech/ KML Classic
70	Concealed PVC Flushing Cistern	Kohler/Hindware/Geberit/Parryware

C. APPROVED MAKE LIST FOR ELECTRICAL WORKS

Sr. No.	Item	Approved Make (As required)
1.	LT Panel boards	CPRI certified panel manufacturer with components of approved makes.
2.	ACB	Schneider, L&T, ABB, Siemens, Mitsubishi
3.	MCCB	Schneider, L&T, ABB, Siemens, Legrand(Only for MCCB Distribution Boards), Mitsubishi
4.	SDF/ SDFU	L&T, Simens, Schneider, ABB
5.	Capacitor and block reactor (LT)	L&T, Sprague, Schneider, Epcos, Shreem, ABB
6.	Starters, Timer & Contactors	Siemens, L&T, Schneider, C&S, ABB, BCH
7.	Push Buttons	Schneider, Siemens, L&T, BCH, C&S, Teknic
8.	Indicating lamps (LED type)	Teknic, Schneider, Siemens, L&T, BCH, C&S
9.	Numerical Relays	Siemens, L&T, ABB, GE, Schneider, Alstom
10.	Synchronization relays	Deif, Woodward
11.	APFC relay*	ABB, Beluk, Epcos
12.	Indicating meters (Analogue)	AE, MECO, L&T, Rishab
13.	TOD meter	L&T, Schnieder, Secure
14.	Digital meters	L&T, ABB, Siemens, Schneider, Socomec, Secure, Elmeasure
15.	Current Transformer & Potential Transformer	AE, Intrans, Kappa, L&T, Rishab, ResiTech Electricals, PGR Powertech, Pragati, Newtek Electricals
16.	Selector switches	Tecnic, Kaycee, L&T
17.	UPS (above and including 10kVA)	Socomec, Emerson, Schneider by APC, Reilo, Numeric, GE
18.	Battery Charger	Waves, HBL, Amara Raja, Dubas
19.	SMF/VRLA Batteries	Exide, Amara Raja, HBL

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Sr. No.	Item	Approved Make (As required)
20.	Sandwich Bus duct	L & T, Godrej, Schneider, C&S
21.	1.1 kV grade XLPE insulated PVC sheathed Al./ Cu. Cable	KEI, Polycab, Havells, Gloster, Finolex, Torrent , RPG-KEC Cables
22.	660/1100 volt grade stranded unsheathed wire with copper conductor	Finolex, RR Kabel, Lapp Kabel, Polycab, V-guard
23.	Cable glands, lugs, End termination kits	Lapp Kabel, Gripwel, HMI, Denson, Multipressings, Yamuna Gasses, Dowels, Comet
24.	Anchor Fastener	Hilti, Fischer
25.	GI Cable tray	Indiana / Steelite / Rico Steel / ProfabEngg /OBO/ Legrand, fixotech
26.	Modular type switches, sockets, bell push, fan regulator etc-Medium range	Honeywell (Blenze), Wipro-North West (Nowa) , Legrand (Myrius), Kolors (krest), Crabtree (Athena), Anchor by Panasonic (Roma Plus)
27.	Metalclad plug/socket/Decontactor	Legrand, Schneider, L&T
28.	Thermoplastic receptacles & Decontactor	Mennekes, Hensel Walther, Schneider, Scame
29.	MCB, RCCB	Legrand, Siemens, Hager, Schnedier, L&T, ABB
30.	MCB Distribution Boards	Legrand, Siemens, Hager, Schneider, L&T, ABB
31.	Ceiling fans/Wall fans	Usha, Crompton, Orient, Khaitan
32.	Exhaust fans	Almonard, Crompton, Khaitan
33.	Ventilating fans	Greenheck, Ostberg, System Air, Kruger
34.	PVC Conduit and accessories/ casing and capping	Precision, Clipsal, Lappkabel, Balco, Konseal, Polycab, Panasonic
35.	Ceiling Rose	Anchor, GM
36.	GI conduit/M S Conduit	Any ISI marked.
37.	LED Light Fixtures (indoor)	Philips, Wipro, Crompton Greaves, Trilux, XAL, LT, Zumtobel, Osram, Duralamp Targetti.
38.	LED module/LED Chip	NICHIA/ OSRAM/ CREE/ LUMILEDS/SAMSUNG/CITIZEN (Japan)/Bridgelux(USA)/EVERLITE
39.	LED Driver	Osram, Meanwell, Tridronics, BAG, LT, Helvar, Wipro, Philips, Crompton
40.	Occupancy Sensors	Schneider, Theban, Osram, Lutron, Honeywell, Crestron, Dynalite
41.	External Light	K-lite, Crompton, Philips, Wipro, Keselec, LT, Bajaj
42.	External lighting Pole	K-lite, LT, Crompton, Bajaj, Keselec, valmont
43.	Highmast	Crompton, Bajaj, valmont
44.	Lightning Protection and accessories	OBO , Dehn, Furse, Erico
45.	Surge Protective Devices	OBO, Dehn, Furse, Phoenix Contact, Erico, Mersen
46.	Synthetic Insulating Mats	CPRI certified for required voltage level as per IS 15652
47.	Chemical earthing	OBO, Dehn, Furse, Jeftechno, erico

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SCHEDULE– D

Section – VI

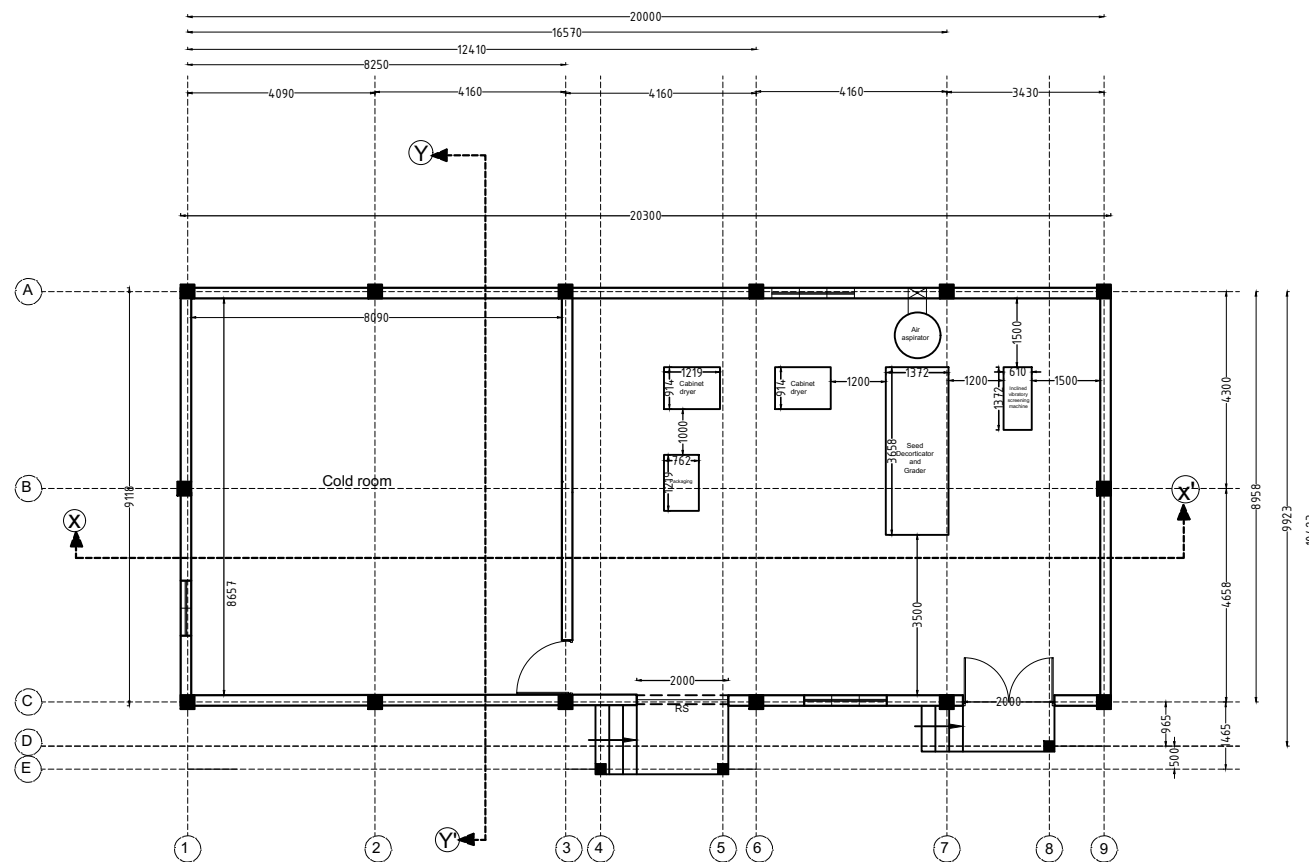
Drawings

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LIST OF DRAWING		
DRAWING TITLE		
SL.NO.	PACKAGE - A	PAGE NO .
A	CHIRONJEE PROCESSING UNIT	
1	Architectural plan of chironjee processing unit	1
2	Elevation and section of chironjee processing unit	2
3	Structural detail of chironjee processing unit	3 - 8
4	Electrical layout of chironjee processing unit	9
B	NEEM / MAHUA / KUSUM / GROUND- NUT OIL PROCESSING UNIT	
5	Architectural plan of neem / mahua / kusum / ground - nut oil processing unit	10
6	Elevation and section of neem / mahua / kusum / ground - nut oil processing unit	11
7	Structural detail of neem / mahua / kusum / ground - nut oil processing unit	12 - 17
8	Electrical layout of neem / mahua / kusum / ground - nut oil processing unit	18
C	MASALA PROCESSING UNIT	
9	Architectural plan of masala processing unit	19
10	Elevation and section of masala processing unit	20
11	Structural detail of masala processing unit	21 - 26
12	Electrical layout of masala processing unit	27
D	PRIMARY PROCESSING UNIT	
13	Architectural plan of primary processing unit	28
14	Elevation and section of primary processing unit	29
15	Structural detail of primary processing unit	30 - 35
16	Electrical layout of primary processing unit	36
	PACKAGE - B	
E	LAC PROCESSING UNIT	
17	Architectural plan of lac processing unit	37
18	Elevation and section of lac processing unit	38
19	Structural detail of lac processing unit	39 - 44
20	Electrical layout of lac processing unit	45
F	PULSE MILLING UNIT	
21	Architectural plan of pulse milling unit	46
22	Elevation and section of pulse milling unit	47
23	Structural detail of pulse milling unit	48 - 53
24	Electrical layout of pulse milling unit	54
G	OHT - 50 KL CAPACITY	
25	Architectural plan of oht - 50kl capacity	55
26	section of oht - 50kl capacity	56
27	Structural detail of oht - 50kl capacity	57
H	EXTERNAL ELECTRIFICATION	

28	Electrical layout of external electrification	58
	PACKAGE - C	
I	WAREHOUSE	
29	Architectural plan of warehouse	59
30	Elevation and section of warehouse	60
31	Structural detail of warehouse	61 - 66
32	Electrical layout of warehouse	67
J	ENTRANCE GATE	
33	Architectural plan / Elevation of entrance gate	68
K	TOILET BLOCK , SEPTIC TANK & SOAK PIT	
34	Architectural plan of toilet	69
35	Elevation and section of toilet	70
36	Structural detail of toilet	71 - 75
37	Electrical layout of toilet	76
38	Architectural plan / section / structural detail of septic tank & soak pit	77



CHIRONJEE PROCESSING UNIT
BUILD UP AREA - 192 SQM

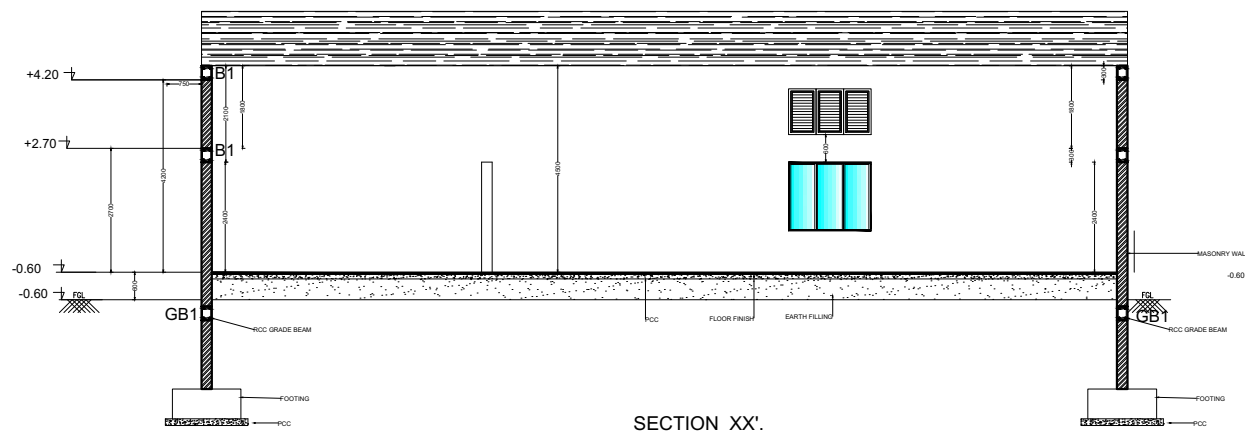
- LIST OF DRAWING
PULSE MILLING UNIT
DP0001 DRG CL 01 102**
- 1 - PLAN LAYOUT
 - 2 - SECTION / ELEVATION
 - 3 - COLUMN LAYOUT
 - 4 - FOOTING LAYOUT
 - 5 - GROUND BEAM LAYOUT
 - 6 - BEAM LAYOUT (2.5 M ABOVE)
 - 7 - BEAM LAYOUT (4.5 M ABOVE)
 - 8 - TRUSS DETAIL
 - 9 - ELECTRICAL LAYOUT

OPENING SCHEDULE

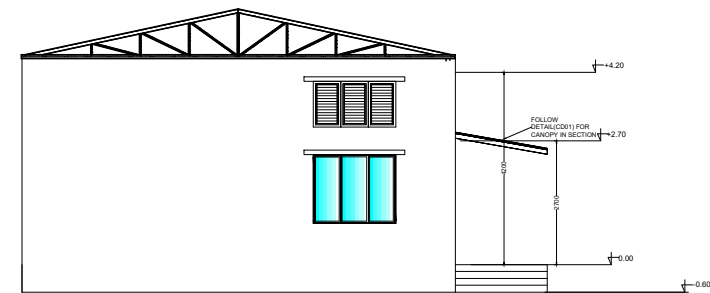
NAME	SAYMBOL
WINDOW	- W1
VENTILATOR	- V1
ROLLING SHUTTER	- R1
DOOR	- D1

SN	SAYMBOL	NOS	SIZE
01	W1	02	1.8M X 1.5M
02	V1	03	1.8 M X 1 M
03	R1	01	2.5M X 2.4 M
04	D2	01	2M X 2.1M

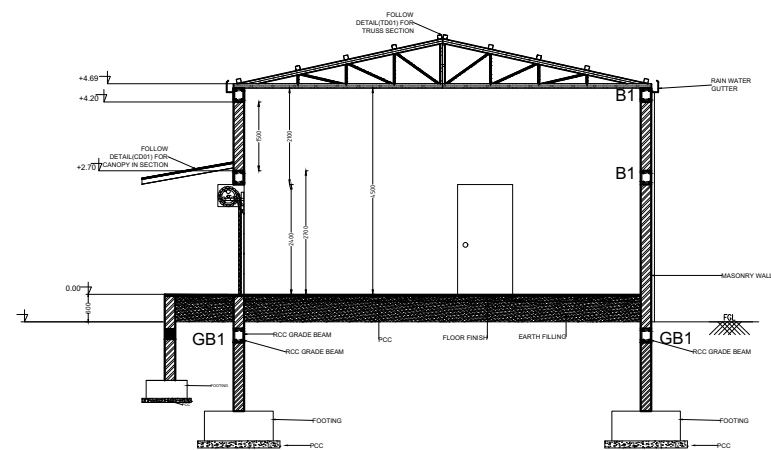
DRG NO:		SHEET NO:	REV.	SCALE:	SWATI Architecture landscape interior ARCHITECTS PLANERS ENGINEERING INTERIOR DESIGN 282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com	
DP0001 DRG CL 01 102		1 OF 9	R0	NTS		
DESIGNED:		DRAWN:	CHECKED:	VERIFIED:	APPROVED:	CLIENT:
UPENDRA SINGH		SIMRAN SONI	UPENDRA SINGH	ADMIN	ADMIN	CHHATTISGARH STATE MINOR FOREST PRODUCE
ISSUED FOR:					UNIT:	DATE:
TENDOR PURPOSE					MILIMETER	12.05.2022
116 This drawing is the property of HUP DESIGN and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand					PROJECT:	
					INCUBATION CENTER AT DEOBHOG GARIYABAND	
					TITLE:	
					CHIRONJEE PROCESSING UNIT PLAN LAYOUT	
					1	



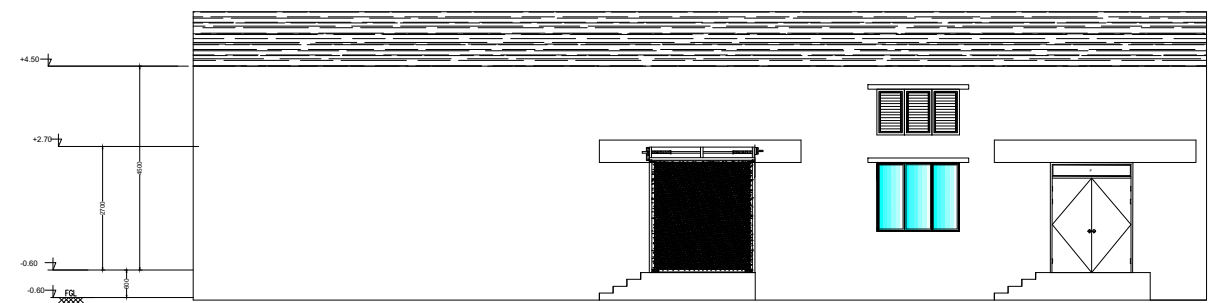
SECTION XX'.



SIDE ELEVATION

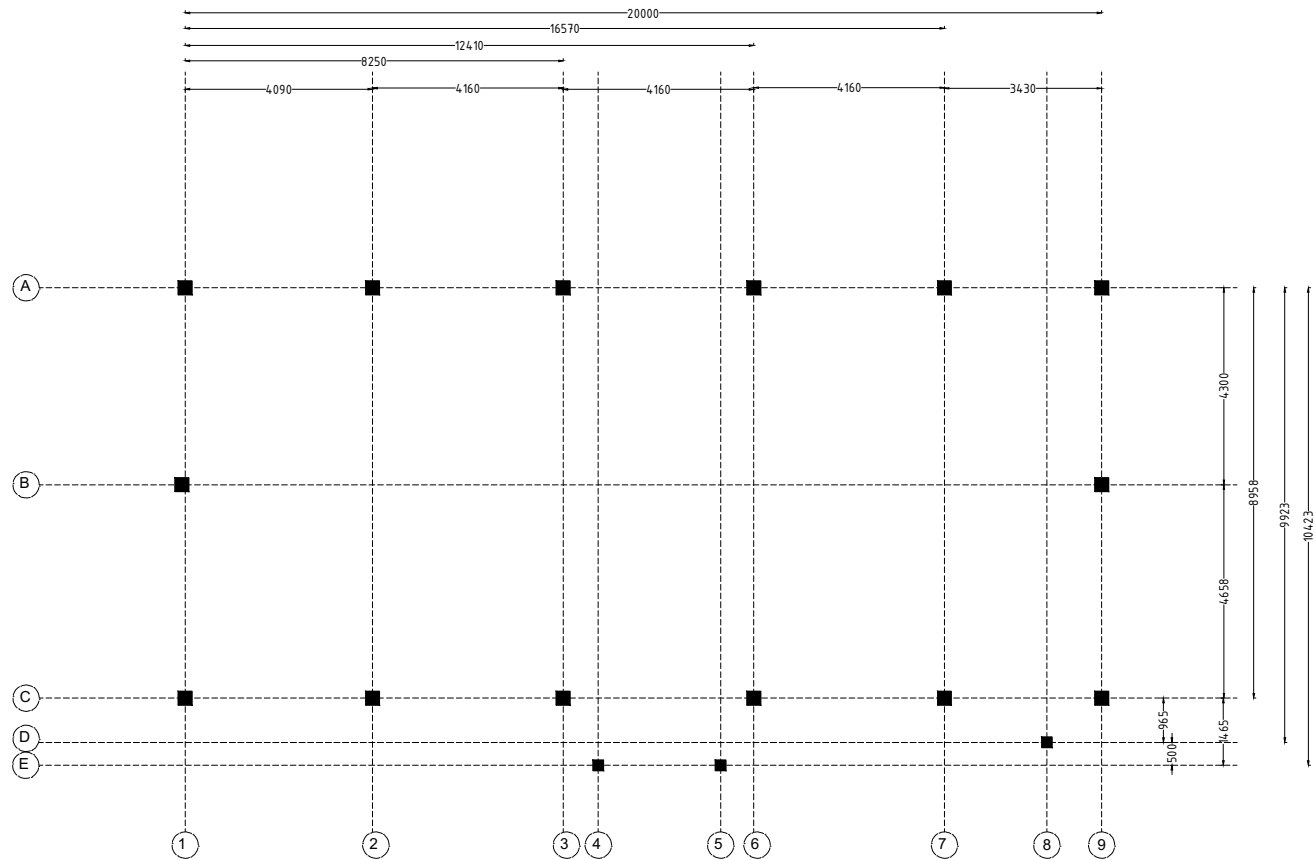


SECTION YY'.

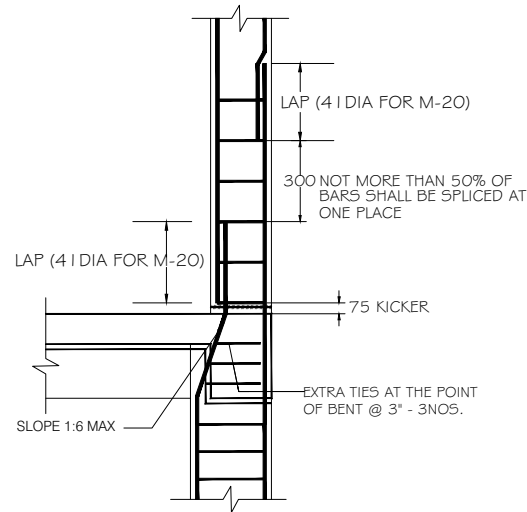


ELEVATION FRONT .

DRG NO: DP0001 DRG CL 01 102	SHEET NO: 2 OF 9	REV. R0	SCALE: NTS	SWATI Architecture landscape interior ARCHITECTS PLANERS ENGINEERING INTERIOR DESIGN 282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com	
DESIGNED: UPENDRA SINGH SIMRAN SONI	DRAWN: UPENDRA SINGH	CHECKED:	VERIFIED: ADMIN	APPROVED: ADMIN	CLIENT: CHHATTISGARH STATE MINOR FOREST PRODUCE
ISSUED FOR: TENDOR PURPOSE		UNIT: MILIMETER	DATE: 12.05.2022	PROJECT: INCUBATION CENTER AT DEOBHOG GARIYABAND	
This drawing is the property of HUP DESIGN and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand				TITLE: CHIRONJEE PROCESSING UNIT SECTION/ ELEVATION	2



COLUMN LAYOUT PLAN







COLUMN DETAIL

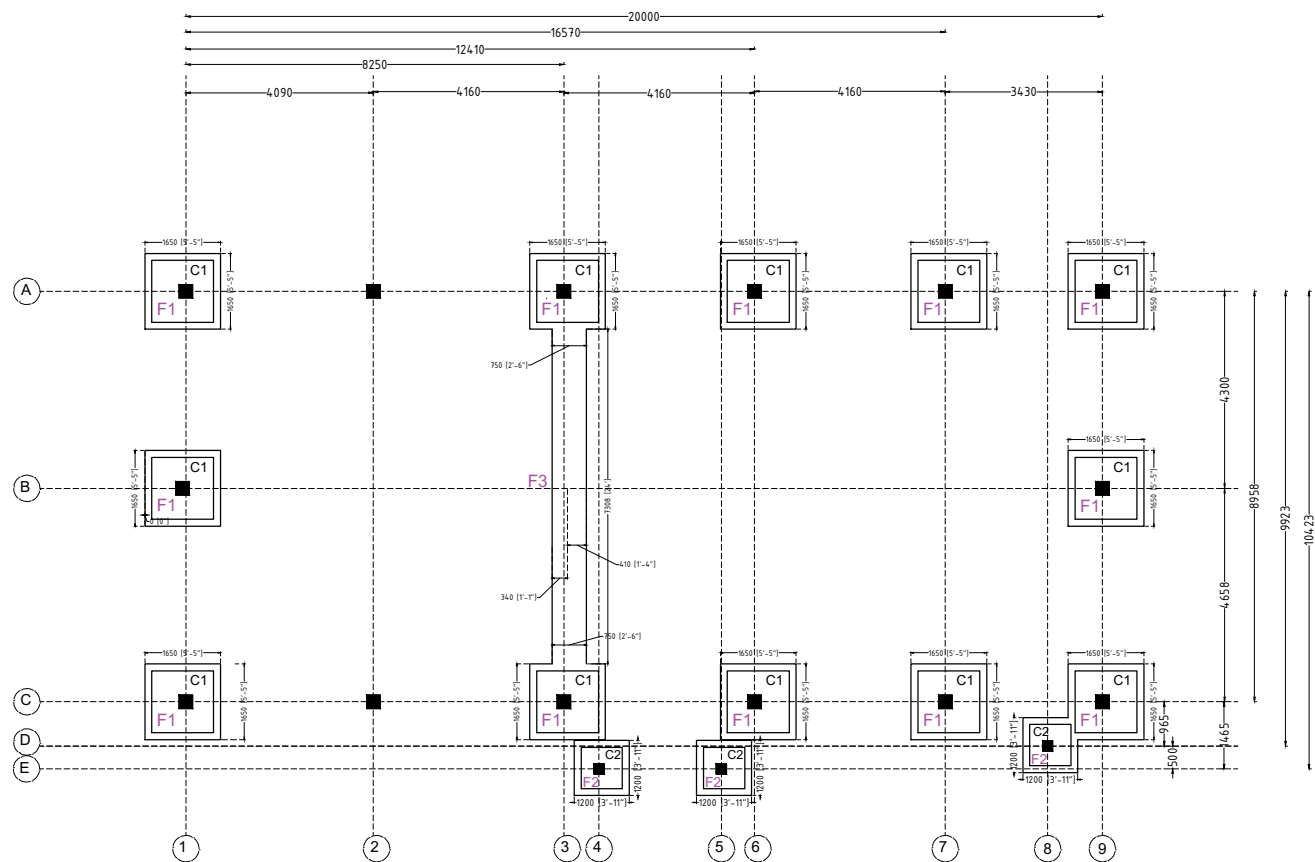
GENERAL NOTES

- NOTES-
- USE - M 20 GRADE OF CONC. AS/IS 426-5000
 - USE - FE 500 GRADE OF REINF. BY CLIENT
 - PROVIDE CLEAR COVER TO MAIN REINF.
- FOUNDATION- 50MM
COLUMN - 40MM
BEAM - 25MM
SLAB - 20MM OR DIA OF BAR, WHICHEVER IS MORE,
R.C.C. WALL - 25MM
- 4.TIES SHOULD BE BEND INSIDE WITH 10# LENGTH IN BEAM & COLUMN
- 5.FOLLOW - IS-456-2000 FOR R.C.C. WORK
- 6.STRIPPING TIME FOR SHUTTERING / FORMWORK UNDER NORMAL CONDITION.
- | TYPE OF WORK | MINIMUM PERIOD BEFORE STRIKING FORM WORK |
|--|--|
| a) VERTICAL FORMWORK TO COLUMN, WALLS, BEAM | 16-24 HOUR |
| b) SOFFITS FORMWORK TO SLABS (PROPS TO BE REFIXED- IMMEDIATELY AFTER REMOVAL OF FORMWORK) | 3 DAYS |
| c) SOFFIT FORMWORK TO BEAMS (PROPS TO BE REFIXED IMMEDIATELY AFTER REMOVAL OF FORMWORK) | 7DAYS |
| d) PROPS TO SLABS: | |
| 1) SPANNING UP TO 4.5M | 7DAYS |
| 2) SPANNING OVER 4.5M | 14 DAYS |
| e) PROPS TO BEAMS & ARCHES: | |
| 1) SPANNING UP TO 6M | 14DAYS |
| 2) SPANNING OVER 6M | 21DAYS |
- CURING FOR R.C.C. MEMBER MINIMUM 14 DAYS CONTINOUSELY PREFERABLE - 28 DAYS.
 - START EARLY CURING TO AVOID SRINKAGE CRACKS, WHEN CONCRETE APPEARS TO HARDEN.
 - PROVIDE FOLLOWING SLUMP IN CONCRETE GEN-ERALLY.
- | | |
|---|---------|
| a) SHALLOW SECTIONS, PAVMENTS, MASS CONC. LIGTH REINFORCEMENT | |
| SECTION IN SLAB, BEAM, WALL, COLUMN | 25-75 |
| b) HEAVILY REINFORCEMENT SECTION IN SLAB | 50-100 |
| c) HEAVILY REINFORCEMENT SECTION IN BEAMS, WALLS, COLUMNS SLIPFORM, OR PUMPED CONC. | 75-100 |
| d) TRENCH FILL, PILLING, PUMPED CONC. | 100-150 |
- 10) PROVIDE LAP/ DEVELOPEMENT LENGTH IN REINFORCEMENT BARS GRADE OF CONC.
- M20- 47Ø
M25-41Ø
M30-38Ø
- 11) REFER RELEVANT DRG. WITH THIS DRG.
- 12) AVOID CORE CUTING.

TYPICAL COLUMN DETAIL'S

COLUMN NAME	Pile/col detail	STIRRUPS	REMARKS
C1	 <div>8-T12 T8@ 200 c/c 2-Tie</div>		FOUNDATION TO TERRACE
C1	 <div>4-T12 T8@ 200 c/c 1-Tie</div>		TERMINATE AT GROUND LVL

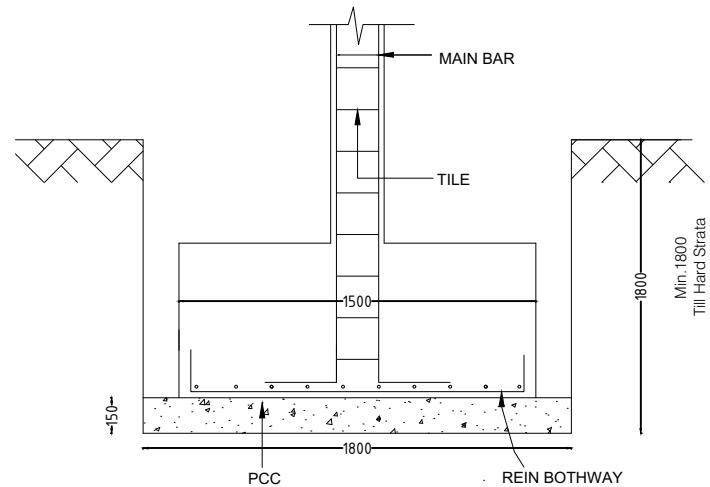
DRG NO: DP0001 DRG CL 01 102					SHEET NO: 3 OF 9	REV. R0	SCALE: NTS	SWATI Architecture landscape interior ARCHITECTS PLANERS ENGINEERING INTERIOR DESIGN 282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com				
DESIGNED:		DRAWN:		CHECKED:		VERIFIED:		APPROVED:		CLIENT:	CHHATTISGARH STATE MINOR FOREST PRODUSE	
UPENDRA SINGH		SIMRAN SONI		UPENDRA SINGH		ADMIN		ADMIN				
ISSUED FOR:						UNIT:		DATE:		PROJECT:	INCUBATION CENTER AT DEOBHOG GARIYABAND	
TENDOR PURPOSE						MILIMETER		12.05.2022				
118 This drawing is the property of HUP DESIGN and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand								TITLE:		CHIRONJEE PROCESSING UNIT COLUMN LAYOUT		3



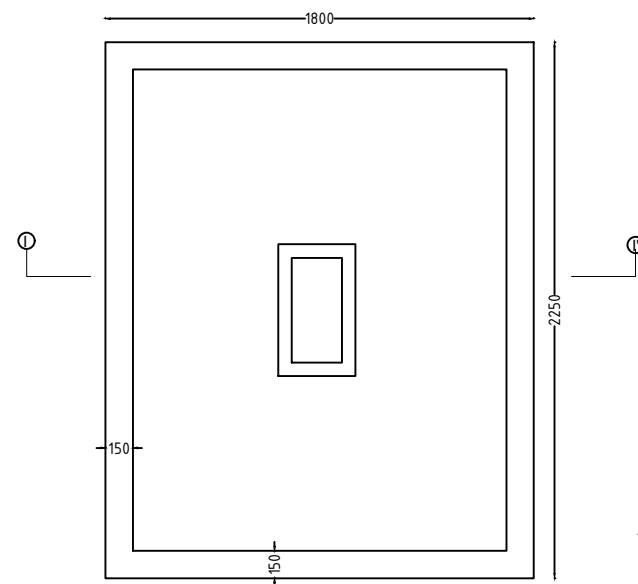
FOOTING LAYOUT

FOOTING SCHEDULE

FE500 AND M20							
Footing	Column	PCC Size	Footing Size	Total	Steel	Steel	Remarks
	Nos	X - Y mm	X - Y mm	Depth mm	to X mm	to Y mm	
F1	C1	1650 X 1650	1350 X 1350	400	T10@ 175C/C	T10@ 175 C/C	Bottom bars only
F2	C2	1200 X 1200	900 X 900	230	T8@200C/C	T8@ 200 C/C	Bottom bars only



TYPICAL FOOTING SECTION (1-1')



TYPICAL FOOTING PLAN

GENERAL NOTES

NOTES-

1. USE - M 20 GRADE OF CONC. AS/IS 426-5000
2. USE - FE 500 GRADE OF REINF. BY CLIENT
3. PROVIDE CLEAR COVER TO MAIN REINF.

FOUNDATION- 50MM
COLUMN - 40MM
BEAM - 25MM
SLAB - 20MM OR DIA OF BAR, WHICHEVER IS MORE,
R.C.C. WALL - 25MM
4.TIES SHOULD BE BEND INSIDE WITH 10# LENGTH IN BEAM & COLUMN



- 5.FOLLOW - IS-456-2000 FOR R.C.C. WORK
- 6.STRIPPING TIME FOR SHUTTERING / FORMWORK UNDER NORMAL CONDITION.

TYPE OF WORK	MINIMUM PERIOD BEFORE STRIKING FORM WORK
--------------	--

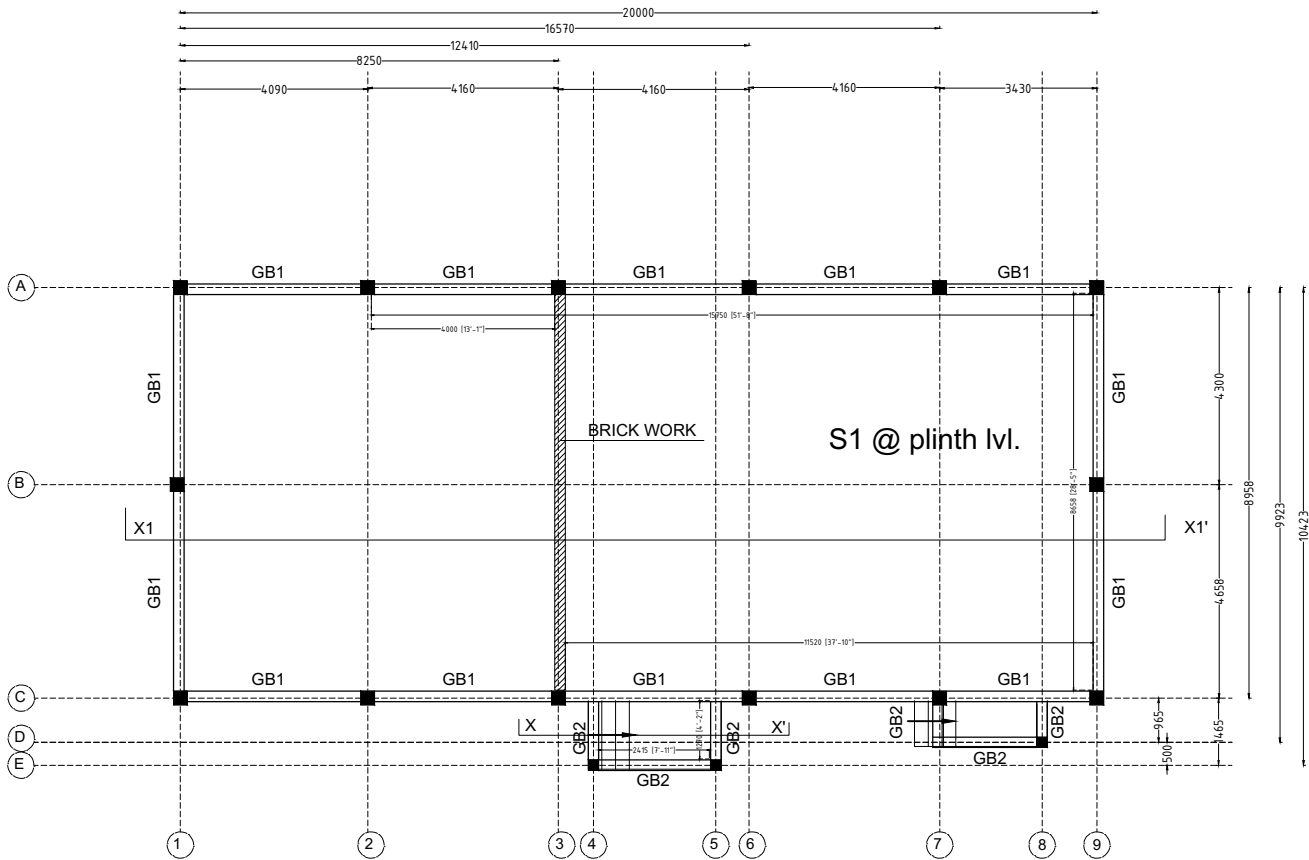
- a) VERTICAL FORMWORK TO COLUMN, WALLS, BEAM 16-24 HOUR
- b) SOFFITS FORMWORK TO SLABS (PROPS TO BE REFIXED- IMMEDIATELY AFTER REMOVAL OF FORMWORK) 3 DAYS
- c) SOFFIT FORMWORK TO BEAMS (PROPS TO BE REFIXED IMMEDIATELY AFTER REMOVAL OF FORMWORK) 7DAYS
- d) PROPS TO SLABS:
 - 1) SPANNING UP TO 4.5M 7DAYS
 - 2) SPANNING OVER 4.5M 14 DAYS
- e) PROPS TO BEAMS & ARCHES:
 - 1) SPANNING UP TO 6M 14DAYS
 - 2) SPANNING OVER 6M 21DAYS

7. CURING FOR R.C.C. MEMBER MINIMUM 14 DAYS CONTINUOUSLY PREFERABLE - 28 DAYS.
8. START EARLY CURING TO AVOID SRINKAGE CRACKS, WHEN CONCRETE APPEARS TO HARDEN.
- 9) PROVIDE FOLLOWING SLUMP IN CONCRETE GENERALLY.
 - a) SHALLOW SECTIONS, PAYMENTS, MASS CONC. LIGTH REINFORCEMENT SECTION IN SLAB, BEAM, WALL, COLUMN 25-75
 - b) HEAVILY REINFORCEMENT SECTION IN SLAB 50-100
 - c) HEAVILY REINFORCEMENT SECTION IN BEAMS, WALLS, COLUMNS SLIPFORM, OR PUMPED CONC. 75-100
 - d) TRENCH FILL, PILLING, PUMPED CONC. 100-150
- 10) PROVIDE LAP/ DEVELOPEMENT LENGTH IN REINFORCEMENT BARS GRADE OF CONC.

M20- 47Ø
M25-41Ø
M30-38Ø
- 11) REFER RELEVANT DRG. WITH THIS DRG.
- 12) AVOID CORE CUTING.

DRG NO:	SHEET NO:	REV.	SCALE:
DP0001 DRG CL 01 102	3 OF 9	R0	NTS
DESIGNED:	DRAWN:	CHECKED:	VERIFIED:
UPENDRA SINGH	SIMRAN SONI	UPENDRA SINGH	ADMIN
ISSUED FOR:	UNIT:	DATE:	
TENDOR PURPOSE	MILIMETER	12.05.2022	

SWATI Architecture landscape interior ARCHITECTS I PLANERS I ENGINEERING I INTERIOR DESIGN 282 , tulip , A block , Talpuri International colony , Bhillai , C.G. Email - swati.arch@outlook.com	
CLIENT:	CHHATTISGARH STATE MINOR FOREST PRODUSE
PROJECT:	INCUBATION CENTER AT DEOBHOG GARIYABAND



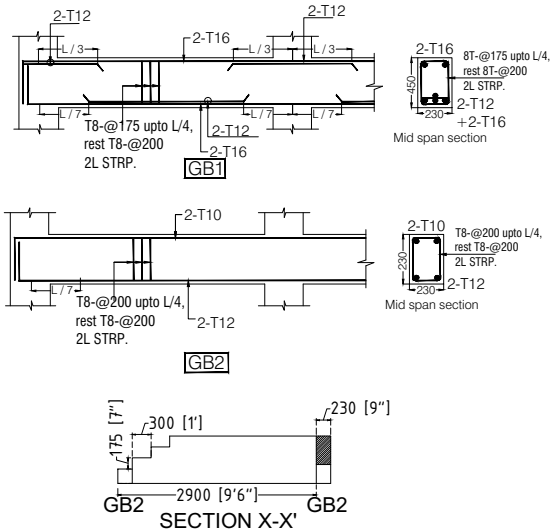
GROUND BEAM LAYOUT

BEAM SCHEDULE FOR GROUND/ PLINTH LVL.

GB1	230X375	2-T16	2-T12	2-T16	2-T12	2-T12	T8 @200C/C	T8 @175C/C	T8 @175C/C	SLAB THK. INCLUDED
GB2	230X230	2-T12	-	2-T10	-	-	T8 @200C/C	T8 @200C/C	T8 @200C/C	SLAB THK. INCLUDED

SLAB SCHEDULE FOR GROUND FLOOR LVL.

SLAB NAME	THICKNESS (mm)			remarks
		Main Steel	Other Steel	
S1	150 (MESH)	T8 @ 200 c/c	T8 @ 200 c/c	All straight

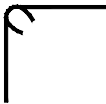


GROUND BEAM SECTIONAL DETAIL

GENERAL NOTES

NOTES-

- USE - M 20 GRADE OF CONC. AS/IS 426-5000
 - USE - FE 500 GRADE OF REINF. BY CLIENT
 - PROVIDE CLEAR COVER TO MAIN REINF.
- FOUNDATION- 50MM
COLUMN - 40MM
BEAM - 25MM
SLAB - 20MM OR DIA OF BAR, WHICHEVER IS MORE,
R.C.C. WALL - 25MM
- TIES SHOULD BE BEND INSIDE WITH 10# LENGTH IN BEAM & COLUMN



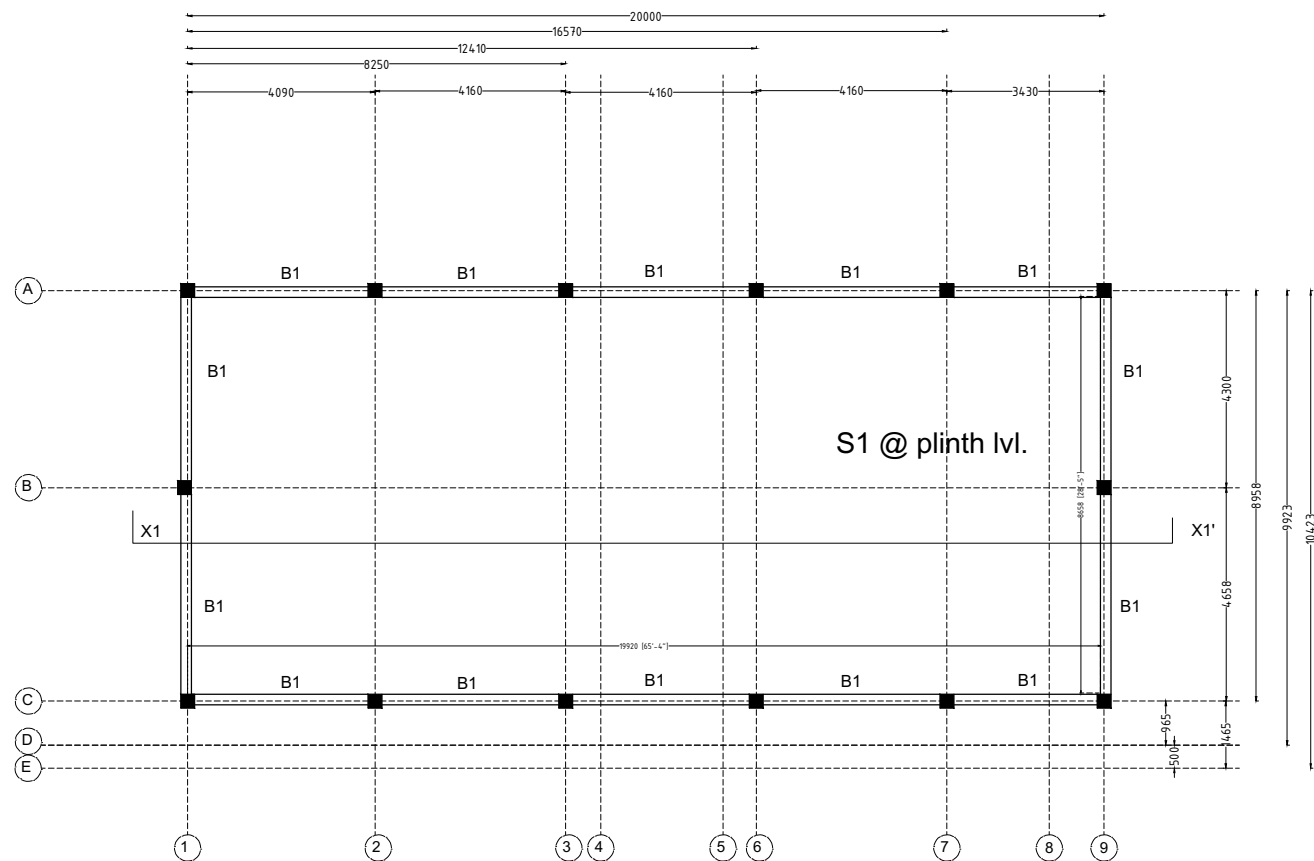
- FOLLOW - IS-456-2000 FOR R.C.C. WORK
- STRIPPING TIME FOR SHUTTERING / FORMWORK UNDER NORMAL CONDITION.

TYPE OF WORK	MINIMUM PERIOD BEFORE STRIKING FORM WORK
--------------	--

- VERTICAL FORMWORK TO COLUMN, WALLS, BEAM 16-24 HOUR
- SOFFITS FORMWORK TO SLABS (PROPS TO BE REFIXED- IMMEDIATELY AFTER REMOVAL OF FORMWORK) 3 DAYS
- SOFFIT FORMWORK TO BEAMS (PROPS TO BE REFIXED IMMEDIATELY AFTER REMOVAL OF FORMWORK) 7DAYS
- PROPS TO SLABS:
 - 1) SPANNING UP TO 4.5M 7DAYS
 - 2) SPANNING OVER 4.5M 14 DAYS
- PROPS TO BEAMS & ARCHES:
 - 1) SPANNING UP TO 6M 14DAYS
 - 2) SPANNING OVER 6M 21DAYS

- CURING FOR R.C.C. MEMBER MINIMUM 14 DAYS CONTINUOUSLY PREFERABLE - 28 DAYS.
- START EARLY CURING TO AVOID SRINKAGE CRACKS, WHEN CONCRETE APPEARS TO HARDEN.
- PROVIDE FOLLOWING SLUMP IN CONCRETE GENERALLY.
 - SHALLOW SECTIONS, PAYMENTS, MASS CONC. LIGTH REINFORCEMENT SECTION IN SLAB, BEAM, WALL, COLUMN 25-75
 - HEAVILY REINFORCEMENT SECTION IN SLAB 50-100
 - HEAVILY REINFORCEMENT SECTION IN BEAMS, WALLS, COLUMNS SLIPFORM, OR PUMPED CONC. 75-100
 - TRENCH FILL, PILLING, PUMPED CONC. 100-150
- PROVIDE LAP/ DEVELOPEMENT LENGTH IN REINFORCEMENT BARS GRADE OF CONC.
 - M20- 47Ø
 - M25-41Ø
 - M30-38Ø
- REFER RELEVANT DRG. WITH THIS DRG.
- AVOID CORE CUTING.

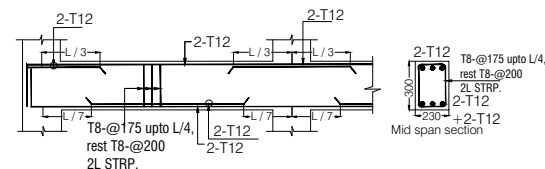
DRG NO:		SHEET NO:		REV.	SCALE:	<div>SWATI Architecture landscape interior</div> <div>ARCHITECTS PLANERS ENGINEERING INTERIOR DESIGN</div> <div>282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com</div>
DP0001	DRG CL 01 102	5 OF 9		R0	NTS	
DESIGNED:		DRAWN:	CHECKED:	VERIFIED:	APPROVED:	CLIENT: <div>CHHATTISGARH STATE MINOR FOREST PRODUCE</div>
UPENDRA SINGH		SIMRAN SONI	UPENDRA SINGH	ADMIN	ADMIN	
ISSUED FOR:				UNIT:	DATE:	PROJECT: <div>INCUBATION CENTER AT DEOBHOG GARIYABAND</div>
TENDOR PURPOSE				MILIMETER	12.05.2022	
<div>120</div> <div>This drawing is the property of HUP DESIGN and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand</div>						TITLE: <div>CHIRONJEE PROCESSING UNIT</div> <div>BEAM LAYOUT</div> <div>5</div>



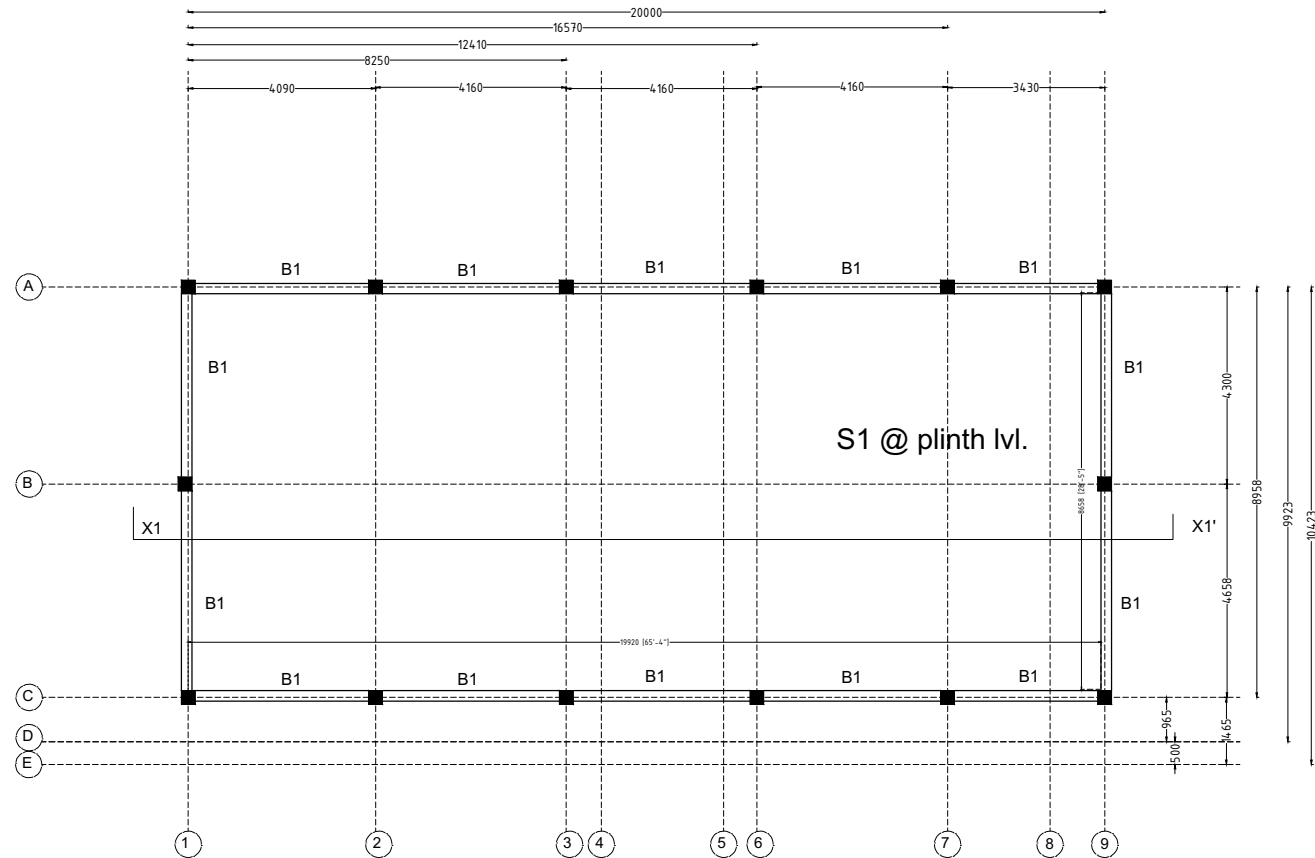
BEAM PLAN(2.4 m ABOVE PLINTH LVL)

BEAM SCHEDULE FOR 2.4m LVL. ABOVE PLINTH

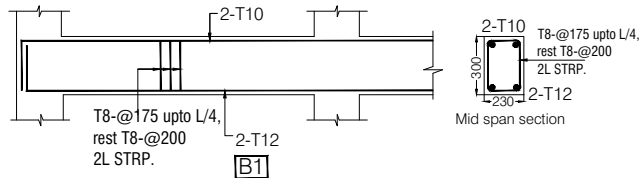
B1	230X300	2-T12	2-T12	2-T12	2-T12	2-T12	T8 @200C/C	T8 @175C/C	T8 @175C/C	SLAB THK. INCLUDED



DRG NO: DP0001 DRG CL 01 102	SHEET NO: 3 OF 9	REV. R0	SCALE: NTS	SWATI Architecture landscape interior ARCHITECTS PLANERS ENGINEERING INTERIOR DESIGN 282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com	
DESIGNED: UPENDRA SINGH	DRAWN: SIMRAN SONI	CHECKED: UPENDRA SINGH	VERIFIED: ADMIN	APPROVED: ADMIN	CLIENT: CHHATTISGARH STATE MINOR FOREST PRODUCE
ISSUED FOR: TENDOR PURPOSE	UNIT: MILIMETER	DATE: 12.05.2022	PROJECT: INCUBATION CENTER AT DEOBHOG GARIYABAND		
This drawing is the property of HUP DESIGN and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand				TITLE: CHIRONJEE PROCESSING UNIT BEAM LAYOUT	6



BEAM PLAN (4.5 ABOVE PLINTH LVL)



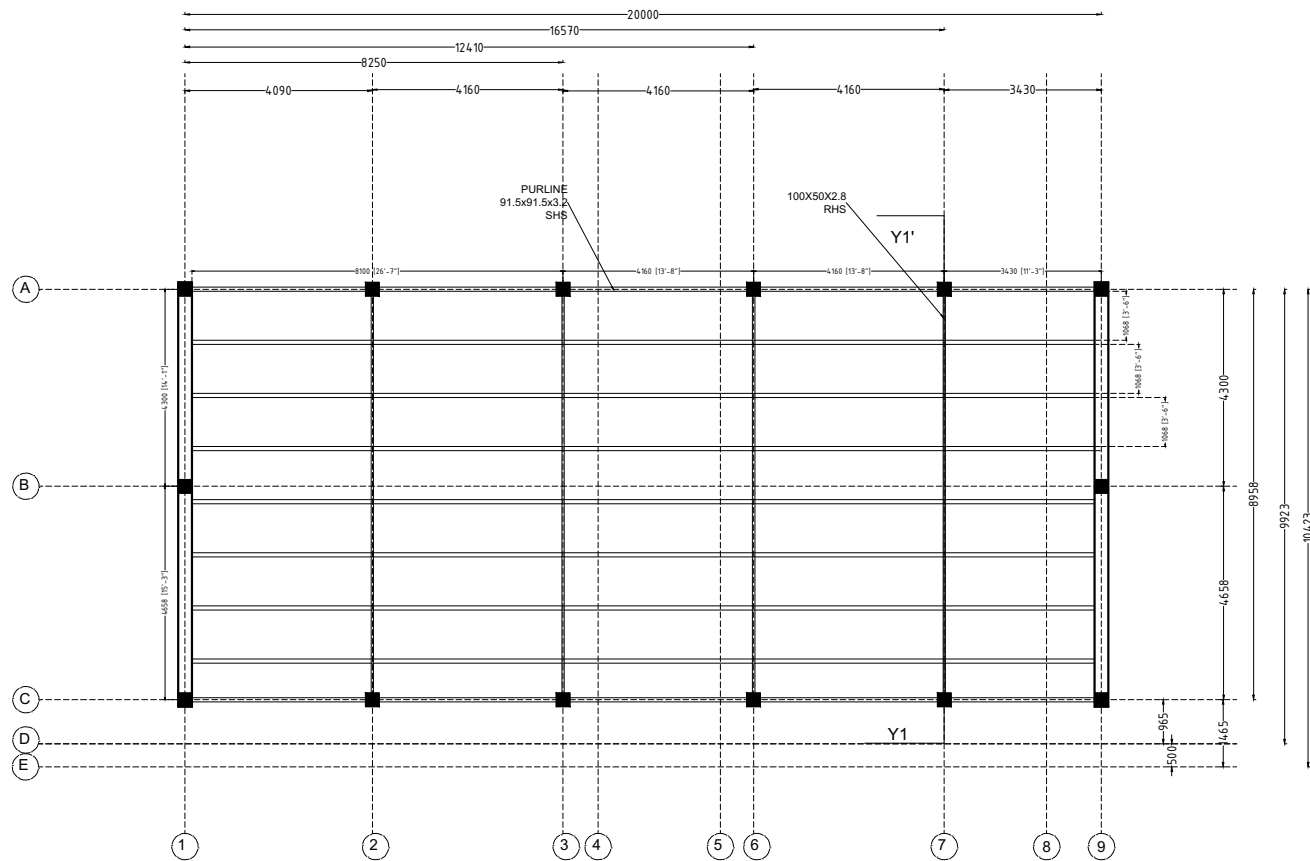
BEAM SCHEDULE FOR 4.5m LVL. ABOVE PLINTH

Beam ID	Size	Top Reinforcement			Bottom Reinforcement			Stirrups			Remarks
		Type	Spacing	Notes	Type	Spacing	Notes	Type	Spacing	Notes	
B1	230X300	2-T12	-		2-T10	-		T8 @200/C	T8 @175C/C	T8 @175C/C	SLAB THK. INCLUDED

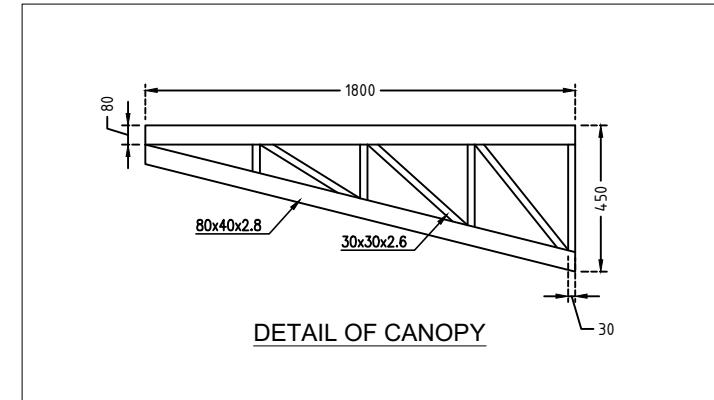
GENERAL NOTES

- NOTES-
- USE - M 20 GRADE OF CONC. AS/IS 426-5000
 - USE - FE 500 GRADE OF REINF. BY CLIENT
 - PROVIDE CLEAR COVER TO MAIN REINF.
- FOUNDATION- 50MM
COLUMN - 40MM
BEAM - 25MM
SLAB - 20MM OR DIA OF BAR, WHICHEVER IS MORE,
R.C.C. WALL - 25MM
- TIES SHOULD BE BEND INSIDE WITH 10# LENGTH IN BEAM & COLUMN
- 5.FOLLOW - IS-456-2000 FOR R.C.C. WORK
6.STRIPPING TIME FOR SHUTTERING / FORMWORK UNDER NORMAL CONDITION.
- | TYPE OF WORK | MINIMUM PERIOD BEFORE STRIKING FORM WORK |
|--|--|
| a) VERTICAL FORMWORK TO COLUMN, WALLS, BEAM | 16-24 HOUR |
| b) SOFFITS FORMWORK TO SLABS (PROPS TO BE REFIXED- IMMEDIATELY AFTER REMOVAL OF FORMWORK) | 3 DAYS |
| c) SOFFIT FORMWORK TO BEAMS (PROPS TO BE REFIXED IMMEDIATELY AFTER REMOVAL OF FORMWORK) | 7DAYS |
| d) PROPS TO SLABS: | |
| 1) SPANNING UP TO 4.5M | 7DAYS |
| 2) SPANNING OVER 4.5M | 14 DAYS |
| e) PROPS TO BEAMS & ARCHES: | |
| 1) SPANNING UP TO 6M | 14DAYS |
| 2) SPANNING OVER 6M | 21DAYS |
- CURING FOR R.C.C. MEMBER MINIMUM 14 DAYS CONTINOUSELY PREFERABLE - 28 DAYS.
 - START EARLY CURING TO AVOID SRINKAGE CRACKS, WHEN CONCRETE APPEARS TO HARDEN.
 - PROVIDE FOLLOWING SLUMP IN CONCRETE GEN-ERALLY.
- | | |
|---|---------|
| a) SHALLOW SECTIONS, PAYMENTS, MASS CONC. LIGTH REINFORCEMENT SECTION IN SLAB, BEAM, WALL, COLUMN | 25-75 |
| b) HEAVILY REINFORCEMENT SECTION IN SLAB | 50-100 |
| c) HEAVILY REINFORCEMENT SECTION IN BEAMS, WALLS, COLUMNS SLIPFORM, OR PUMPED CONC. | 75-100 |
| d) TRENCH FILL, PILLING, PUMPED CONC. | 100-150 |
- PROVIDE LAP/ DEVELOPEMENT LENGTH IN REINFORCEMENT BARS GRADE OF CONC.
- M20- 47Ø
M25-41Ø
M30-38Ø
- REFER RELEVANT DRG. WITH THIS DRG.
 - AVOID CORE CUTING.

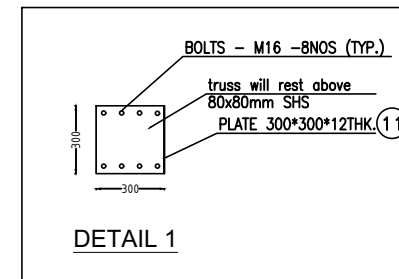
DRG NO: DP0001 DRG CL 01 102				SHEET NO: 3 OF 9	REV. R0	SCALE: NTS	SWATI Architecture landscape interior ARCHITECTS PLANERS ENGINEERING INTERIOR DESIGN 282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com	
DESIGNED: UPENDRA SINGH		DRAWN: SIMRAN SONI		CHECKED: UPENDRA SINGH	VERIFIED: ADMIN	APPROVED: ADMIN	CLIENT:	CHHATTISGARH STATE MINOR FOREST PRODUCE
ISSUED FOR: TENDOR PURPOSE				UNIT: MILIMETER	DATE: 12.05.2022	PROJECT: INCUBATION CENTER AT DEOBHOG GARIYABAND		
This drawing is the property of HUP.DESIGN and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand						TITLE: CHIRONJEE PROCESSING UNIT BEAM LAYOUT		



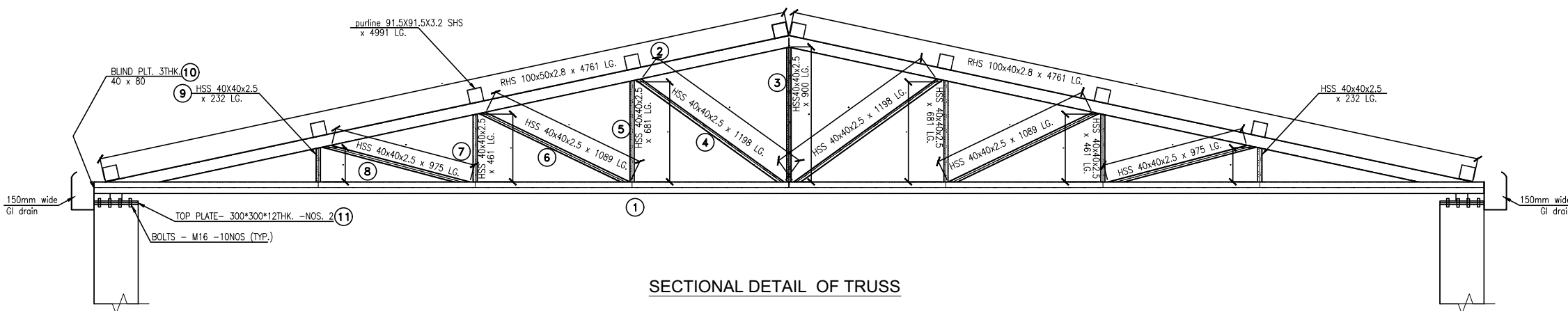
ROOF TRUSS DETAIL



DETAIL OF CANOPY



DETAIL 1



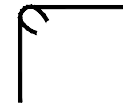
SECTIONAL DETAIL OF TRUSS

GENERAL NOTES

NOTES-

1. USE - M 20 GRADE OF CONC. AS/IS 426-5000
2. USE - FE 500 GRADE OF REINF. BY CLIENT
3. PROVIDE CLEAR COVER TO MAIN REINF.

FOUNDATION- 50MM
COLUMN - 40MM
BEAM - 25MM
SLAB - 20MM OR DIA OF BAR, WHICHEVER IS MORE,
R.C.C. WALL - 25MM
4.TIES SHOULD BE BEND INSIDE WITH 10# LENGTH
IN BEAM & COLUMN



- 5.FOLLOW - IS-456-2000 FOR R.C.C. WORK
- 6.STRIPPING TIME FOR SHUTTERING / FORMWORK UNDER NORMAL CONDITION.

TYPE OF WORK	MINIMUM PERIOD BEFORE STRIKING FORM WORK
--------------	--

- VERTICAL FORMWORK TO COLUMN, WALLS, BEAM 16-24 HOUR
- SOFFITS FORMWORK TO SLABS (PROPS TO BE REFIXED- IMMEDIATELY AFTER REMOVAL OF FORMWORK) 3 DAYS
- SOFFIT FORMWORK TO BEAMS (PROPS TO BE REFIXED IMMEDIATELY AFTER REMOVAL OF FORMWORK) 7DAYS
- PROPS TO SLABS:
 - 1) SPANNING UP TO 4.5M 7DAYS
 - 2) SPANNING OVER 4.5M 14 DAYS
- PROPS TO BEAMS & ARCHES:
 - 1) SPANNING UP TO 6M 14DAYS
 - 2) SPANNING OVER 6M 21DAYS

7. CURING FOR R.C.C. MEMBER MINIMUM 14 DAYS CONTINUOUSLY PREFERABLE - 28 DAYS.
8. START EARLY CURING TO AVOID SRINKAGE CRACKS, WHEN CONCRETE APPEARS TO HARDEN.
- 9) PROVIDE FOLLOWING SLUMP IN CONCRETE GENERALLY.

- SHALLOW SECTIONS, PAYMENTS, MASS CONC. LIGTH REINFORCEMENT SECTION IN SLAB, BEAM, WALL, COLUMN 25-75
- HEAVILY REINFORCEMENT SECTION IN SLAB 50-100
- HEAVILY REINFORCEMENT SECTION IN BEAMS, WALLS, COLUMNS SLIPFORM, OR PUMPED CONC. 75-100
- TRENCH FILL, PILLING, PUMPED CONC. 100-150

- 10) PROVIDE LAP/ DEVELOPEMENT LENGTH IN REINFORCEMENT BARS GRADE OF CONC.
 - M20- 47Ø
 - M25-41Ø
 - M30-38Ø

- 11) REFER RELEVANT DRG. WITH THIS DRG.
- 12) AVOID CORE CUTING.

DRG NO:	SHEET NO:	REV.	SCALE:
DP0001 DRG CL 01 102	3 OF 9	R0	NTS
DESIGNED:	DRAWN:	CHECKED:	VERIFIED:
UPENDRA SINGH	SIMRAN SONI	UPENDRA SINGH	ADMIN
ISSUED FOR:	UNIT:	DATE:	
TENDOR PURPOSE	MILIMETER	12.05.2022	

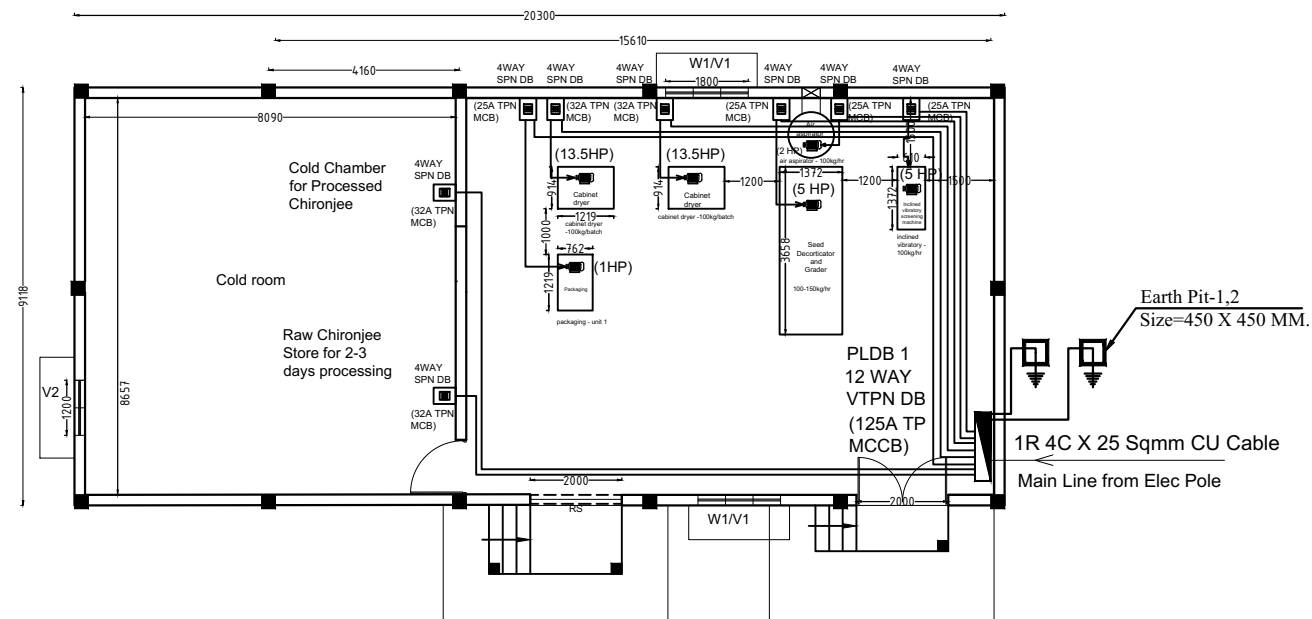
SWATI Architecture landscape interior

ARCHITECTS I PLANERS I ENGINEERING I INTERIOR DESIGN
282 , tulip , A block , Talpuri International colony , Bhillai , C.G. Email - swati.arch@outlook.com

CLIENT: CHHATTISGARH STATE MINOR FOREST PRODUSE

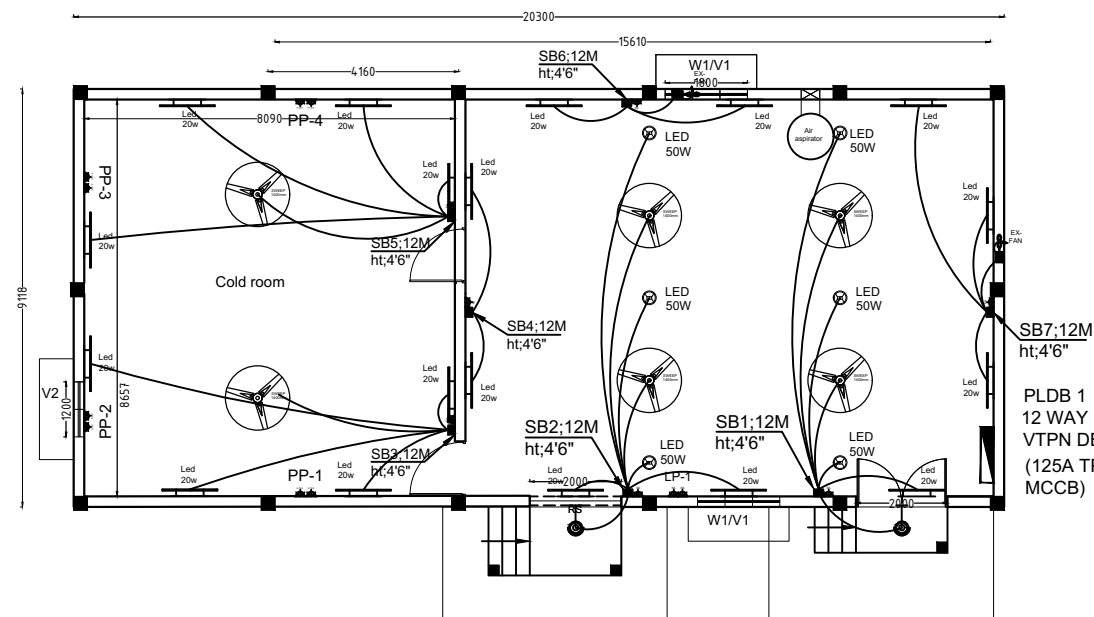
PROJECT: INCUBATION CENTER AT DEOBHOG GARIYABAND

TITLE: CHIRONJEE PROCESSING UNIT
TRUSS LAYOUT



CHIRONJEE PROCESSING UNIT

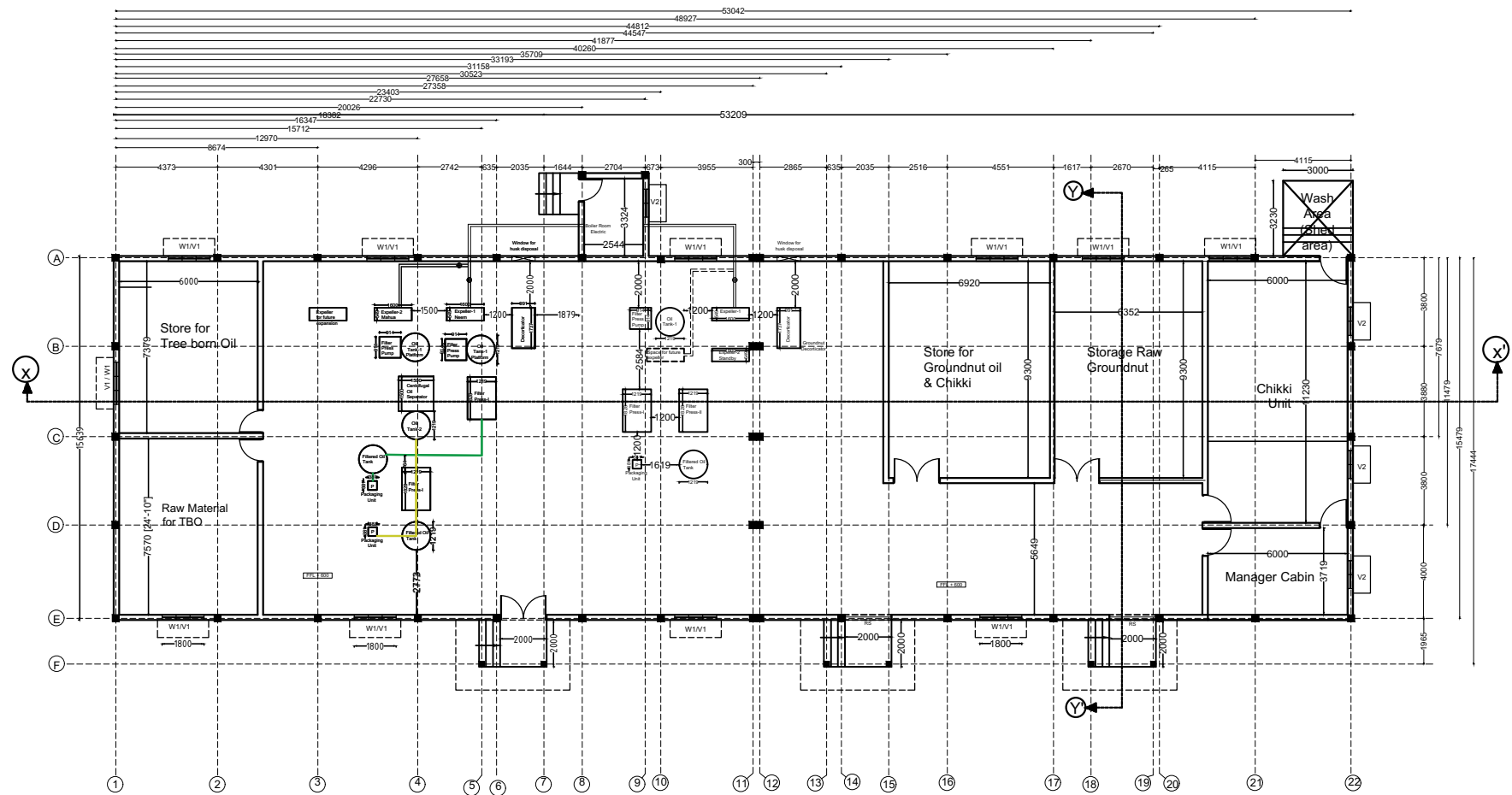
01	LED 50W	50W FLOOD LIGHT (HIGH BAY)	06 No.
02	WALL LIGHT		02 No.
03	PP-1	16A SWITCH SOCKET	04 No.
04	LP-1	6A SWITCH SOCKET	01 No.
05	4WAY SPN DB	4WAY SPN DB	08 No.
06	PLDB 1 12 WAY VTPN DB		01 No.
07	1400 mm Ceiling Fan		06 No.
08	20w Led Tube Light		16 No.
09	450 mm Ex Fan		03 No.
10	LP-1	6A SWITCH SOCKET	09 No.
11	SB1	SWITCH BOARD	07 No.
12	6 X 6 SQMM CU WIRE		
13	3 X 1.5 SQMM CU WIRE		
14	Earth Pit-1 Size=450 X 450 MM.		2 SET



ELECTRICAL LAYOUT

MACHINE LIST			
1 - guthali grader machine(inclined vibrating) - 100kg/hr- nos 1	5 HP	6 X 6 Sqmm CU wire	
2 - chironjee decorticator and grader - 100-150kg/hr - nos 1	5 HP	6 X 6 Sqmm CU wire	
3 - cabinet dryer - 100kg/batch - nos 2	10 KW	13.5 HP	6 X 6 Sqmm CU wire
3A - cabinet dryer - 100kg/batch - nos 2	10 KW	13.5 HP	6 X 6 Sqmm CU wire
4 - air aspirator machine - 100kg/hr - nos1	2 HP	6 X 6 Sqmm CU wire	
5 - weighting machine -10gm - 10kg , 10kg - 250kg - nos 2	1 HP	6 X 6 Sqmm CU wire	
6 - vacuum packaging machine - nos 1	2 HP	6 X 6 Sqmm CU wire	
7 - material handling and other equipment - nos 1	1 HP		
TOTAL LOAD	3P MCCB 125A (32 KW) (83 AMP)	43 HP	1R 4C 25 Sqmm Ar. CU Cable

DRG NO: DP0001 DRG CL 01 102					SHEET NO: 3 OF 9	REV. R0	SCALE: NTS	<div>SWATI Architecture landscape interior</div> <div>ARCHITECTS PLANERS ENGINEERING INTERIOR DESIGN</div> <div>282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com</div>		
DESIGNED: UPENDRA SINGH		DRAWN: SIMRAN SONI		CHECKED: UPENDRA SINGH	VERIFIED: ADMIN	APPROVED: ADMIN		CLIENT: CHHATTISGARH STATE MINOR FOREST PRODUCE		
ISSUED FOR: TENDOR PURPOSE					UNIT: MILIMETER	DATE: 12.05.2022		PROJECT: INCUBATION CENTER AT DEOBHOG GARIYABAND		
<div>124</div> <div>This drawing is the property of HUP DESIGN and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand</div>								TITLE: CHIRONJEE PROCESSING UNIT ELECTRICAL LAYOUT		9



- LIST OF DRAWING**
NEEM / MAHUA / KUSUM / GROUNDNUT OIL
EXTRACTION UNIT
DP0001 DRG CL 01 103
1 - PLAN LAYOUT
2 - SECTION / ELEVATION
3 - COLUMN LAYOUT
4 - FOOTING LAYOUT
5 - GROUND BEAM LAYOUT
6 - BEAM LAYOUT (2.4 M ABOVE)
7 - BEAM LAYOUT (4.5 M ABOVE)
8 - TRUSS DETAIL
9 - ELECTRICAL LAYOUT

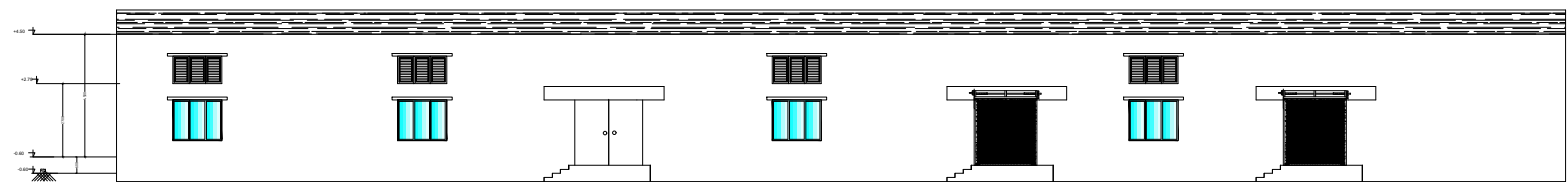
OPENING SCHEDULE

NAME	SAYMBOL
WINDOW	- W1
VENTILATOR	- V1
ROLLING SHUTTER	- R1
DOOR	- D1

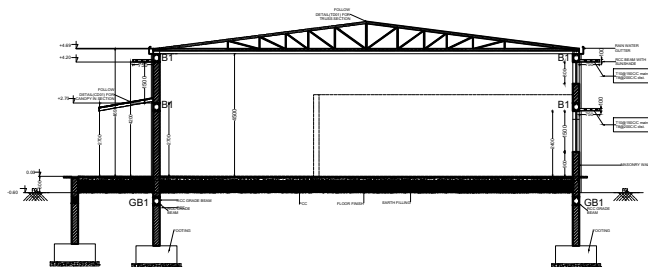
SN	SAYMBOL	NOS	SIZE
01	W1	11	1.8M X 1.5M
02	V1	15	1.8 M X 1 M
03	D2	03	1.2 M X 2.1M
04	D1	07	1M X 2.1 M
05	R1	02	2.4 M X 2.5 M

NEEM / MAHUA / KUSUM /GROUNDNUT OIL/ CHIKKI UNIT
BUILD UP AREA - 866 SQM

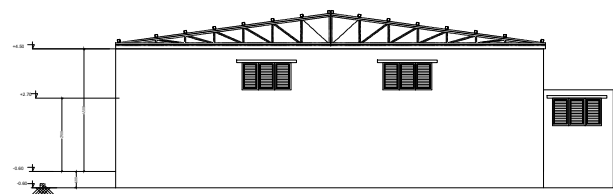
DRG NO: DP0001 DRG CL 01 103	SHEET NO: 1 OF 9	REV. R0	SCALE: NTS	SWATI Architecture landscape interior ARCHITECTS PLANERS ENGINEERING INTERIOR DESIGN 282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com
DESIGNED: UPENDRA SINGH	DRAWN: SIMRAN SONI	CHECKED: UPENDRA SINGH	VERIFIED: ADMIN	APPROVED: ADMIN
ISSUED FOR: TENDOR PURPOSE				UNIT: MILIMETER
				DATE: 12.05.2022
This drawing is the property of HUP DESIGN and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand				TITLE: NEEM / MAHUA / KUSUM /GROUNDNUT OIL EXTRACTION UNIT PLAN LAYOUT



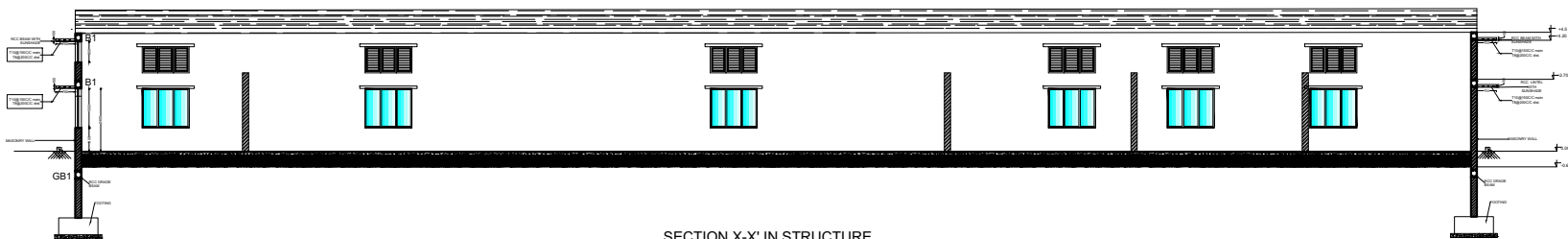
FRONT ELEVATION



SECTION Y-Y' IN STRUCTURE



SIDE ELEVATION



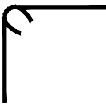
SECTION X-X' IN STRUCTURE

DRG NO:		SHEET NO:		REV.		SCALE:		<div>SWATI Architecture landscape interior</div> <div>ARCHITECTS PLANERS ENGINEERING INTERIOR DESIGN</div> <div>282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com</div>			
DP0001 DRG CL 01 103		2 OF 9		R0		NTS					
DESIGNED:		DRAWN:		CHECKED:		VERIFIED:		APPROVED:		CLIENT:	
UPENDRA SINGH		SIMRAN SONI		UPENDRA SINGH		ADMIN		ADMIN		CHHATTISGARH STATE MINOR FOREST PRODUCE	
ISSUED FOR:				UNIT:		DATE:		PROJECT:			
TENDOR PURPOSE				MILIMETER		12.05.2022		INCUBATION CENTER AT DEOBHOG GARIYABAND			
<div>126</div> <div>This drawing is the property of HUP DESIGN and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand</div>								TITLE:			
								NEEM / MAHUA / KUSUM /GROUNDNUT OIL EXTRACTION UNIT			
								ELEVATION / SECTION			
								11			

GENERAL NOTES

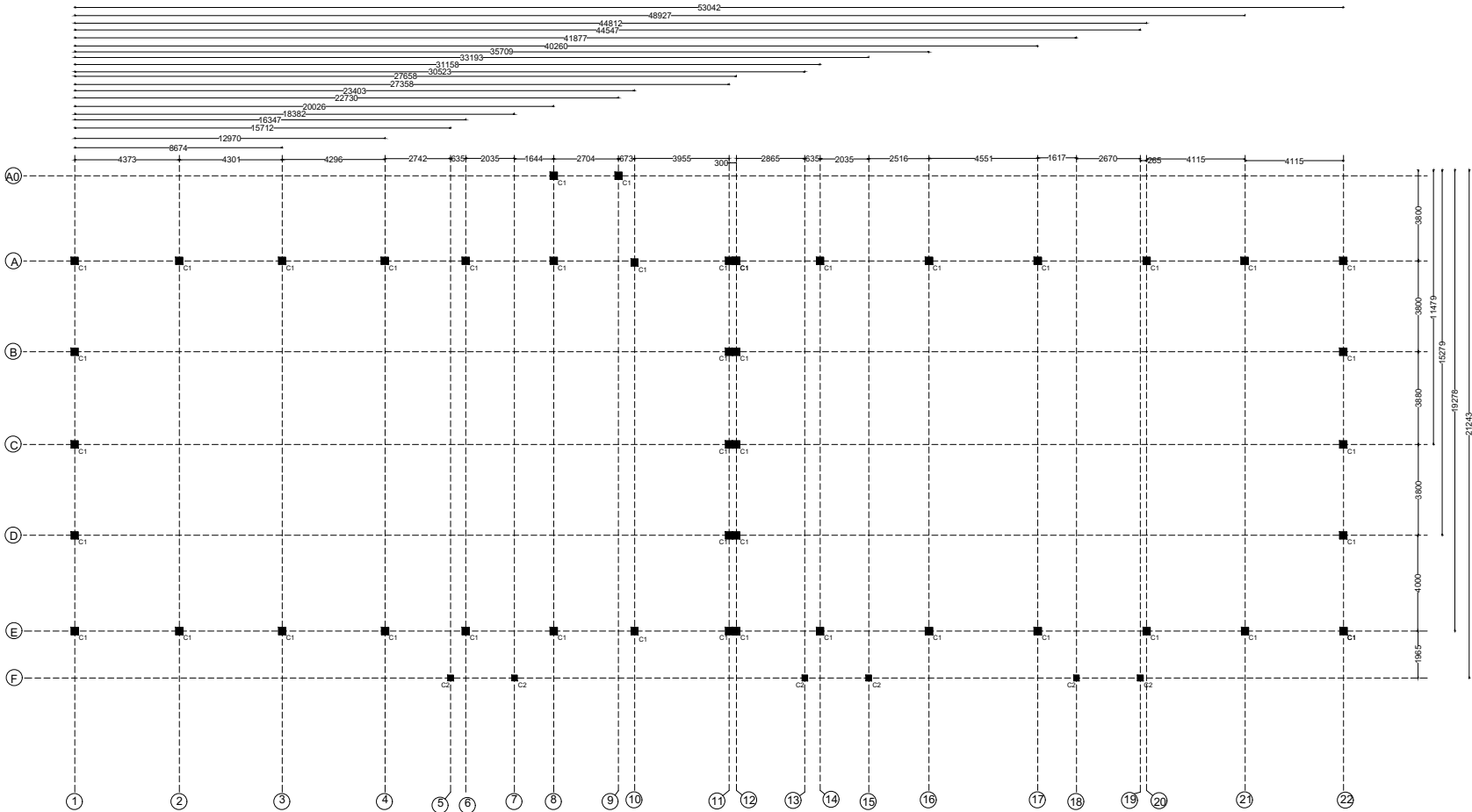
NOTES-

1. USE - M 20 GRADE OF CONC. AS/IS 426-5000
2. USE - FE 500 GRADE OF REINF. BY CLIENT
3. PROVIDE CLEAR COVER TO MAIN REINF.
- FOUNDATION- 50MM
- COLUMN - 40MM
- BEAM - 25MM
- SLAB - 20MM OR DIA OF BAR, WHICHEVER IS MORE,
- R.C.C. WALL - 25MM
- 4.TIES SHOULD BE BEND INSIDE WITH 10# LENGTH IN BEAM & COLUMN

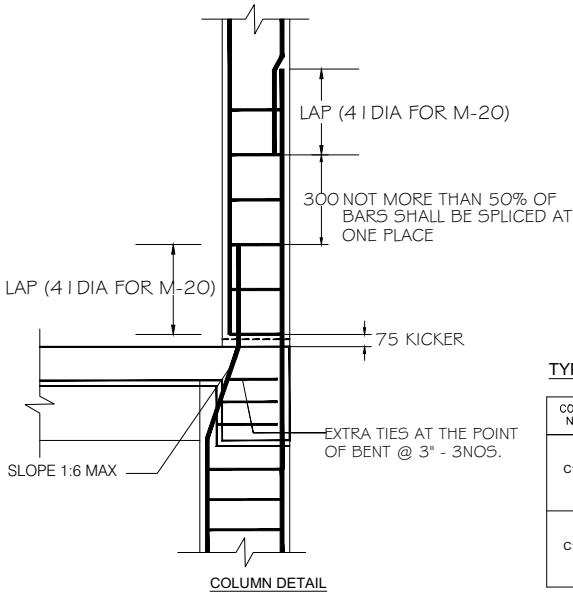


- 5.FOLLOW - IS-456-2000 FOR R.C.C. WORK
- 6.STRIPPING TIME FOR SHUTTERING / FORMWORK UNDER NORMAL CONDITION.

TYPE OF WORK	MINIMUM PERIOD BEFORE STRIKING FORM WORK
a) VERTICAL FORMWORK TO COLUMN, WALLS, BEAM	16-24 HOUR
b) SOFFITS FORMWORK TO SLABS (PROPS TO BE REFIXED- - IMMEDIATELY AFTER REMOVAL OF FORMWORK)	3 DAYS
c) SOFFIT FORMWORK TO BEAMS (PROPS TO BE REFIXED IMMEDIATELY AFTER REMOVAL OF FORMWORK)	7DAYS
d) PROPS TO SLABS:	
1) SPANNING UP TO 4.5M	7DAYS
2) SPANNING OVER 4.5M	14 DAYS
e) PROPS TO BEAMS & ARCHES:	
1) SPANNING UP TO 6M	14DAYS
2) SPANNING OVER 6M	21DAYS
7. CURING FOR R.C.C. MEMBER MINIMUM 14 DAYS CONTINUOUSLY PREFERABLE - 28 DAYS.	
8. START EARLY CURING TO AVOID SRINKAGE CRACKS, WHEN CONCRETE APPEARS TO HARDEN.	
9) PROVIDE FOLLOWING SLUMP IN CONCRETE GEN- -ERALLY.	
a) SHALLOW SECTIONS, PAYMENTS, MASS CONC. LIGTH REINFORCEMENT SECTION IN SLAB, BEAM, WALL, COLUMN	25-75
b) HEAVILY REINFORCEMENT SECTION IN SLAB	50-100
c) HEAVILY REINFORCEMENT SECTION IN BEAMS, WALLS, COLUMNS SLIPFORM, OR PUMPED CONC.	75-100
d) TRENCH FILL, PILLING, PUMPED CONC.	100-150
10) PROVIDE LAP/ DEVELOPEMENT LENGTH IN REINFORCEMENT BARS GRADE OF CONC.	
	M20- 47Ø
	M25-41Ø
	M30-38Ø
11) REFER RELEVANT DRG. WITH THIS DRG.	
12) AVOID CORE CUTING.	



COLUMN LAYOUT PLAN



TYPICAL COLUMN DETAIL'S

COLUMN NAME	Pile/col detail	STIRRUPS	REMARKS
C1	 300 300 8-T12 TB@ 200 c/c 2-Tie		FOUNDATION TO TERRACE
C1	 230 230 4-T12 TB@ 200 c/c 1-Tie		TERMINATE AT GROUND LVL.

DRG NO:	SHEET NO:	REV.	SCALE:
DP0001 DRG CL 01 105	3 OF 9	R0	NTS
DESIGNED:	DRAWN:	CHECKED:	VERIFIED:
UPENDRA SINGH	SIMRAN SONI	UPENDRA SINGH	ADMIN
ISSUED FOR:	UNIT:	DATE:	
TENDOR PURPOSE	MILIMETER	12.05.2022	

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SWATI Architecture landscape interior
ARCHITECTS | PLANERS | ENGINEERING | INTERIOR DESIGN
282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com

CHHATTISGARH STATE MINOR FOREST PRODUCE

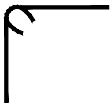
INCUBATION CENTER AT DEOBHOG GARIYABAND

TITLE:
NEEM / MAHUA / KUSUM/ GROUND NUT OIL EXTRACTION UNIT
BEAM LAYOUT

GENERAL NOTES

NOTES-

1. USE - M 20 GRADE OF CONC. AS/IS 426-5000
2. USE - FE 500 GRADE OF REINF. BY CLIENT
3. PROVIDE CLEAR COVER TO MAIN REINF.
- FOUNDATION- 50MM
COLUMN - 40MM
BEAM - 25MM
SLAB - 20MM OR DIA OF BAR, WHICHEVER IS MORE,
R.C.C. WALL - 25MM
- 4.TIES SHOULD BE BEND INSIDE WITH 10# LENGTH
IN BEAM & COLUMN



- 5.FOLLOW - IS-456-2000 FOR R.C.C. WORK
6.STRIPPING TIME FOR SHUTTERING / FORMWORK
UNDER NORMAL CONDITION.

TYPE OF WORK	MINIMUM PERIOD BEFORE STRIKING FORM WORK
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a) VERTICAL FORMWORK TO
COLUMN, WALLS, BEAM 16-24 HOUR

b) SOFFITS FORMWORK TO
SLABS (PROPS TO BE REFIXED-
- IMMEDIATELY AFTER REMOVAL
OF FORMWORK) 3 DAYS

c) SOFFIT FORMWORK TO BEAMS
(PROPS TO BE REFIXED IMMEDIATELY
AFTER REMOVAL OF FORMWORK) 7DAYS

d) PROPS TO SLABS:
1) SPANNING UP TO 4.5M 7DAYS
2) SPANNING OVER 4.5M 14 DAYS

e) PROPS TO BEAMS & ARCHES:
1) SPANNING UP TO 6M 14DAYS
2) SPANNING OVER 6M 21DAYS

7. CURING FOR R.C.C. MEMBER MINIMUM 14 DAYS
CONTINUOUSLY PREFERABLE - 28 DAYS.
8. START EARLY CURING TO AVOID SHRINKAGE
CRACKS, WHEN CONCRETE APPEARS TO HARDEN.
9) PROVIDE FOLLOWING SLUMP IN CONCRETE GEN-
-ERALLY.

a) SHALLOW SECTIONS, PAYMENTS,
MASS CONC. LIGHT REINFORCEMENT
SECTION IN SLAB, BEAM, WALL, COLUMN 25-75

b) HEAVILY REINFORCEMENT SECTION IN
SLAB 50-100

c) HEAVILY REINFORCEMENT SECTION IN
BEAMS, WALLS, COLUMNS SLIPFORM, OR
PUMPED CONC. 75-100

d) TRENCH FILL, FILLING, PUMPED CONC.
100-150

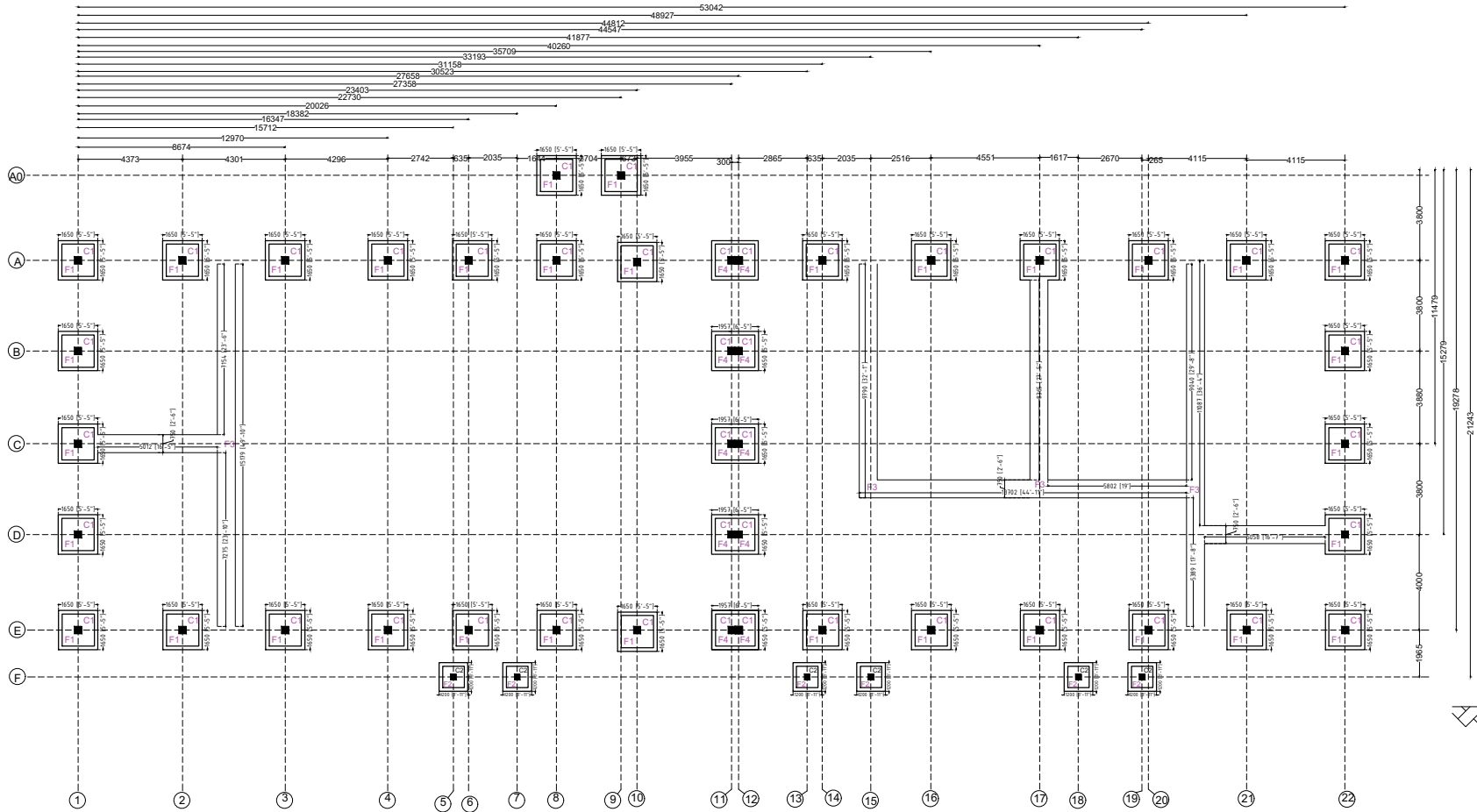
10) PROVIDE LAP/ DEVELOPEMENT LENGTH
IN REINFORCEMENT BARS GRADE OF CONC.

M20- 47Ø

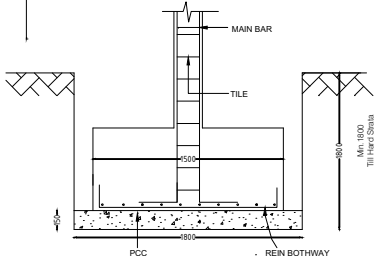
M25-41Ø

M30-38Ø

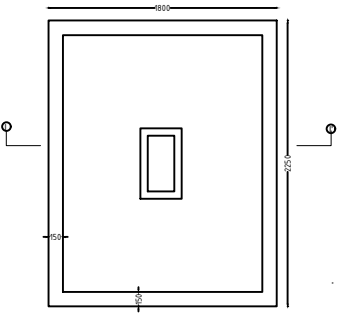
- 11) REFER RELEVANT DRG. WITH THIS DRG.
12) AVOID CORE CUTTING.



FOOTING LAYOUT PLAN



TYPICAL FOOTING SECTION (1-1')



TYPICAL FOOTING PLAN

FOOTING SCHEDULE

FE500 AND M20							Remarks
Footing	Column Nos	PCC Size X - Y mm	Footing Size X - Y mm	Total Depth mm	Steel to X mm	Steel to Y mm	
F1	C1	1650 X 1650	1350 X 1350	400	T10@ 175C/C	T10@ 175 C/C	Bottom bars only
F2	C2	1200 X 1200	900 X 900	230	T8@200C/C	T8@ 200 C/C	Bottom bars only

DRG NO:

DP0001 DRG CL 01 105

SHEET NO:

4 OF 9

REV.

R0

SCALE:

NTS

DESIGNED:

UPENDRA SINGH

DRAWN:

SIMRAN SONI

CHECKED:

UPENDRA SINGH

VERIFIED:

ADMIN

APPROVED:

ADMIN

ISSUED FOR:

TENDOR PURPOSE

UNIT:

MILIMETER

DATE:

12.05.2022

CLIENT:

SWATI Architecture landscape interior

ARCHITECTS | PLANERS | ENGINEERING | INTERIOR DESIGN
282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com

CHHATTISGARH STATE MINOR FOREST PRODUCE

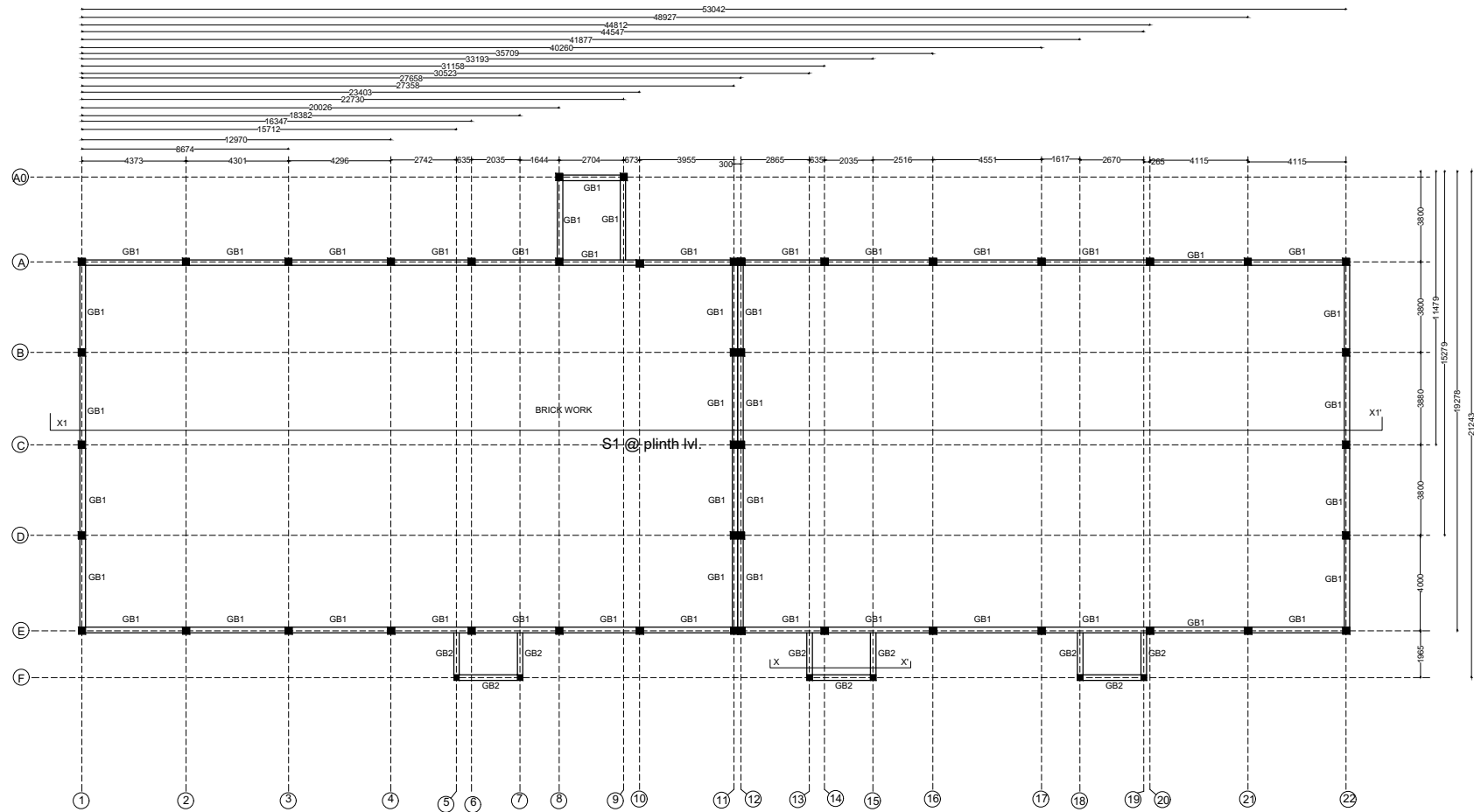
PROJECT:

INCUBATION CENTER AT DEOBHOG GARIYABAND

TITLE:

NEEM / MAHUA / KUSUM/ GROUND NUT OIL EXTRACTION UNIT
FOOTING LAYOUT

This drawing is the property of HUP DESIGN and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand



GROUND BEAM LAYOUT

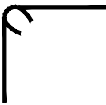
BEAM SCHEDULE FOR GROUND/ PLINTH LVL.									
GB1	230X375	2-T16	2-T12	2-T16	2-T12	2-T12	T8 @200C/C	T8 @175C/C	T8 @175C/C
GB2	230X230	2-T12	-	2-T10	-	-	T8 @200C/C	T8 @200C/C	T8 @200C/C

SLAB SCHEDULE FOR GROUND FLOOR LVL.				
SLAB NAME	THICKNESS (mm)	Main Steel		remarks
			Other Steel	
S1	150 (MESH)	T8 @ 200 c/c	T8 @ 200 c/c	All straight

GENERAL NOTES

NOTES-

- USE - M 20 GRADE OF CONC. AS/IS 426-5000
 - USE - FE 500 GRADE OF REINF. BY CLIENT
 - PROVIDE CLEAR COVER TO MAIN REINF.
- FOUNDATION- 50MM
COLUMN - 40MM
BEAM - 25MM
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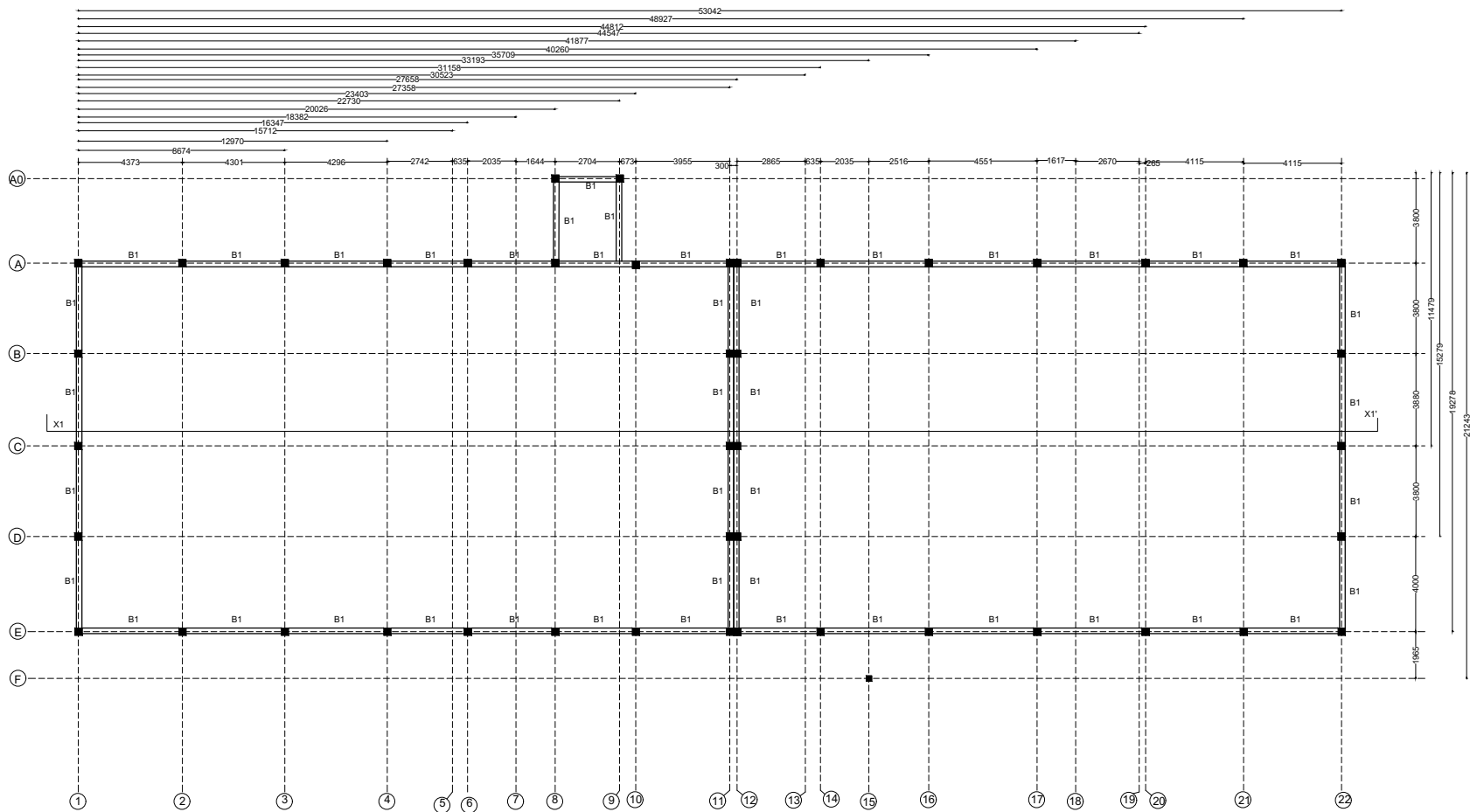
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- START EARLY CURING TO AVOID SRINKAGE CRACKS, WHEN CONCRETE APPEARS TO HARDEN.
- PROVIDE FOLLOWING SLUMP IN CONCRETE GENERALLY.

- SHALLOW SECTIONS, PAYMENTS, MASS CONC. LIGTH REINFORCEMENT SECTION IN SLAB, BEAM, WALL, COLUMN 25-75
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 - HEAVILY REINFORCEMENT SECTION IN BEAMS, WALLS, COLUMNS SLIPFORM, OR PUMPED CONC. 75-100
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- 10) PROVIDE LAP/ DEVELOPEMENT LENGTH IN REINFORCEMENT BARS GRADE OF CONC.

- M20- 47Ø
M25-41Ø
M30-38Ø
- REFER RELEVANT DRG. WITH THIS DRG.
 - AVOID CORE CUTING.

DRG NO:	SHEET NO:	REV.	SCALE:
DP0001 DRG CL 01 105	5 OF 9	R0	NTS
DESIGNED:	DRAWN:	CHECKED:	VERIFIED:
UPENDRA SINGH	SIMRAN SONI	UPENDRA SINGH	ADMIN
ISSUED FOR:		UNIT:	DATE:
	TENDOR PURPOSE	MILIMETER	12.05.2022

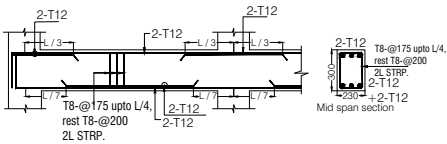
CLIENT:		CHHATTISGARH STATE MINOR FOREST PRODUCE	
PROJECT:		INCUBATION CENTER AT DEOBHOG GARIYABAND	
TITLE:		NEEM / MAHUA / KUSUM/ GROUND NUT OIL EXTRACTION UNIT BEAM LAYOUT	



BEAM LAYOUT (2.5 M ABOVE)

BEAM SCHEDULE FOR 2.4m LVL. ABOVE PLINTH

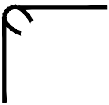
B1	230X300	2-T12	2-T12	2-T12	2-T12	2-T12	T8 @200/C	T8 @175/C	T8 @175/C	SLAB THK. INCLUDED



GENERAL NOTES

NOTES-

- USE - M 20 GRADE OF CONC. AS/IS 426-5000
 - USE - FE 500 GRADE OF REINF. BY CLIENT
 - PROVIDE CLEAR COVER TO MAIN REINF.
- FOUNDATION- 50MM
COLUMN - 40MM
BEAM - 25MM
SLAB - 20MM OR DIA OF BAR, WHICHEVER IS MORE,
R.C.C. WALL - 25MM
- 4.TIES SHOULD BE BEND INSIDE WITH 10# LENGTH IN BEAM & COLUMN



- FOLLOW - IS-456-2000 FOR R.C.C. WORK
- STRIPPING TIME FOR SHUTTERING / FORMWORK UNDER NORMAL CONDITION.

TYPE OF WORK	MINIMUM PERIOD BEFORE STRIKING FORM WORK
--------------	--

- | | |
|--|------------|
| a) VERTICAL FORMWORK TO COLUMN, WALLS, BEAM | 16-24 HOUR |
| b) SOFFITS FORMWORK TO SLABS (PROPS TO BE REFIXED- - IMMEDIATELY AFTER REMOVAL OF FORMWORK) | 3 DAYS |
| c) SOFFIT FORMWORK TO BEAMS (PROPS TO BE REFIXED IMMEDIATELY AFTER REMOVAL OF FORMWORK) | 7DAYS |
| d) PROPS TO SLABS: | |
| 1) SPANNING UP TO 4.5M | 7DAYS |
| 2) SPANNING OVER 4.5M | 14 DAYS |
| e) PROPS TO BEAMS & ARCHES: | |
| 1) SPANNING UP TO 6M | 14DAYS |
| 2) SPANNING OVER 6M | 21DAYS |

- CURING FOR R.C.C. MEMBER MINIMUM 14 DAYS CONTINUOUSLY PREFERABLE - 28 DAYS.
- START EARLY CURING TO AVOID SRINKAGE CRACKS, WHEN CONCRETE APPEARS TO HARDEN.
- PROVIDE FOLLOWING SLUMP IN CONCRETE GENERALLY.
- SHALLOW SECTIONS, PAYMENTS, MASS CONC. LIGHT REINFORCEMENT SECTION IN SLAB, BEAM, WALL, COLUMN
- HEAVILY REINFORCEMENT SECTION IN SLAB
- HEAVILY REINFORCEMENT SECTION IN BEAMS, WALLS, COLUMNS SLIPFORM, OR PUMPED CONC.
- TRENCH FILL, PILLING, PUMPED CONC.
- PROVIDE LAP/ DEVELOPEMENT LENGTH IN REINFORCEMENT BARS GRADE OF CONC.

- REFER RELEVANT DRG. WITH THIS DRG.
- AVOID CORE CUTING.

M20- 47Ø
M25-41Ø
M30-38Ø

DRG NO:	SHEET NO:	REV.	SCALE:
DP0001 DRG CL 01 105	6 OF 9	R0	NTS
DESIGNED:	DRAWN:	CHECKED:	VERIFIED:
UPENDRA SINGH	SIMRAN SONI	UPENDRA SINGH	ADMIN
ISSUED FOR:	TENDOR PURPOSE	UNIT:	MILIMETER
		DATE:	12.05.2022

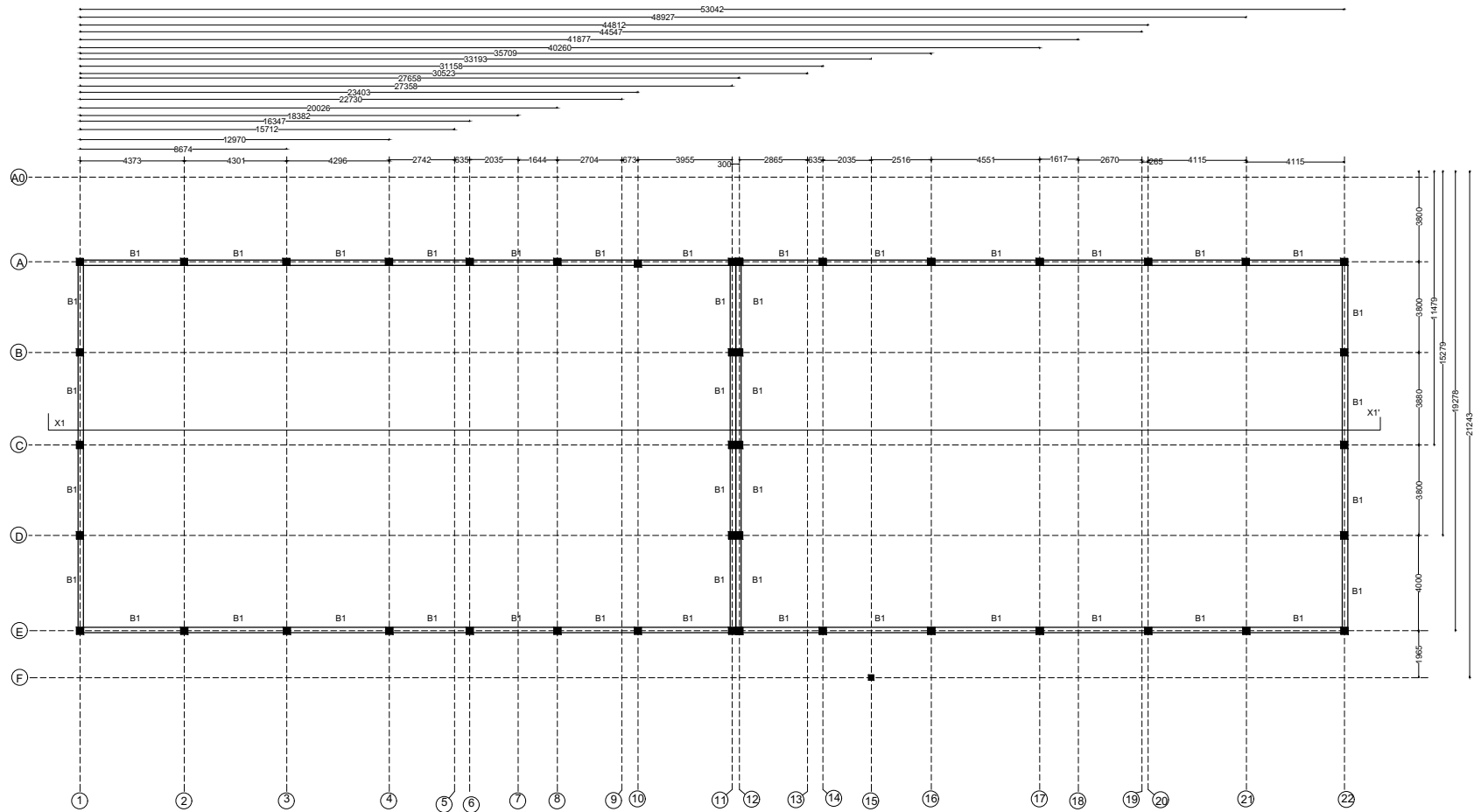
This drawing is the property of HUP DESIGN and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand

SWATI Architecture landscape interior
ARCHITECTS | PLANERS | ENGINEERING | INTERIOR DESIGN
282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com

CHHATTISGARH STATE MINOR FOREST PRODUSE

INCUBATION CENTER AT DEOBHOG GARIYABAND

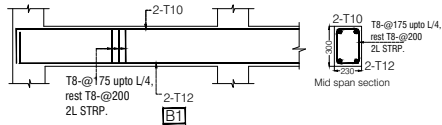
TITLE:
NEEM / MAHUA / KUSUM/ GROUND NUT OIL EXTRACTION UNIT
BEAM LAYOUT



BEAM PLAN (4.5 ABOVE PLINTH LVL)

BEAM SCHEDULE FOR 4.5m LVL. ABOVE PLINTH

Beam	Size	Top	Bottom	Left	Right	Top	Bottom	Left	Right	Top	Bottom	Notes
B1	230X300	2-T12	-	2-T10	-	-	T8 @200C/C	T8 @175C/C	T8 @175C/C	SLAB THK. INCLUDED		
B2	230X300	2-T12	2-T12	2-T12	2-T12	2-T12	T8 @200C/C	T8 @175C/C	T8 @175C/C	SLAB THK. INCLUDED		



GENERAL NOTES

NOTES-

- USE - M 20 GRADE OF CONC. AS/IS 426-5000
 - USE - FE 500 GRADE OF REINF. BY CLIENT
 - PROVIDE CLEAR COVER TO MAIN REINF.
- FOUNDATION- 50MM
COLUMN - 40MM
BEAM - 25MM
SLAB - 20MM OR DIA OF BAR, WHICHEVER IS MORE,
R.C.C. WALL - 25MM
- 4.TIES SHOULD BE BEND INSIDE WITH 10# LENGTH
IN BEAM & COLUMN



- FOLLOW - IS-456-2000 FOR R.C.C. WORK
- STRIPPING TIME FOR SHUTTERING / FORMWORK UNDER NORMAL CONDITION.

TYPE OF WORK	MINIMUM PERIOD BEFORE STRIKING FORM WORK
a) VERTICAL FORMWORK TO COLUMN, WALLS, BEAM	16-24 HOUR
b) SOFFITS FORMWORK TO SLABS (PROPS TO BE REFIXED- - IMMEDIATELY AFTER REMOVAL OF FORMWORK)	3 DAYS
c) SOFFIT FORMWORK TO BEAMS (PROPS TO BE REFIXED IMMEDIATELY AFTER REMOVAL OF FORMWORK)	7DAYS
d) PROPS TO SLABS:	
1) SPANNING UP TO 4.5M	7DAYS
2) SPANNING OVER 4.5M	14 DAYS
e) PROPS TO BEAMS & ARCHES:	
1) SPANNING UP TO 6M	14DAYS
2) SPANNING OVER 6M	21DAYS

- CURING FOR R.C.C. MEMBER MINIMUM 14 DAYS CONTINUOUSLY PREFERABLE - 28 DAYS.
- START EARLY CURING TO AVOID SRINKAGE CRACKS, WHEN CONCRETE APPEARS TO HARDEN.
- PROVIDE FOLLOWING SLUMP IN CONCRETE GENERALLY.
- SHALLOW SECTIONS, PAYMENTS, MASS CONC. LIGHT REINFORCEMENT SECTION IN SLAB, BEAM, WALL, COLUMN
- HEAVILY REINFORCEMENT SECTION IN SLAB
- HEAVILY REINFORCEMENT SECTION IN BEAMS, WALLS, COLUMNS SLIPFORM, OR PUMPED CONC.
- TRENCH FILL, PILLING, PUMPED CONC.
- PROVIDE LAP/ DEVELOPEMENT LENGTH IN REINFORCEMENT BARS GRADE OF CONC.

- 11) REFER RELEVANT DRG. WITH THIS DRG.
- 12) AVOID CORE CUTING.

DRG NO:	SHEET NO:	REV.	SCALE:
DP0001 DRG CL 01 105	7 OF 9	R0	NTS
DESIGNED:	DRAWN:	CHECKED:	VERIFIED:
UPENDRA SINGH	SIMRAN SONI	UPENDRA SINGH	ADMIN
ISSUED FOR:	TENDOR PURPOSE	UNIT:	MILIMETER
		DATE:	12.05.2022

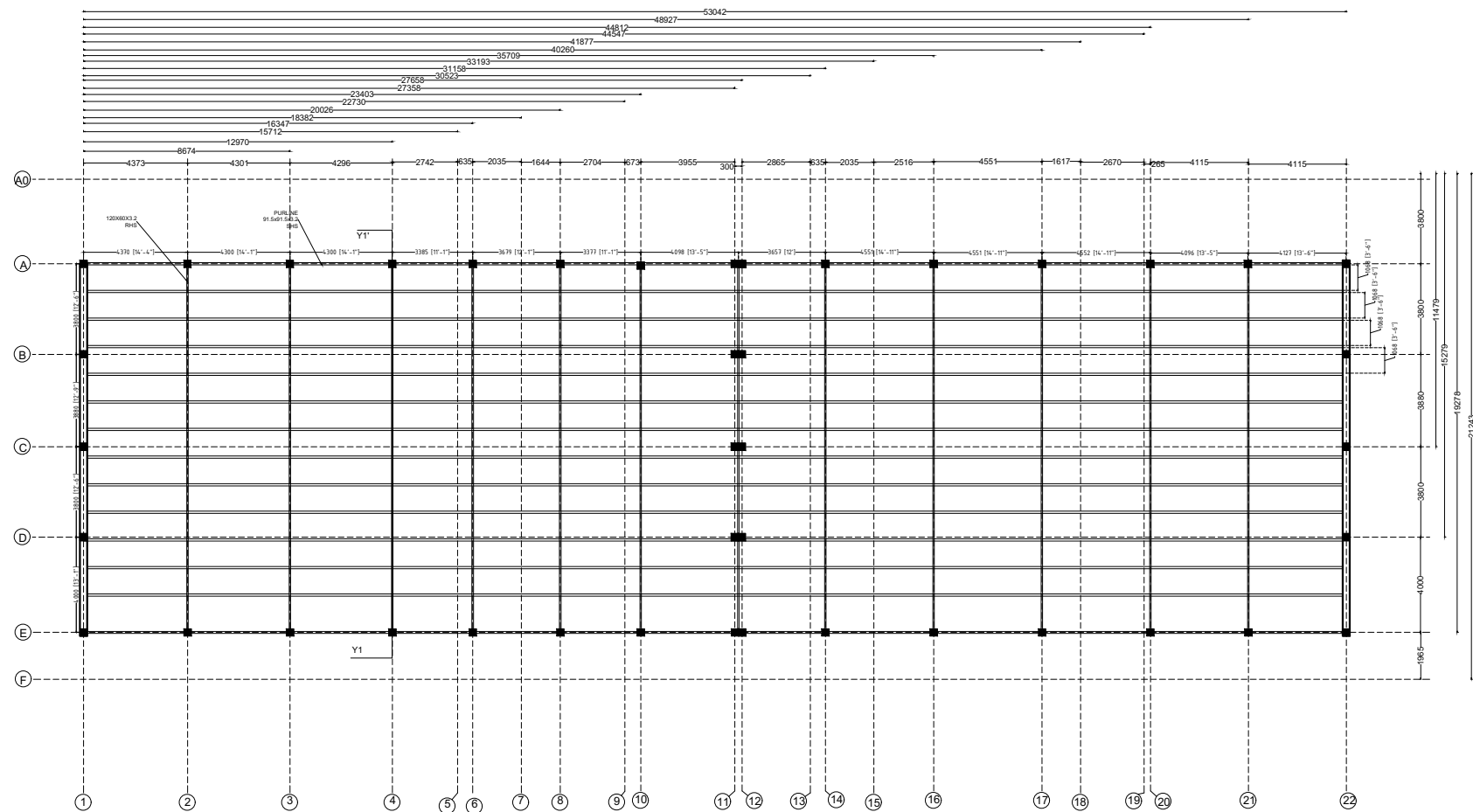
SWATI Architecture landscape interior

ARCHITECTS | PLANERS | ENGINEERING | INTERIOR DESIGN
282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com

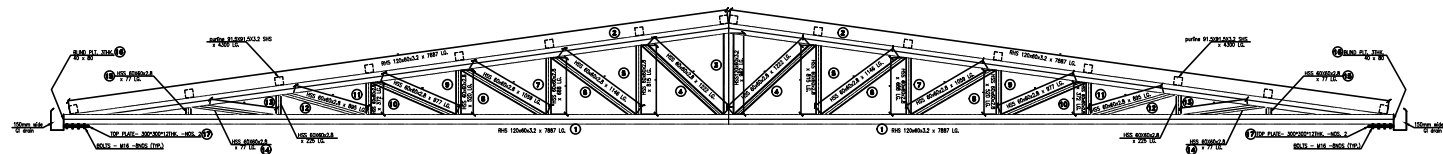
CHHATTISGARH STATE MINOR FOREST PRODUSE

INCUBATION CENTER AT DEOBHOG GARIYABAND

TITLE:
NEEM / MAHUA / KUSUM/ GROUND NUT OIL EXTRACTION UNIT
BEAM LAYOUT



TRUSS PLAN

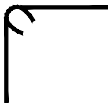


TRUSS DETAIL

GENERAL NOTES

NOTES-

1. USE - M 20 GRADE OF CONC. AS/IS 426-5000
 2. USE - FE 500 GRADE OF REINF. BY CLIENT
 3. PROVIDE CLEAR COVER TO MAIN REINF.
- FOUNDATION- 50MM
COLUMN - 40MM
BEAM - 25MM
SLAB - 20MM OR DIA OF BAR, WHICHEVER IS MORE,
R.C.C. WALL - 25MM
- 4.TIES SHOULD BE BEND INSIDE WITH 10# LENGTH
IN BEAM & COLUMN



- 5.FOLLOW - IS-456-2000 FOR R.C.C. WORK
- 6.STRIPPING TIME FOR SHUTTERING / FORMWORK
UNDER NORMAL CONDITION.

TYPE OF WORK	MINIMUM PERIOD BEFORE STRIKING FORM WORK
--------------	--

- | | |
|---|------------|
| a) VERTICAL FORMWORK TO
COLUMN, WALLS, BEAM | 16-24 HOUR |
| b) SOFFITS FORMWORK TO
SLABS (PROPS TO BE REFIXED-
- IMMEDIATELY AFTER REMOVAL
OF FORMWORK) | 3 DAYS |
| c) SOFFIT FORMWORK TO BEAMS
(PROPS TO BE REFIXED IMMEDIATELY
AFTER REMOVAL OF FORMWORK) | 7DAYS |
| d) PROPS TO SLABS: | |
| 1) SPANNING UP TO 4.5M | 7DAYS |
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| e) PROPS TO BEAMS & ARCHES: | |
| 1) SPANNING UP TO 6M | 14DAYS |
| 2) SPANNING OVER 6M | 21DAYS |

7. CURING FOR R.C.C. MEMBER MINIMUM 14 DAYS
CONTINUOUSLY PREFERABLE - 28 DAYS.
8. START EARLY CURING TO AVOID SRINKAGE
CRACKS, WHEN CONCRETE APPEARS TO HARDEN.
- 9) PROVIDE FOLLOWING SLUMP IN CONCRETE GEN-
-ERALLY.

- | | |
|---|---------|
| a) SHALLOW SECTIONS, PAYMENTS,
MASS CONC. LIGTH REINFORCEMENT
SECTION IN SLAB, BEAM, WALL, COLUMN | 25-75 |
| b) HEAVILY REINFORCEMENT SECTION IN
SLAB | 50-100 |
| c) HEAVILY REINFORCEMENT SECTION IN
BEAMS, WALLS, COLUMNS SLIPFORM, OR
PUMPED CONC. | 75-100 |
| d) TRENCH FILL, PILLING, PUMPED CONC. | 100-150 |
| 10) PROVIDE LAP/ DEVELOPEMENT LENGTH
IN REINFORCEMENT BARS GRADE OF CONC. | |

M20- 47Ø
M25-41Ø
M30-38Ø

- 11) REFER RELEVANT DRG. WITH THIS DRG.
- 12) AVOID CORE CUTING.

DRG NO:	SHEET NO:	REV.	SCALE:
DP0001 DRG CL 01 105	8 OF 9	R0	NTS
DESIGNED:	DRAWN:	CHECKED:	VERIFIED:
UPENDRA SINGH	SIMRAN SONI	UPENDRA SINGH	ADMIN
ISSUED FOR:	TENDOR PURPOSE	UNIT:	MILIMETER
		DATE:	12.05.2022

This drawing is the property of HUP DESIGN and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand

SWATI Architecture landscape interior

ARCHITECTS | PLANERS | ENGINEERING | INTERIOR DESIGN
282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com

CHHATTISGARH STATE MINOR FOREST PRODUCE

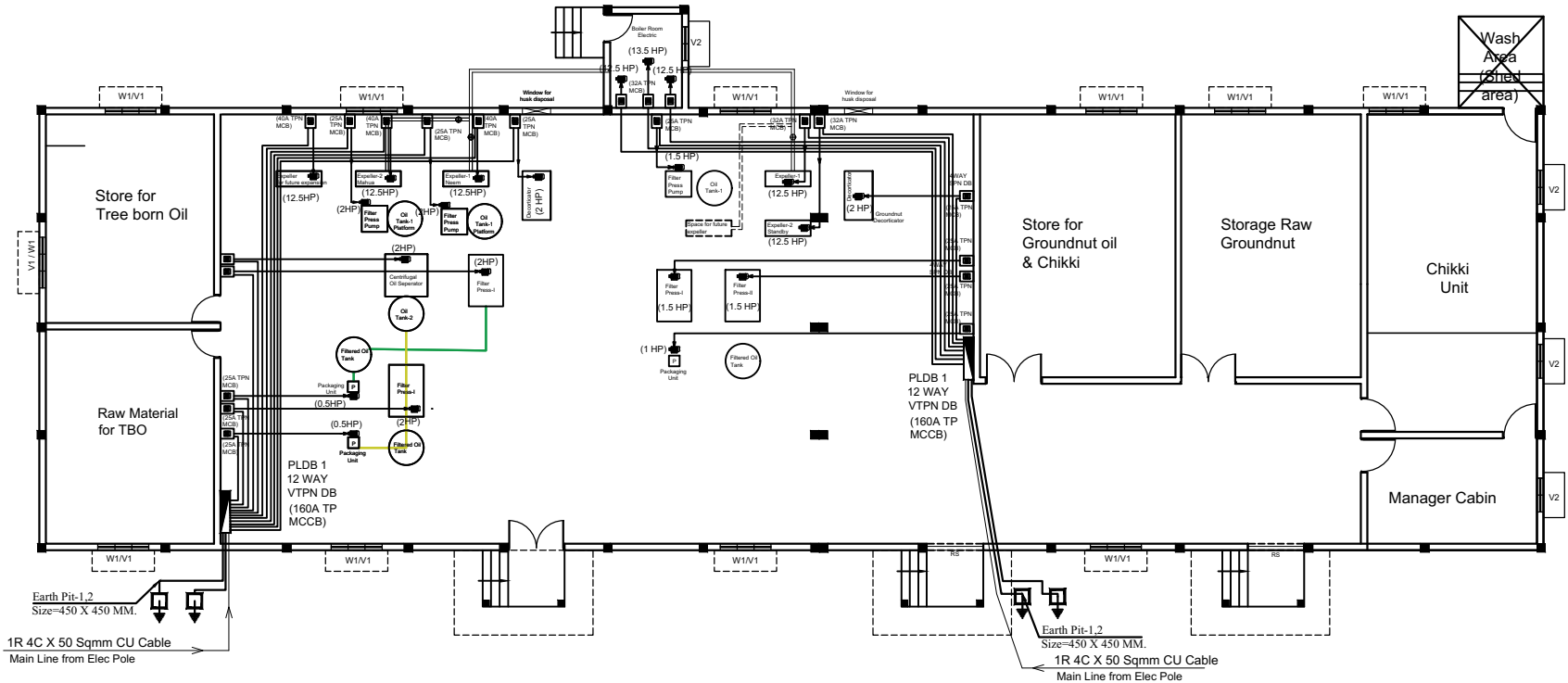
INCUBATION CENTER AT DEOBHOG GARIYABAND

TITLE:
NEEM / MAHUA / KUSUM/ GROUND NUT OIL EXTRACTION UNIT
TRUSS PLAN

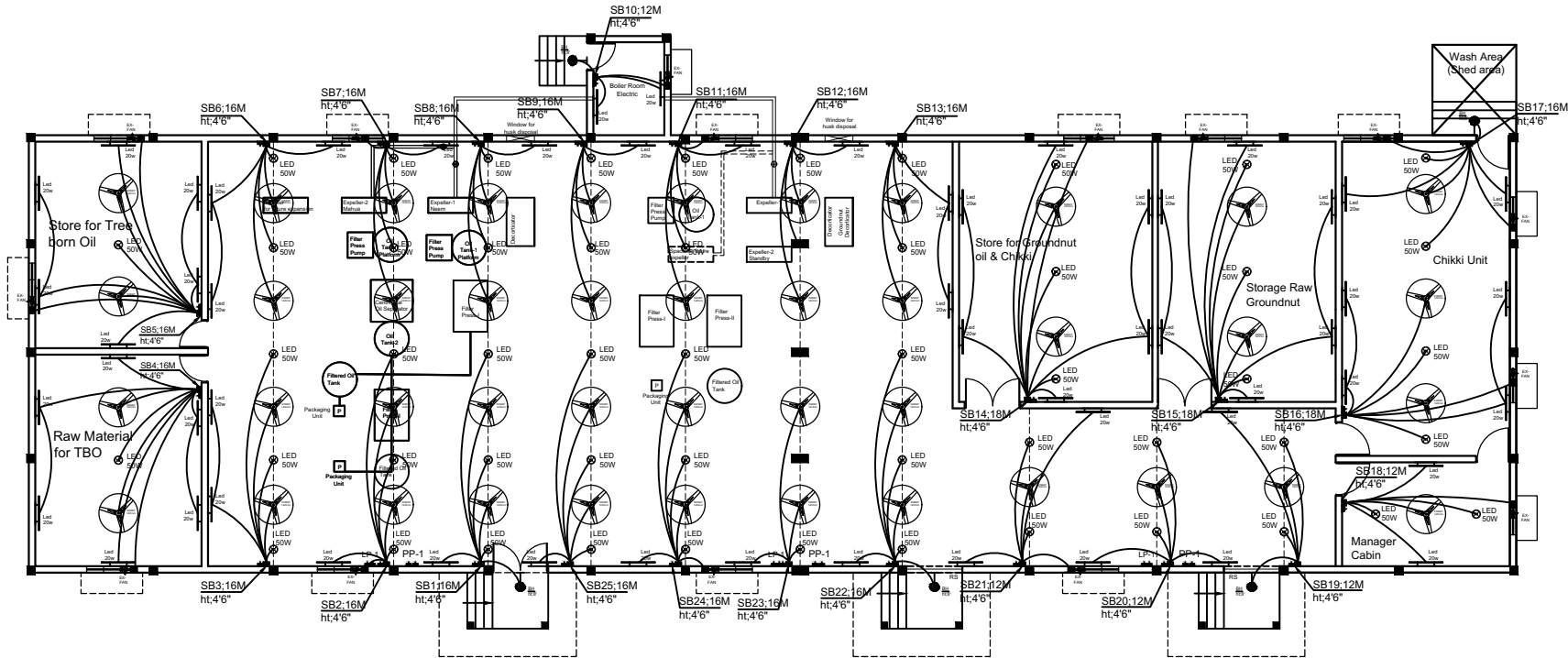
01	LED 50W	50W FLOOD LIGHT (HIGH BAY)	52 No.
02		WALL LIGHT	05 No.
03	PP-1	16A SWITCH SOCKET	06 No.
04	LP-1	6A SWITCH SOCKET	06 No.
05	4WAY SPN DB	4WAY SPN DB	21 No.
06		PLDB 1 12 WAY VTPN DB	02 No.
07		1400 mm Ceiling Fan	43 No.
08		20w Led Tube Light	57 No.
09		450 mm Ex Fan	15 No.
10	LP-1	6A SWITCH SOCKET	25 No.
11	SB1	SWITCH BOARD	25 No.
12		6 X 6 SQMM CU WIRE	
13		3 X 1.5 SQMM CU WIRE	
14		Earth Pit-1 Size=450 X 450 MM.	2 SET

MACHINE LIST					
1 - OIL EXPELLER - 120 - 140 kg/hr- nos 2	12.5 HP	02	25 HP	6 X 6 Sqmm CU wire	
2 - ROUND COOKING KETTLE + STREAM JACKET - nos 2					
3 - FILTER PRESS (16 PLATE WITH FILTER PUMP) - nos 2	2 HP	02	4 HP	6 X 6 Sqmm CU wire	
4 - CENTRIFUGAL OIL SEPARATOR - 50 LIT/ BATCH - nos1	2 HP	01	2 HP	6 X 6 Sqmm CU wire	
5 - FILTER PRESS STAND - nos 2					
6 - NEEM SEED DECORTICATOR - 200KG/HR - nos 1	2 HP	01	2 HP	6 X 6 Sqmm CU wire	
7 - ELECTRIC MOTOR - 12.5 HP -nos 1	12.5 HP	01	12.5 HP	6 X 6 Sqmm CU wire	
8 - ELECTRIC BOILER - NOS 1 (10 KW) (13.5 HP)	13.5 HP	01	13.5 HP	6 X 6 Sqmm CU wire	
9 - ONE FILTER PUMP + SWICH - 1.5 HP - NOS 1	1.5 HP	01	1.5 HP	6 X 6 Sqmm CU wire	
10- OIL TANK - 1000 LT - NOS 2					
11 - ESSENTIAL SPARE KIT - NOS -1					
12 - ACCESSORIES (OIL PIPE LINE) - NOS 1					
13 - BOTTLE FILLING MACHINE - NOS -1	0.5 HP	01	0.5 HP	6 X 6 Sqmm CU wire	
14 - MULTIPURPOSE PULVERIZER - NOS- 1	5 HP	01	5 HP	6 X 6 Sqmm CU wire	
TOTAL LOAD	3P MCCB 160A (50 KW) (128 AMP)	66 HP	1R 4C 50 Sqmm Ar. CU Cable		

MACHINE LIST					
1 - OIL EXPELLER , 120 -140 KG/HR , NOS - 2 (12.5 HP)	12.5 HP	02	25 HP	6 X 6 Sqmm CU wire	
2 - ROUND COOKING KETTLE + STREAM JACKET , NOS - 2					
3 - FILTER PRESS (16 PLATE WITH FILTER PUMP) , NOS - 2	1.5 HP	02	3 HP	6 X 6 Sqmm CU wire	
4 - FILTER PRESS STAND , NOS 2					
5 - GROUND NUT DECORTICATOR , 350 KG /HR , NOS 1	2 HP	01	2 HP	6 X 6 Sqmm CU wire	
6 - ELECTRIC MOTOR , 12.5 HP , NOS - 2	12.5 HP	02	25 HP	6 X 6 Sqmm CU wire	
7 - ELECTRIC BOILER , NOS 1 (10 KW) (13.5 HP)	13.5 HP	01	13.5 HP	6 X 6 Sqmm CU wire	
8 - ONE FILTER PUMP + SWITCH , 1.5 HP - NOS 1	1.5 HP	01	1.5 HP	6 X 6 Sqmm CU wire	
9 - OILL TANK ,1000 LT , NOS 1					
10 - ESSENTIAL SPARE KIT , NOS 1					
11 - ACCESSORIES (OIL PIPE LINE) - NOS 1					
12 - BOTTLE FILLING MACHINE - NOS 1	1 HP	01	1 HP	6 X 6 Sqmm CU wire	
TOTAL LOAD	3P MCCB 160A (53 KW) (138 AMP)	71 HP	1R 4C 50 Sqmm Ar. CU Cable		

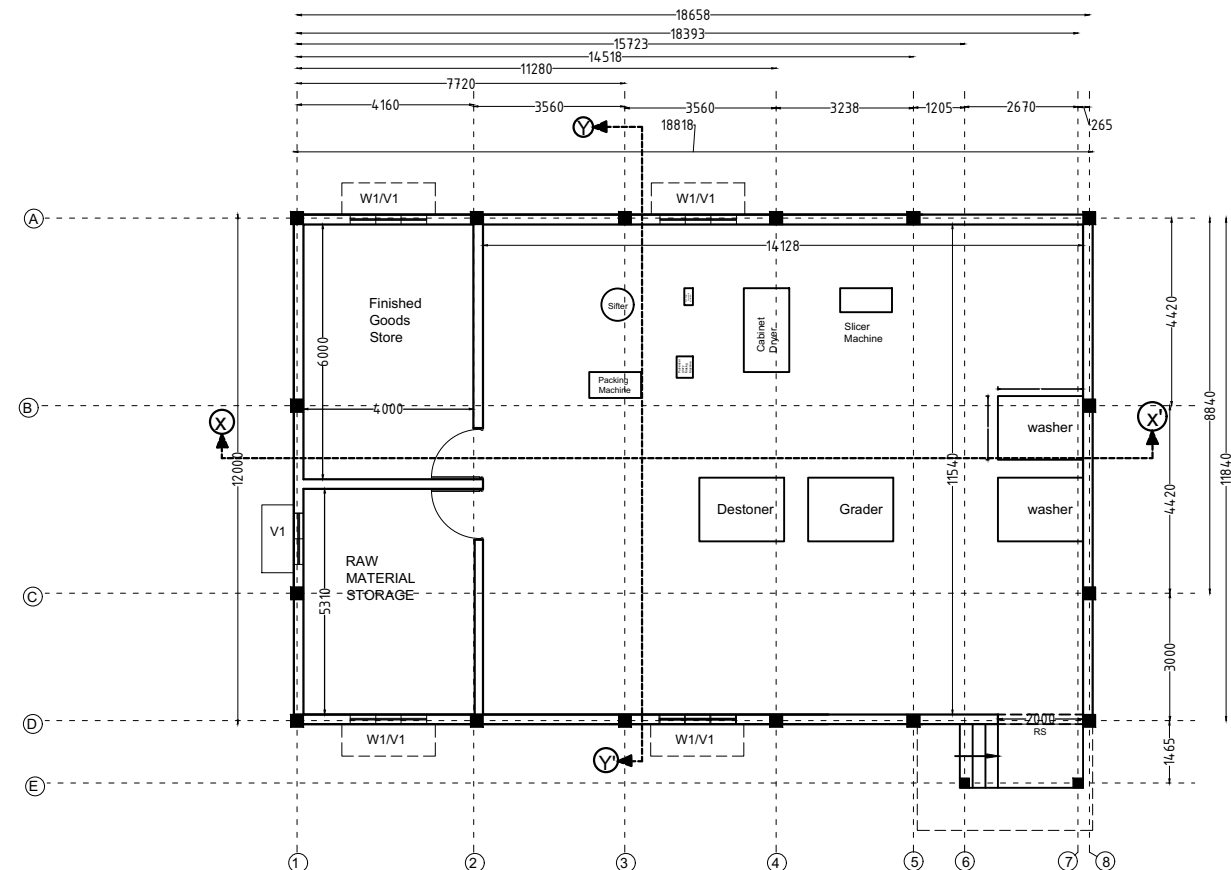


NEEM / MAHUA / KUSUM/ GROUND NUT OIL EXTRACTION UNIT



ELECTRICAL LAYOUT

DRG NO:		SHEET NO:		REV.	SCALE:	SWATI Architecture landscape interior ARCHITECTS PLANERS ENGINEERING INTERIOR DESIGN 282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com	
DP0001 DRG CL 01 105		9 OF 9		R0	NTS		
DESIGNED:	DRAWN:	CHECKED:	VERIFIED:	APPROVED:	CLIENT: CHHATTISGARH STATE MINOR FOREST PRODUCE		
UPENDRA SINGH	SIMRAN SONI	UPENDRA SINGH	ADMIN	ADMIN			
ISSUED FOR:			UNIT:	DATE:	PROJECT: INCUBATION CENTER AT DEOBHOG GARIYABAND		
TENDOR PURPOSE			MILIMETER	12.05.2022			
<div>133</div> <p>This drawing is the property of HUP DESIGN and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand</p>						TITLE:	
						NEEM / MAHUA / KUSUM/ GROUND NUT OIL EXTRACTION UNIT	
						ELECTRICAL LAYOUT	
						18	



MASALA PROCESSING UNIT
BUILD UP AREA - 230 SQM

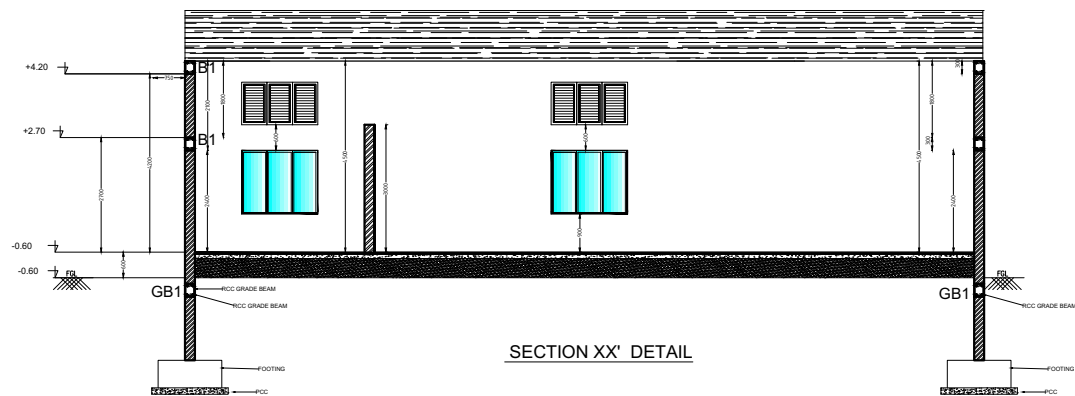
- LIST OF DRAWING**
MASALA PROCESSING UNIT
DP0001 DRG CL 01 104
- 1 - PLAN LAYOUT
 - 2 - SECTION / ELEVATION
 - 3 - COLUMN LAYOUT
 - 4 - FOOTING LAYOUT
 - 5 - BEAM LAYOUT (GROUND BEAM)
 - 6 - BEAM LAYOUT (2.4 M ABOVE PLINTH)
 - 7 - BEAM LAYOUT (4.5 M ABOVE PLINTH)
 - 8 - TRUSS DETAIL
 - 9 - ELECTRICAL LAYOUT

OPENING SCHEDULE

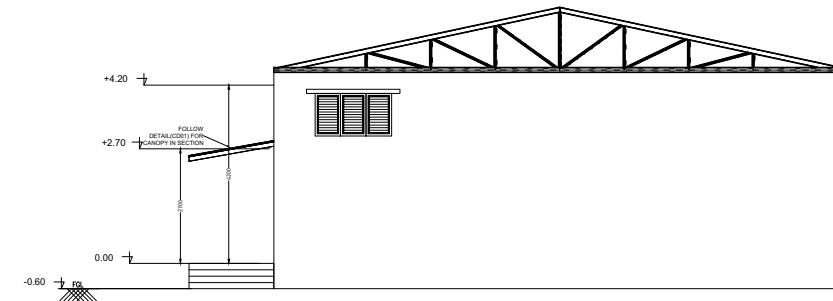
NAME	SAYMBOL
WINDOW	- W1
VENTILATOR	- V1
ROLLING SHUTTER	- R1
DOOR	- D1

SN	SAYMBOL	NOS	SIZE
01	W1	04	1.8M X 1.5M
02	V1	05	1.8 M X 1 M
03	D1	02	1 M X 2.1M
04	R1	01	2M X 2.1 M

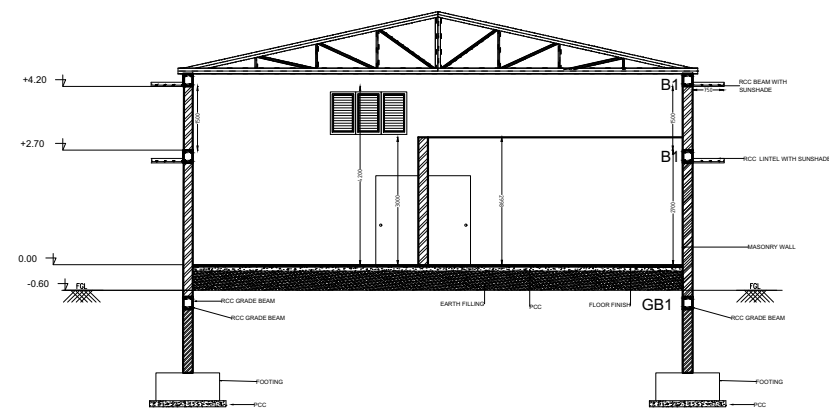
DRG NO: SHEET NO: REV. SCALE:					<div>SWATI Architecture landscape interior</div> <div>ARCHITECTS PLANERS ENGINEERING INTERIOR DESIGN</div> <div>282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com</div>		
DP0001 DRG CL 01 104 1 OF 9 R0 NTS							
DESIGNED:		DRAWN:	CHECKED:	VERIFIED:	APPROVED:	CLIENT: <div>CHHATTISGARH STATE MINOR FOREST PRODUCE</div>	
UPENDRA SINGH		SIMRAN SONI	UPENDRA SINGH	ADMIN	ADMIN		
ISSUED FOR:			UNIT:		DATE:	PROJECT: <div>INCUBATION CENTER AT DEOBHOG GARIYABAND</div>	
TENDOR PURPOSE			MILIMETER		12.05.2022		
<div>134</div> <div>This drawing is the property of HUP DESIGN and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand</div>						TITLE:	
						<div>MASALA PROCESSING UNIT</div> <div>PLAN LAYOUT</div>	
						19	



SECTION XX' DETAIL



SIDE ELEVATION

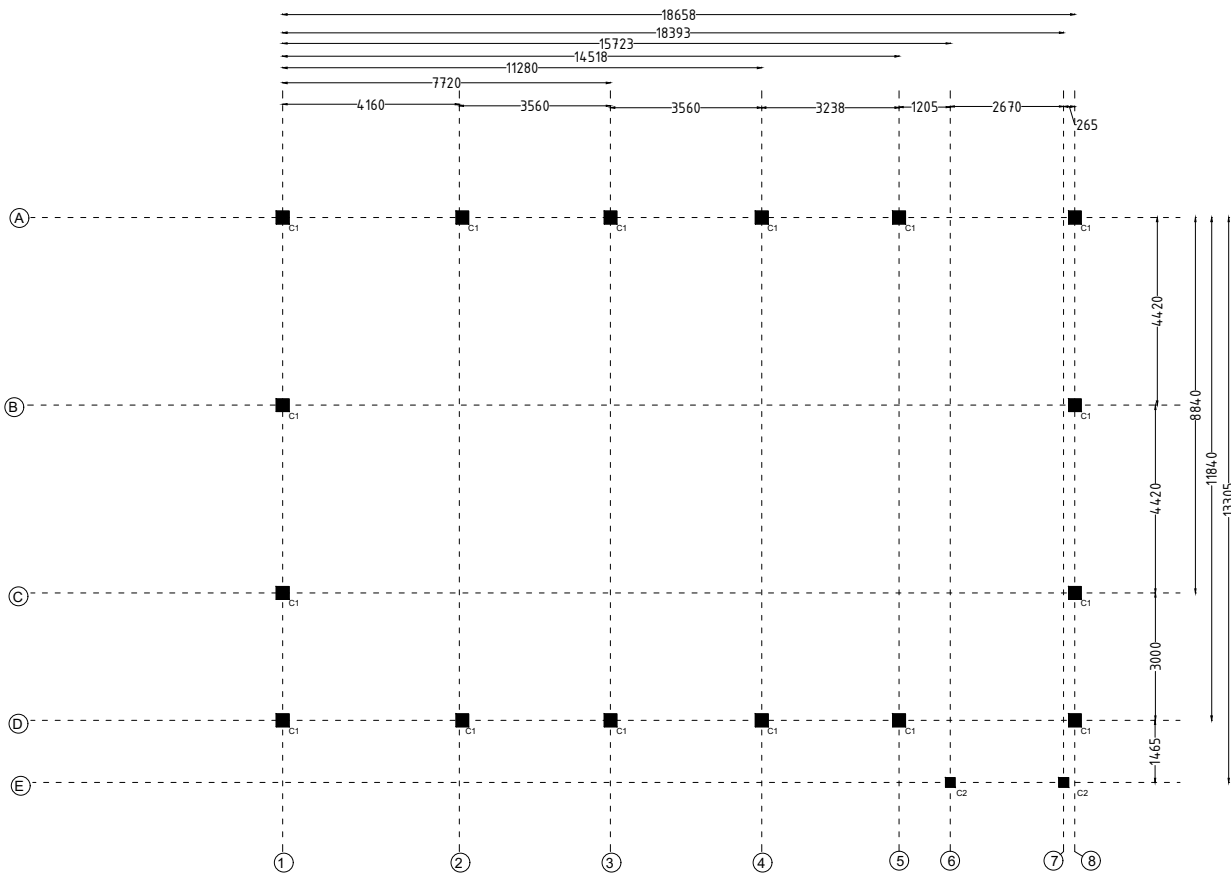


SECTION YY' DETAIL

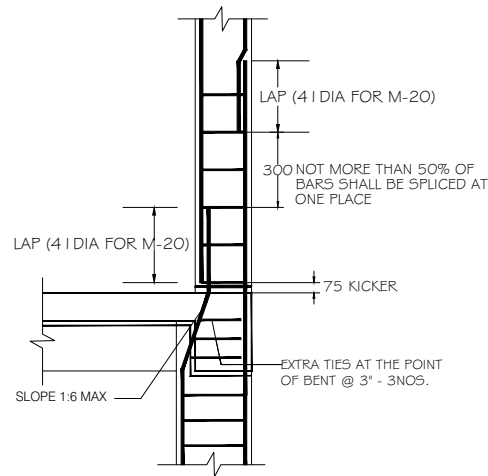


FRONT ELEVATION

DRG NO: DP0001 DRG CL 01 104					SHEET NO: 2 OF 9	REV. R0	SCALE: NTS	SWATI Architecture landscape interior ARCHITECTS PLANERS ENGINEERING INTERIOR DESIGN 282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com		
DESIGNED: UPENDRA SINGH		DRAWN: SIMRAN SONI		CHECKED: UPENDRA SINGH	VERIFIED: ADMIN	APPROVED: ADMIN		CLIENT: CHHATTISGARH STATE MINOR FOREST PRODUCE		
ISSUED FOR: TENDOR PURPOSE					UNIT: MILIMETER	DATE: 12.05.2022		PROJECT: INCUBATION CENTER AT DEOBHOG GARIYABAND		
135 This drawing is the property of HUP DESIGN and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand								TITLE: MASALA PROCESSING UNIT SECTION / ELEVATION 20		



COLUMN LAYOUT

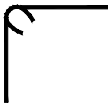


COLUMN DETAIL

GENERAL NOTES

NOTES-





- 1. USE - M 20 GRADE OF CONC. AS/IS 426-5000
- 2. USE - FE 500 GRADE OF REINF. BY CLIENT
- 3. PROVIDE CLEAR COVER TO MAIN REINF.
- FOUNDATION- 50MM
- COLUMN - 40MM
- BEAM - 25MM
- SLAB - 20MM OR DIA OF BAR, WHICHEVER IS MORE,
- R.C.C. WALL - 25MM
- 4.TIES SHOULD BE BEND INSIDE WITH 10# LENGTH IN BEAM & COLUMN



- 5.FOLLOW - IS-456-2000 FOR R.C.C. WORK
- 6.STRIPPING TIME FOR SHUTTERING / FORMWORK UNDER NORMAL CONDITION.

TYPE OF WORK	MINIMUM PERIOD BEFORE STRIKING FORM WORK
a) VERTICAL FORMWORK TO COLUMN, WALLS, BEAM	16-24 HOUR
b) SOFFITS FORMWORK TO SLABS (PROPS TO BE REFIXED- IMMEDIATELY AFTER REMOVAL OF FORMWORK)	3 DAYS
c) SOFFIT FORMWORK TO BEAMS (PROPS TO BE REFIXED IMMEDIATELY AFTER REMOVAL OF FORMWORK)	7DAYS
d) PROPS TO SLABS:	
1) SPANNING UP TO 4.5M	7DAYS
2) SPANNING OVER 4.5M	14 DAYS
e) PROPS TO BEAMS & ARCHES:	
1) SPANNING UP TO 6M	14DAYS
2) SPANNING OVER 6M	21DAYS
7. CURING FOR R.C.C. MEMBER MINIMUM 14 DAYS CONTINUOUSLY PREFERABLE - 28 DAYS.	
8. START EARLY CURING TO AVOID SRINKAGE CRACKS, WHEN CONCRETE APPEARS TO HARDEN.	
9) PROVIDE FOLLOWING SLUMP IN CONCRETE GENERALLY.	
a) SHALLOW SECTIONS, PAVMENTS, MASS CONC. LIGHT REINFORCEMENT	25-75
b) HEAVILY REINFORCEMENT SECTION IN SLAB	50-100
c) HEAVILY REINFORCEMENT SECTION IN BEAMS, WALLS, COLUMNS SLIPFORM, OR PUMPED CONC.	75-100
d) TRENCH FILL, PILLING, PUMPED CONC.	100-150
10) PROVIDE LAP/ DEVELOPEMENT LENGTH IN REINFORCEMENT BARS GRADE OF CONC.	
	M20- 47Ø
	M25-41Ø
	M30-38Ø
11) REFER RELEVANT DRG. WITH THIS DRG.	
12) AVOID CORE CUTING.	

TYPICAL COLUMN DETAIL'S

COLUMN NAME	Pile/col detail	STIRRUPS	REMARKS
C1	 8-T12 T8@ 200 c/c 2-Tie		FOUNDATION TO TERRACE
C1	 4-T12 T8@ 200 c/c 1-Tie		TERMINATE AT GROUND LVL.

DRG NO: DP0001 DRG CL 01 104					SHEET NO: 3 OF 9	REV. R0	SCALE: NTS	CLIENT: CHHATTISGARH STATE MINOR FOREST PRODUCE
DESIGNED: UPENDRA SINGH					DRAWN: SIMRAN SONI	CHECKED: UPENDRA SINGH	VERIFIED: ADMIN	
ISSUED FOR: TENDOR PURPOSE					UNIT: MILIMETER	DATE: 12.05.2022	PROJECT: INCUBATION CENTER AT DEOBHOG GARIYABAND	TITLE: MASALA PROCESSING UNIT COLUMN LAYOUT
This drawing is the property of HUP DESIGN and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand								

GENERAL NOTES

NOTES-

1. USE - M 20 GRADE OF CONC. AS/IS 426-5000
2. USE - FE 500 GRADE OF REINF. BY CLIENT
3. PROVIDE CLEAR COVER TO MAIN REINF.
- FOUNDATION- 50MM
COLUMN - 40MM
BEAM - 25MM
SLAB - 20MM OR DIA OF BAR, WHICHEVER IS MORE,
R.C.C. WALL - 25MM
- 4.TIES SHOULD BE BEND INSIDE WITH 10# LENGTH
IN BEAM & COLUMN

- 5.FOLLOW - IS-456-2000 FOR R.C.C. WORK
6.STRIPPING TIME FOR SHUTTERING / FORMWORK
UNDER NORMAL CONDITION.

TYPE OF WORK	MINIMUM PERIOD BEFORE STRIKING FORM WORK
--------------	--

a) VERTICAL FORMWORK TO
COLUMN, WALLS, BEAM 16-24 HOUR

b) SOFFITS FORMWORK TO
SLABS (PROPS TO BE REFIXED-
- IMMEDIATELY AFTER REMOVAL
OF FORMWORK) 3 DAYS

c) SOFFIT FORMWORK TO BEAMS
(PROPS TO BE REFIXED IMMEDIATELY
AFTER REMOVAL OF FORMWORK) 7DAYS

d) PROPS TO SLABS:
1) SPANNING UP TO 4.5M 7DAYS
2) SPANNING OVER 4.5M 14 DAYS

e) PROPS TO BEAMS & ARCHES:
1) SPANNING UP TO 6M 14DAYS
2) SPANNING OVER 6M 21DAYS

7. CURING FOR R.C.C. MEMBER MINIMUM 14 DAYS
CONTINOUSELY PREFERABLE - 28 DAYS.

8. START EARLY CURING TO AVOID SRINKAGE
CRACKS, WHEN CONCRETE APPEARS TO HARDEN.

9) PROVIDE FOLLOWING SLUMP IN CONCRETE GEN-
-ERALLY.

a) SHALLOW SECTIONS, PAVMENTS,
MASS CONC. LIGTH REINFORCEMENT
SECTION IN SLAB, BEAM, WALL, COLUMN 25-75

b) HEAVILY REINFORCEMENT SECTION IN
SLAB 50-100

c) HEAVILY REINFORCEMENT SECTION IN
BEAMS, WALLS, COLUMNS SLIPFORM, OR
PUMPED CONC. 75-100

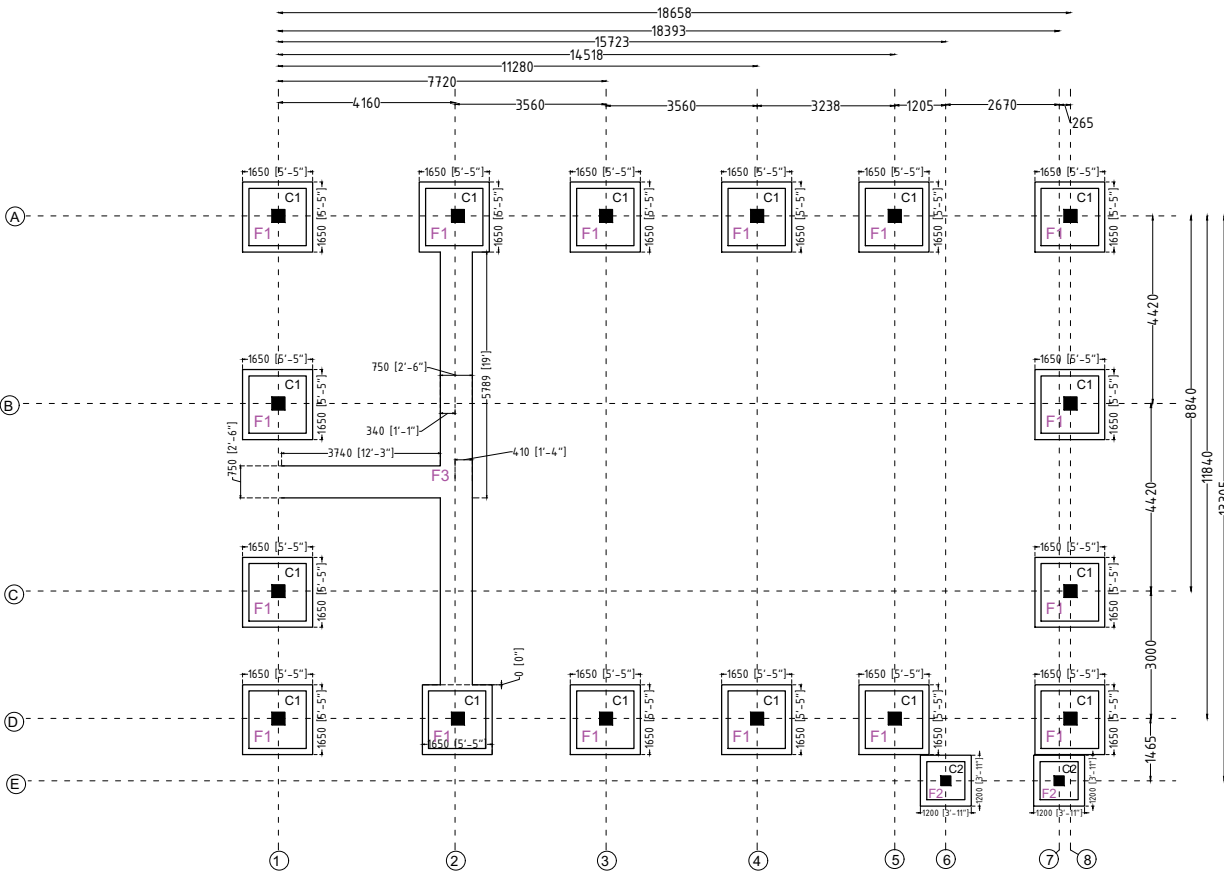
d) TRENCH FILL, PILLING, PUMPED CONC.
100-150

10) PROVIDE LAP/ DEVELOPEMENT LENGTH
IN REINFORCEMENT BARS GRADE OF CONC.

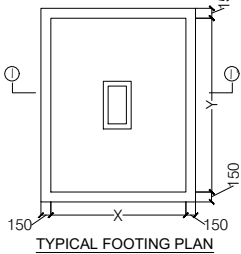
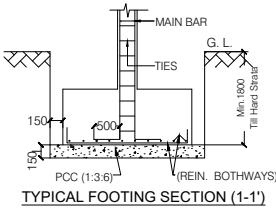
M20- 47Ø
M25-41Ø
M30-38Ø

11) REFER RELEVANT DRG. WITH THIS DRG.

12) AVOID CORE CUTING.



FOOTING LAYOUT



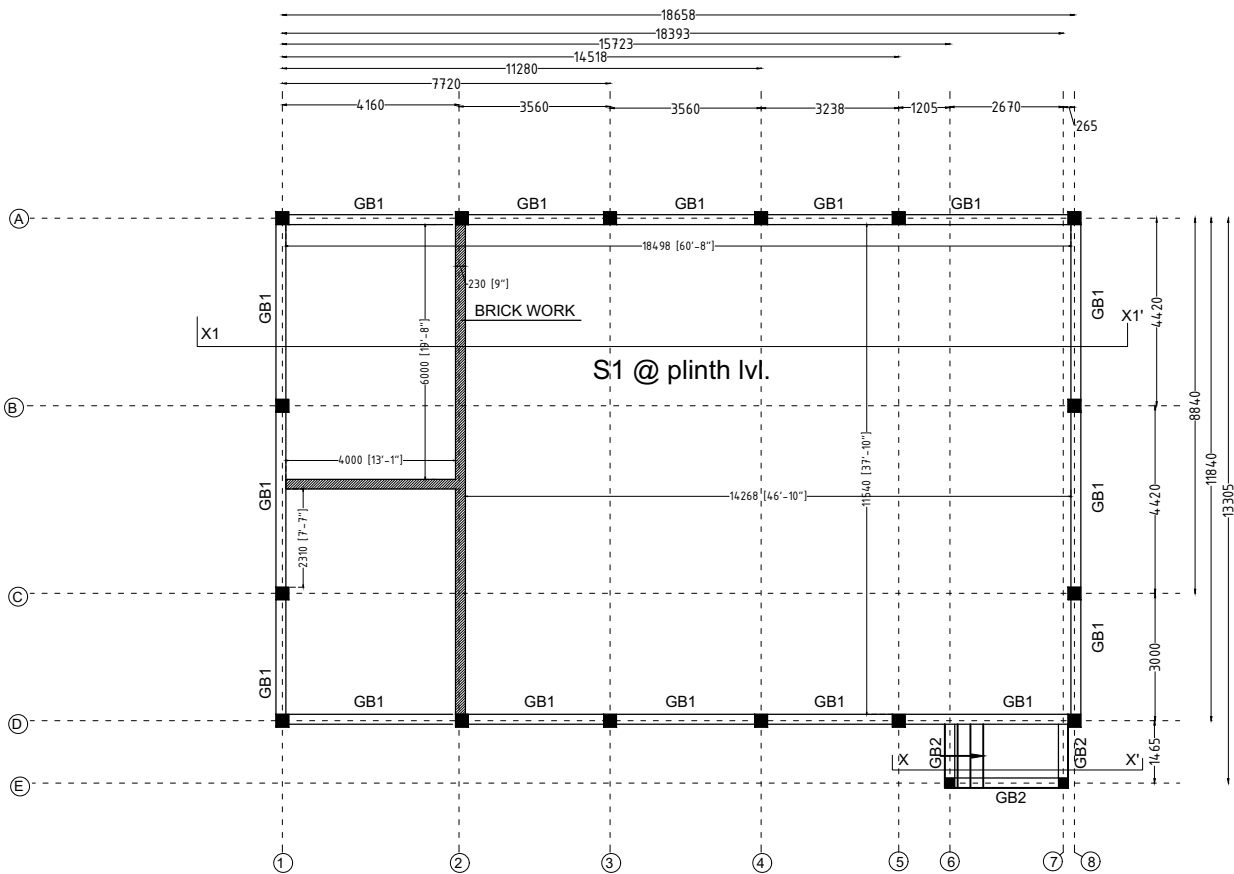
FOOTING SCHEDULE

FE500 AND M20

Footings	Column	PCC Size	Footings Size	Total	Steel	Steel
	Nos	X - Y mm	X - Y mm	Depth mm	to X mm	to Y mm
F1	C1	1650 X 1650	1350 X 1350	400	T10@ 175C/C	T10@ 175 C/C
F2	C2	1200 X 1200	900 X 900	230	T8@200C/C	T8@ 200 C/C

DRG NO:	SHEET NO:	REV.	SCALE:
DP0001 DRG CL 01 104	4 OF 9	R0	NTS
DESIGNED:	DRAWN:	CHECKED:	VERIFIED:
UPENDRA SINGH	SIMRAN SONI	UPENDRA SINGH	ADMIN
ISSUED FOR:	UNIT:	DATE:	
TENDOR PURPOSE	MILIMETER	12.05.2022	

CLIENT:	CHHATTISGARH STATE MINOR FOREST PRODUSE
PROJECT:	INCUBATION CENTER AT DEOBHOG GARIYABAND
TITLE:	MASALA PROCESSING UNIT FOOTING LAYOUT



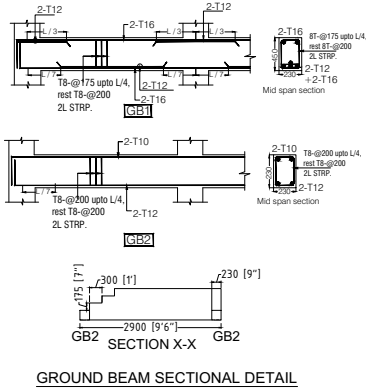
GROUND BEAM LAYOUT

BEAM SCHEDULE FOR GROUND/ PLINTH LVL.

Beam	Slab	Top	Bottom	Top	Bottom	Top	Bottom	Top	Bottom	Slab
GB1	230X375	2-T16	2-T12	2-T16	2-T12	2-T12	2-T12	T8 @200C/C	T8 @175C/C	T8 @175C/C
GB2	230X230	2-T12	-	2-T10	-	-	-	T8 @200C/C	T8 @200C/C	T8 @200C/C

SLAB SCHEDULE FOR GROUND FLOOR LVL.

Slab Name	Thickness (mm)	Main Steel		Other Steel		remarks
S1	150 (MESH)	T8 @ 200 c/c	T8 @ 200 c/c	T8 @ 200 c/c	T8 @ 200 c/c	All straight

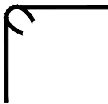


GROUND BEAM SECTIONAL DETAIL

GENERAL NOTES

NOTES-

- USE - M 20 GRADE OF CONC. AS/IS 426-5000
 - USE - FE 500 GRADE OF REINF. BY CLIENT
 - PROVIDE CLEAR COVER TO MAIN REINF.
- FOUNDATION- 50MM
COLUMN - 40MM
BEAM - 25MM
SLAB - 20MM OR DIA OF BAR, WHICHEVER IS MORE,
R.C.C. WALL - 25MM
- TIES SHOULD BE BEND INSIDE WITH 10# LENGTH IN BEAM & COLUMN



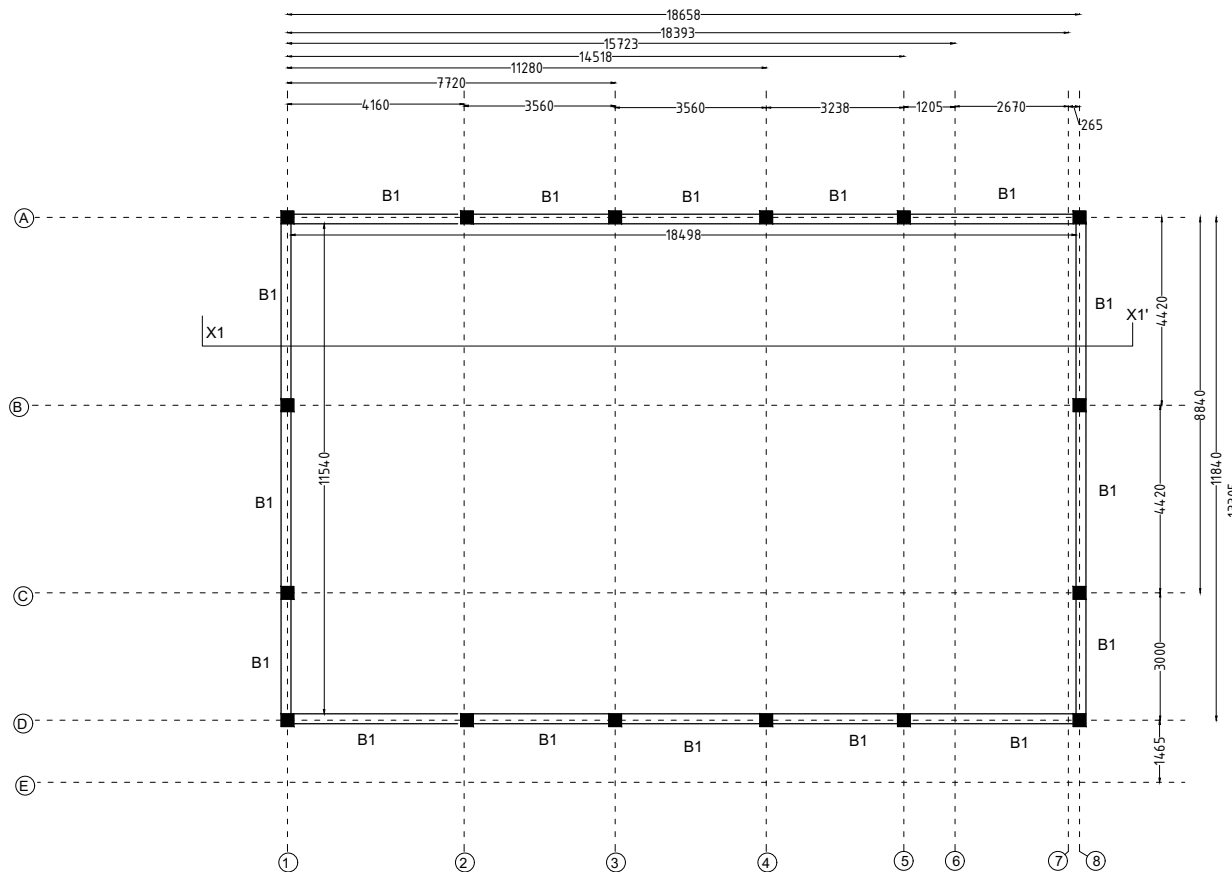
- FOLLOW - IS-456-2000 FOR R.C.C. WORK
- STRIPPING TIME FOR SHUTTERING / FORMWORK UNDER NORMAL CONDITION.

TYPE OF WORK	MINIMUM PERIOD BEFORE STRIKING FORM WORK
--------------	--

- VERTICAL FORMWORK TO COLUMN, WALLS, BEAM 16-24 HOUR
- SOFFITS FORMWORK TO SLABS (PROPS TO BE REFIXED- IMMEDIATELY AFTER REMOVAL OF FORMWORK) 3 DAYS
- SOFFIT FORMWORK TO BEAMS (PROPS TO BE REFIXED IMMEDIATELY AFTER REMOVAL OF FORMWORK) 7DAYS
- PROPS TO SLABS:
 - 1) SPANNING UP TO 4.5M 7DAYS
 - 2) SPANNING OVER 4.5M 14 DAYS
- PROPS TO BEAMS & ARCHES:
 - 1) SPANNING UP TO 6M 14DAYS
 - 2) SPANNING OVER 6M 21DAYS

- CURING FOR R.C.C. MEMBER MINIMUM 14 DAYS CONTINUOUSLY PREFERABLE - 28 DAYS.
 - START EARLY CURING TO AVOID SRINKAGE CRACKS, WHEN CONCRETE APPEARS TO HARDEN.
 - PROVIDE FOLLOWING SLUMP IN CONCRETE GENERALLY.
 - SHALLOW SECTIONS, PAVEMENTS, MASS CONC. LIGHT REINFORCEMENT SECTION IN SLAB, BEAM, WALL, COLUMN 25-75
 - HEAVILY REINFORCEMENT SECTION IN SLAB 50-100
 - HEAVILY REINFORCEMENT SECTION IN BEAMS, WALLS, COLUMNS SLIPFORM, OR PUMPED CONC. 75-100
 - TRENCH FILL, PILLING, PUMPED CONC. 100-150
 - PROVIDE LAP/ DEVELOPEMENT LENGTH IN REINFORCEMENT BARS GRADE OF CONC.
 - M20- 47Ø
 - M25-41Ø
 - M30-38Ø
- 11) REFER RELEVANT DRG. WITH THIS DRG.
12) AVOID CORE CUTING.

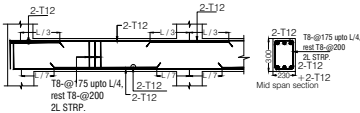
DRG NO: DP0001 DRG CL 01 104	SHEET NO: 5 OF 9	REV. R0	SCALE: NTS	SWATI Architecture landscape interior ARCHITECTS PLANERS ENGINEERING INTERIOR DESIGN 282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com	
DESIGNED: UPENDRA SINGH	DRAWN: SIMRAN SONI	CHECKED: UPENDRA SINGH	VERIFIED: ADMIN	APPROVED: ADMIN	CLIENT: CHHATTISGARH STATE MINOR FOREST PRODUCE
ISSUED FOR: TENDOR PURPOSE	UNIT: MILIMETER	DATE: 12.05.2022	PROJECT: INCUBATION CENTER AT DEOBHOG GARIYABAND	TITLE: MASALA PROCESSING UNIT BEAM LAYOUT	



BEAM PLAN(2.4 m ABOVE PLINTH LVL)

BEAM SCHEDULE FOR 2.4m LVL. ABOVE PLINTH

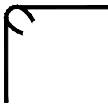
B1	230X300	2-T12	2-T12	2-T12	2-T12	2-T12	T8 @200/C	T8 @175/C	T8 @175/C	SLAB THK. INCLUDED



GENERAL NOTES

NOTES-

- USE - M 20 GRADE OF CONC. AS/IS 426-5000
 - USE - FE 500 GRADE OF REINF. BY CLIENT
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COLUMN - 40MM
BEAM - 25MM
SLAB - 20MM OR DIA OF BAR, WHICHEVER IS MORE,
R.C.C. WALL - 25MM
- TIES SHOULD BE BEND INSIDE WITH 10# LENGTH IN BEAM & COLUMN



- FOLLOW - IS-456-2000 FOR R.C.C. WORK
- STRIPPING TIME FOR SHUTTERING / FORMWORK UNDER NORMAL CONDITION.

TYPE OF WORK	MINIMUM PERIOD BEFORE STRIKING FORM WORK
--------------	--

- VERTICAL FORMWORK TO COLUMN, WALLS, BEAM 16-24 HOUR
- SOFFITS FORMWORK TO SLABS (PROPS TO BE REFIXED- IMMEDIATELY AFTER REMOVAL OF FORMWORK) 3 DAYS
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- PROPS TO SLABS:
 - SPANNING UP TO 4.5M 7DAYS
 - SPANNING OVER 4.5M 14 DAYS
- PROPS TO BEAMS & ARCHES:
 - SPANNING UP TO 6M 14DAYS
 - SPANNING OVER 6M 21DAYS

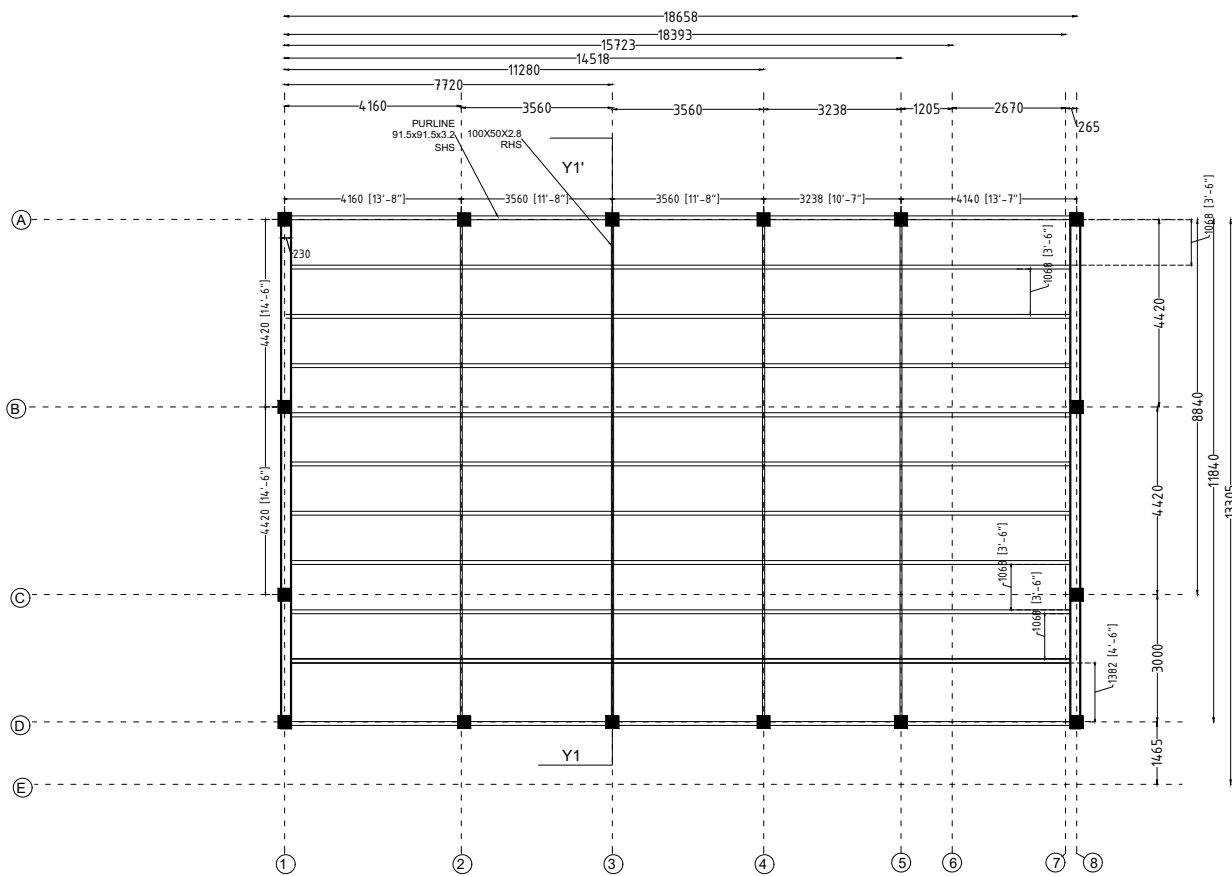
- CURING FOR R.C.C. MEMBER MINIMUM 14 DAYS CONTINOUSELY PREFERABLE - 28 DAYS.
- START EARLY CURING TO AVOID SRINKAGE CRACKS, WHEN CONCRETE APPEARS TO HARDEN.
- PROVIDE FOLLOWING SLUMP IN CONCRETE GEN-ERALLY.
 - SHALLOW SECTIONS, PAVMENTS, MASS CONC. LIGTH REINFORCEMENT SECTION IN SLAB, BEAM, WALL, COLUMN 25-75
 - HEAVILY REINFORCEMENT SECTION IN SLAB 50-100
 - HEAVILY REINFORCEMENT SECTION IN BEAMS, WALLS, COLUMNS SLIPFORM, OR PUMPED CONC. 75-100
 - TRENCH FILL, PILLING, PUMPED CONC. 100-150
- PROVIDE LAP/ DEVELOPEMENT LENGTH IN REINFORCEMENT BARS GRADE OF CONC.

M20- 47Ø
M25-41Ø
M30-38Ø

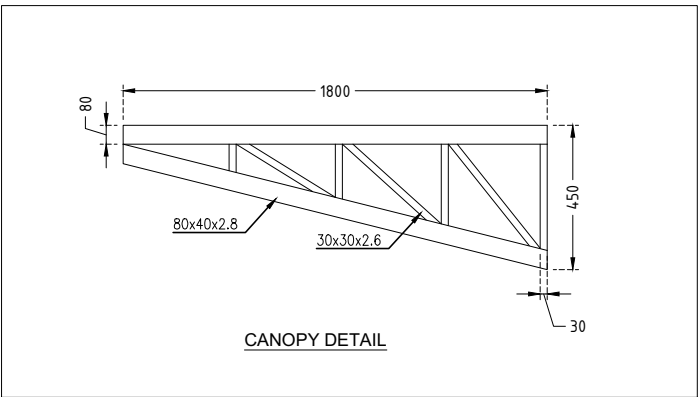
- REFER RELEVANT DRG. WITH THIS DRG.
- AVOID CORE CUTING.

DRG NO:	SHEET NO:	REV.	SCALE:
DP0001 DRG CL 01 104	6 OF 9	R0	NTS
DESIGNED:	DRAWN:	CHECKED:	VERIFIED:
UPENDRA SINGH	SIMRAN SONI	UPENDRA SINGH	ADMIN
ISSUED FOR:	UNIT:	DATE:	
TENDOR PURPOSE	MILIMETER	12.05.2022	

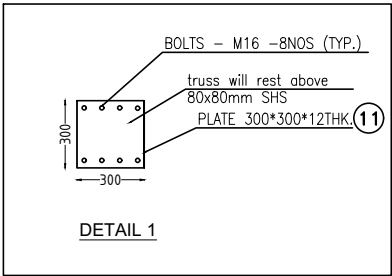
CLIENT:	CHHATTISGARH STATE MINOR FOREST PRODUSE
PROJECT:	INCUBATION CENTER AT DEOBHOG GARIYABAND
TITLE:	MASALA PROCESSING UNIT BEAM LAYOUT



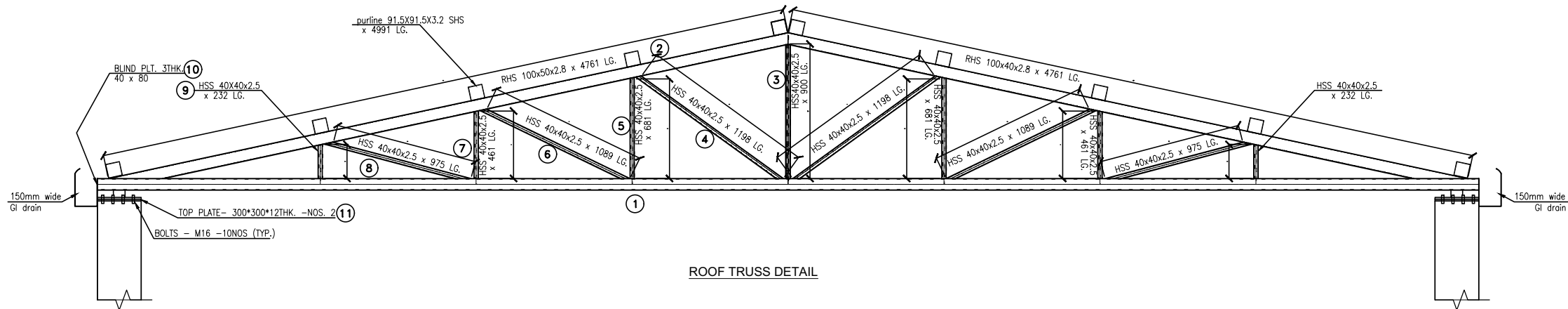
ROOF TRUSS DETAIL



CANOPY DETAIL



DETAIL 1

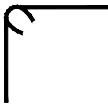


ROOF TRUSS DETAIL

GENERAL NOTES

NOTES-

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 - USE - FE 500 GRADE OF REINF. BY CLIENT
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COLUMN - 40MM
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SLAB - 20MM OR DIA OF BAR, WHICHEVER IS MORE,
R.C.C. WALL - 25MM
- TIES SHOULD BE BEND INSIDE WITH 10# LENGTH IN BEAM & COLUMN



- FOLLOW - IS-456-2000 FOR R.C.C. WORK
- STRIPPING TIME FOR SHUTTERING / FORMWORK UNDER NORMAL CONDITION.

TYPE OF WORK	MINIMUM PERIOD BEFORE STRIKING FORM WORK
--------------	--

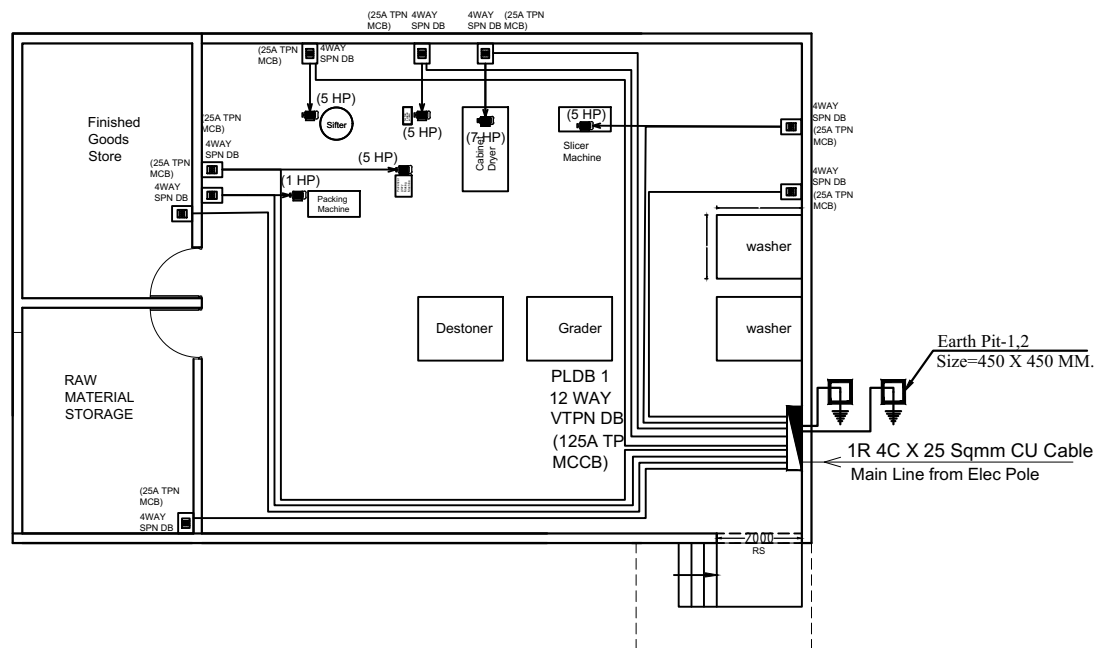
- VERTICAL FORMWORK TO COLUMN, WALLS, BEAM 16-24 HOUR
- SOFFITS FORMWORK TO SLABS (PROPS TO BE REFIXED- IMMEDIATELY AFTER REMOVAL OF FORMWORK) 3 DAYS
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 - TRENCH FILL, PILLING, PUMPED CONC. 100-150
- PROVIDE LAP/ DEVELOPEMENT LENGTH IN REINFORCEMENT BARS GRADE OF CONC.

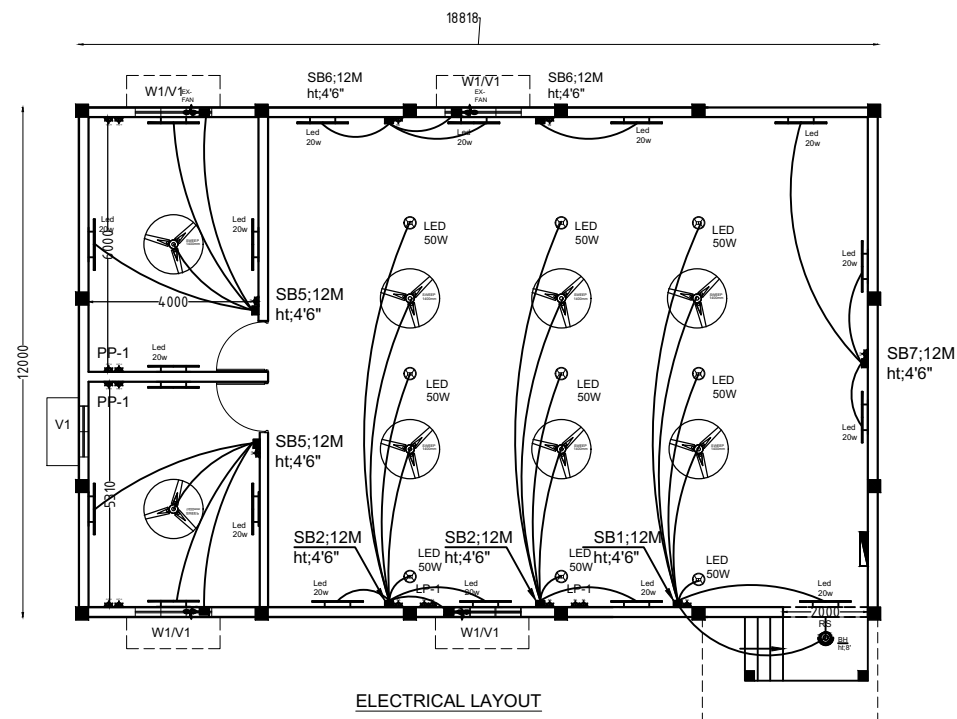
M20- 47Ø
M25-41Ø
M30-38Ø

- REFER RELEVANT DRG. WITH THIS DRG.
- AVOID CORE CUTING.

DRG NO: DP0001 DRG CL 01 104	SHEET NO: 8 OF 9	REV. R0	SCALE: NTS	SWATI Architecture landscape interior ARCHITECTS PLANERS ENGINEERING INTERIOR DESIGN 282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com
DESIGNED: UPENDRA SINGH	DRAWN: SIMRAN SONI	CHECKED: UPENDRA SINGH	VERIFIED: ADMIN	APPROVED: ADMIN
ISSUED FOR: TENDOR PURPOSE				CLIENT: CHHATTISGARH STATE MINOR FOREST PRODUCE
UNIT: MILIMETER				DATE: 12.05.2022
PROJECT: INCUBATION CENTER AT DEOBHOG GARIYABAND				TITLE: MASALA PROCESSING UNIT TRUSS DETAIL



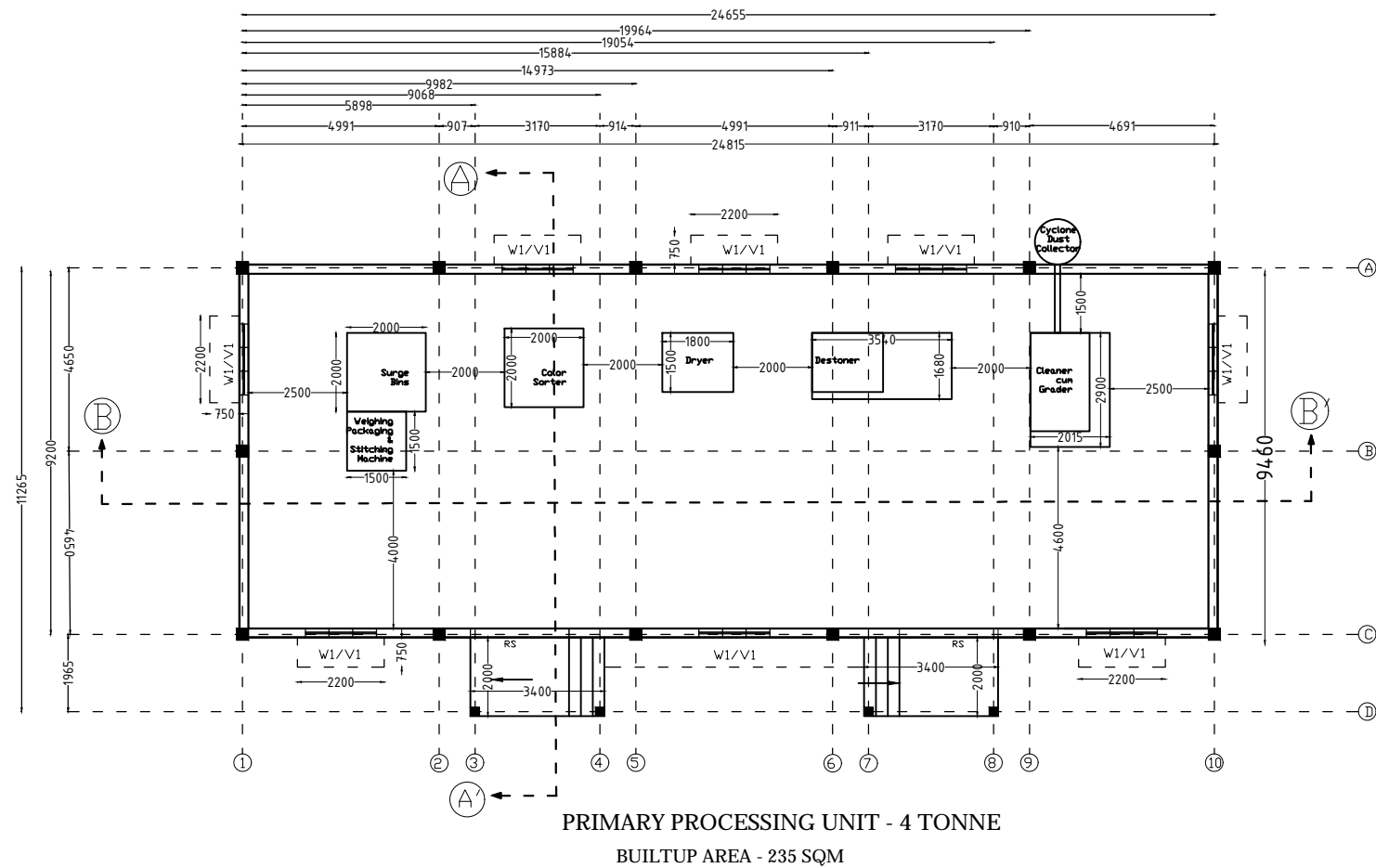
01	LED 50W	50W FLOOD LIGHT (HIGH BAY)	06 No.
02		WALL LIGHT	02 No.
03	PP-1	16A SWITCH SOCKET	08 No.
04	LP-1	6A SWITCH SOCKET	02 No.
05	4WAY SPN DB	4WAY SPN DB	09 No.
06		PLDB 1 12 WAY VTPN DB	01 No.
07		1400 mm Ceiling Fan	06 No.
08	Led 20w	20w Led Tube Light	16 No.
09	Ex Fan	450 mm Ex Fan	06 No.
10	LP-1	6A SWITCH SOCKET	07 No.
11	SB1	SWITCH BOARD	07 No.
12		6 X 6 SQMM CU WIRE	
13		3 X 1.5 SQMM CU WIRE	
14		Earth Pit-1 Size=450 X 450 MM.	2 SET



MASALA PROCESSING UNIT

MACHINE LIST			
1 - PULVERIZER , 100 KG / H , NOS 1	5 HP	6 X 6 Sqmm CU wire	
2 - PULVERIZER GRAVY MAKING MACHINE , 100KG / H , NOS 1	5 HP	6 X 6 Sqmm CU wire	
3 - SLICER MACHINE - 500 KG / HR , NOS 1	5 HP	6 X 6 Sqmm CU wire	
4 - CABINET DRYER , 250 KG / BATCH , NOS - 1 (5 KW)	7 HP	6 X 6 Sqmm CU wire	
4A - CABINET DRYER , 250 KG / BATCH , NOS - 2 (5 KW)	7 HP	6 X 6 Sqmm CU wire	
5 - SEIVING MACHINE , 100 KG / HR , NOS 1	2 HP	6 X 6 Sqmm CU wire	
6 - PACKAGING MACHINE , NOS -1	1 HP	6 X 6 Sqmm CU wire	
6A - PACKAGING MACHINE , NOS - 2	1 HP	6 X 6 Sqmm CU wire	
TOTAL LOAD	3P MCCB 125A (25 KW) (64 AMP)	33 HP	1R 4C 25 Sqmm Ar. CU Cable

DRG NO: DP0001 DRG CL 01 104	SHEET NO: 9 OF 9	REV. R0	SCALE: NTS	SWATI Architecture landscape interior ARCHITECTS PLANERS ENGINEERING INTERIOR DESIGN 282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com	
DESIGNED: UPENDRA SINGH	DRAWN: SIMRAN SONI	CHECKED: UPENDRA SINGH	VERIFIED: ADMIN	APPROVED: ADMIN	CLIENT: CHHATTISGARH STATE MINOR FOREST PRODUCE
ISSUED FOR: TENDOR PURPOSE	UNIT: MILIMETER	DATE: 12.05.2022	PROJECT: MINI FOOD PARK GARIYABAND		
This drawing is the property of HUP DESIGN and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand				TITLE: MASALA PROCESSING UNIT ELECTRICAL LAYOUT	



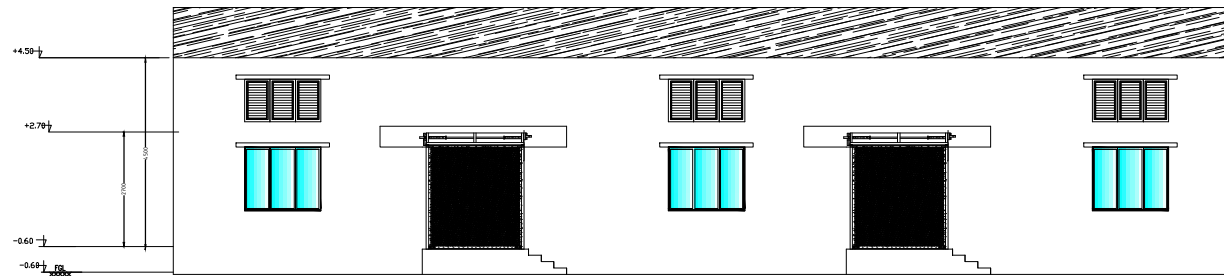
- LIST OF DRAWING**
PULSE MILLING UNIT
DP0001 DRG CL 01 106
- 1 - PLAN LAYOUT
 - 2 - SECTION / ELEVATION
 - 3 - COLUMN LAYOUT
 - 4 - FOOTING LAYOUT
 - 5 - GROUND BEAM LAYOUT
 - 6 - BEAM LAYOUT (2.5 M ABOVE)
 - 7 - BEAM LAYOUT (4.5 M ABOVE)
 - 8 - TRUSS DETAIL
 - 9 - ELECTRICAL LAYOUT

OPENING SCHEDULE

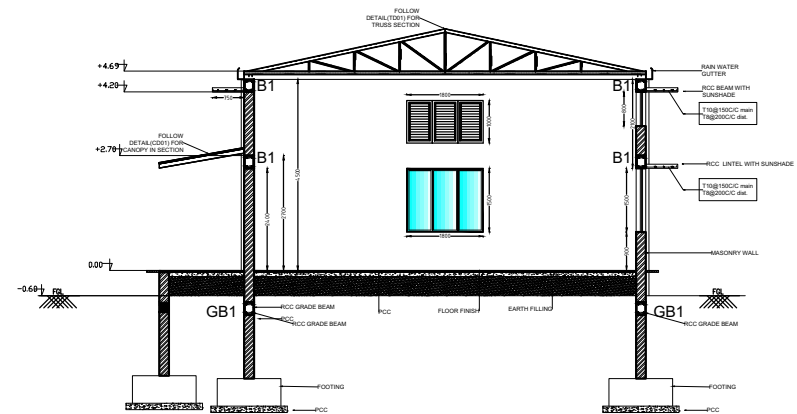
NAME	SAYMBOL
WINDOW	- W1
VENTILATOR	- V1
ROLLING SHUTTER	- R1
DOOR	- D1

SN	SAYMBOL	NOS	SIZE
01	W1	08	1.8M X 1.5M
02	V1	08	1.8 M X 1 M
03	R1	02	2.5M X 2.4 M

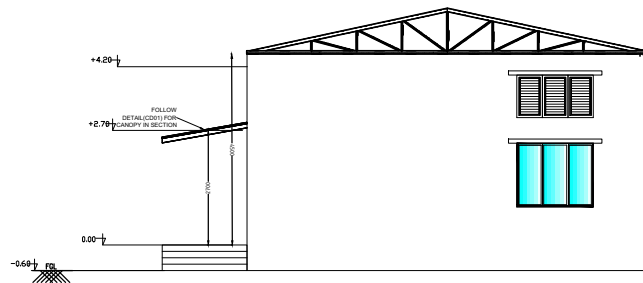
DRG NO: DP0001 DRG CL 01 101		SHEET NO: 1 OF 9	REV. R0	SCALE: NTS	SWATI Architecture landscape interior ARCHITECTS PLANERS ENGINEERING INTERIOR DESIGN 282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com		
DESIGNED:	DRAWN:	CHECKED:	VERIFIED:	APPROVED:	CLIENT:	CHHATTISGARH STATE MINOR FOREST PRODUCE	
UPENDRA SINGH	SIMRAN SONI	UPENDRA SINGH	ADMIN	ADMIN			
ISSUED FOR:		UNIT:		DATE:	PROJECT:	INCUBATION CENTER AT DEOBHOG GARIYABAND	
TENDOR PURPOSE		MILIMETER		12.05.2022			
143 This drawing is the property of HUP DESIGN and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand					TITLE:	PRIMARY PROCESSING UNIT PLAN LAYOUT	28



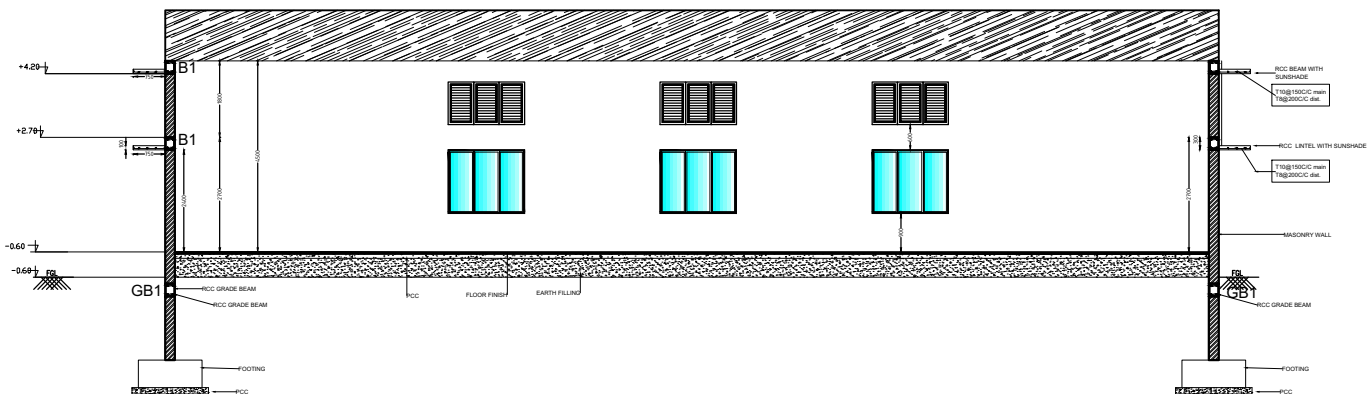
FRONT ELEVATION



SECTION A-A' IN STRUCTURE



SIDE ELEVATION

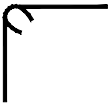


SECTION B-B' IN STRUCTURE

DRG NO: DP0001 DRG CL 01 101		SHEET NO: 2 OF 9	REV. R0	SCALE: NTS	<div>SWATI Architecture landscape interior</div> <div>ARCHITECTS PLANERS ENGINEERING INTERIOR DESIGN</div> <div>282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com</div>	
DESIGNED:	DRAWN:	CHECKED:	VERIFIED:	APPROVED:	CLIENT:	CHHATTISGARH STATE MINOR FOREST PRODUCE
UPENDRA SINGH	SIMRAN SONI	UPENDRA SINGH	ADMIN	ADMIN		
ISSUED FOR: TENDOR PURPOSE			UNIT: MILIMETER	DATE: 12.05.2022	PROJECT:	INCUBATION CENTER AT DEOBHOG GARIYABAND
<div>144</div> <div>This drawing is the property of HUP DESIGN and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand</div>					TITLE:	PRIMARY PROCESSING UNIT SECTION / ELEVATION
						29

NOTES-

1. USE - M 20 GRADE OF CONC. AS/IS 426-5000
2. USE - FE 500 GRADE OF REINF. BY CLIENT
3. PROVIDE CLEAR COVER TO MAIN REINF.
- FOUNDATION- 50MM
- COLUMN - 40MM
- BEAM - 25MM
- SLAB - 20MM OR DIA OF BAR, WHICHEVER IS MORE,
- R.C.C. WALL - 25MM
- 4.TIES SHOULD BE BEND INSIDE WITH 10# LENGTH IN BEAM & COLUMN



- 5.FOLLOW - IS-456-2000 FOR R.C.C. WORK
- 6.STRIPPING TIME FOR SHUTTERING / FORMWORK UNDER NORMAL CONDITION.

TYPE OF WORK	MINIMUM PERIOD BEFORE STRIKING FORM WORK
--------------	--

- a) VERTICAL FORMWORK TO COLUMN, WALLS, BEAM16-24 HOUR
- b) SOFFITS FORMWORK TO SLABS (PROPS TO BE REFIXED- IMMEDIATELY AFTER REMOVAL OF FORMWORK)3 DAYS
- c) SOFFIT FORMWORK TO BEAMS (PROPS TO BE REFIXED IMMEDIATELY AFTER REMOVAL OF FORMWORK)7DAYS
- d) PROPS TO SLABS:
- 1) SPANNING UP TO 4.5M7DAYS
- 2) SPANNING OVER 4.5M14 DAYS
- e) PROPS TO BEAMS & ARCHES:
- 1) SPANNING UP TO 6M14DAYS
- 2) SPANNING OVER 6M21DAYS

7. CURING FOR R.C.C. MEMBER MINIMUM 14 DAYS CONTINUOUSLY PREFERABLE - 28 DAYS.
8. START EARLY CURING TO AVOID SRINKAGE CRACKS, WHEN CONCRETE APPEARS TO HARDEN.
- 9) PROVIDE FOLLOWING SLUMP IN CONCRETE GENERALLY.

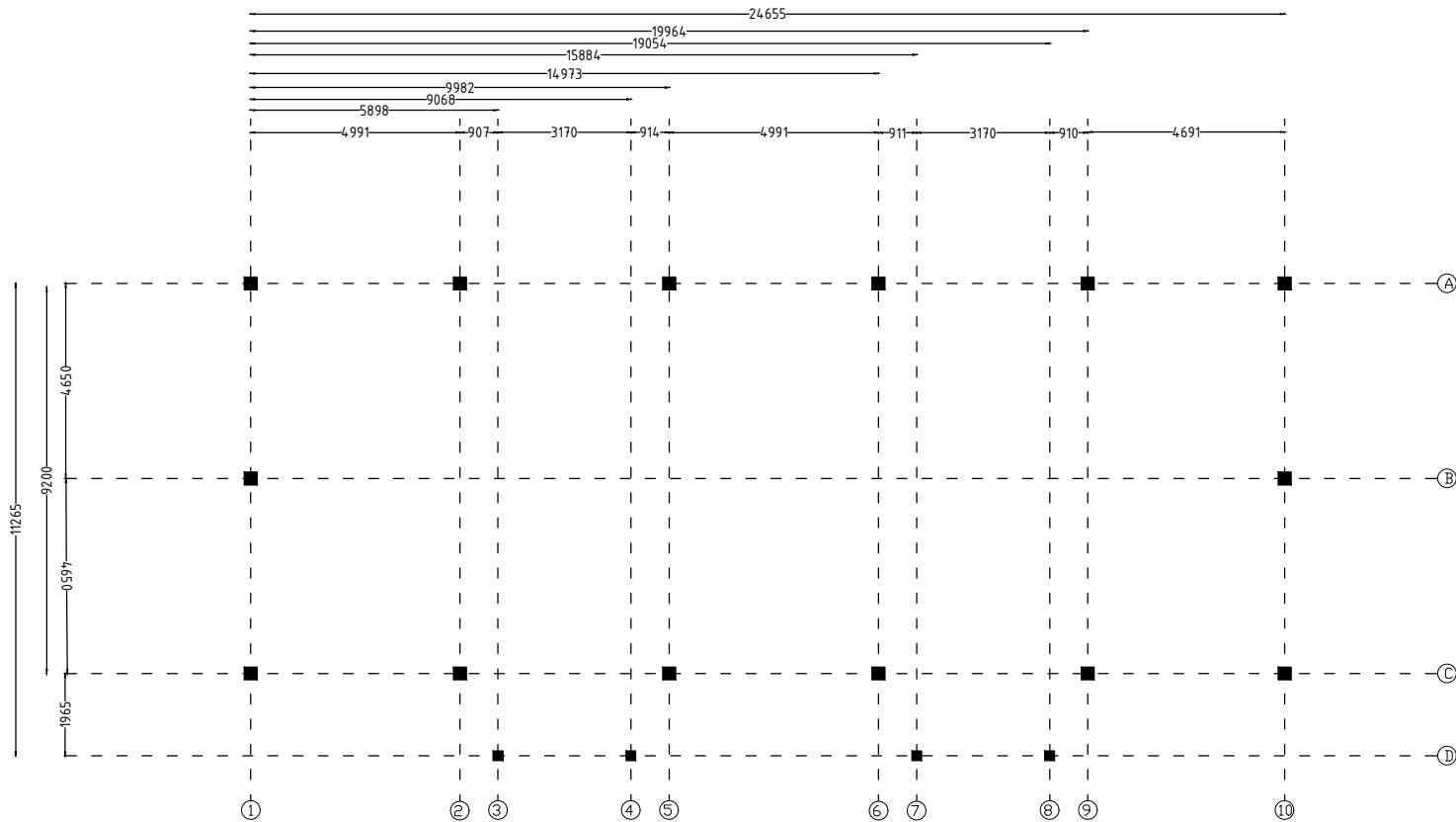
- a) SHALLOW SECTIONS, PAYMENTS, MASS CONC. LIGTH REINFORCEMENT SECTION IN SLAB, BEAM, WALL, COLUMN25-75
- b) HEAVILY REINFORCEMENT SECTION IN SLAB50-100
- c) HEAVILY REINFORCEMENT SECTION IN BEAMS, WALLS, COLUMNS SLIPFORM, OR PUMPED CONC.75-100
- d) TRENCH FILL, PILLING, PUMPED CONC.100-150
- 10) PROVIDE LAP/ DEVELOPEMENT LENGTH IN REINFORCEMENT BARS GRADE OF CONC.

M20- 47Ø

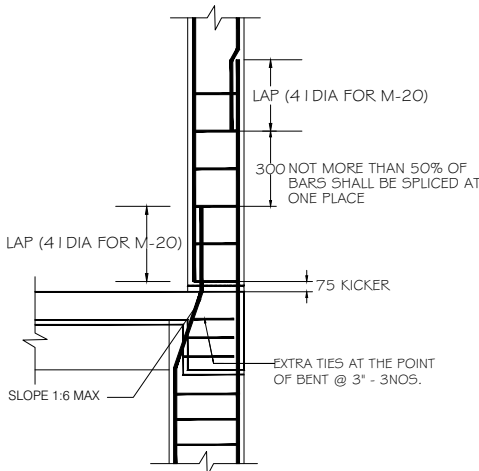
M25-41Ø

M30-38Ø

- 11) REFER RELEVANT DRG. WITH THIS DRG.
- 12) AVOID CORE CUTING.



COLUMN LAYOUT



COLUMN DETAIL

TYPICAL COLUMN DETAIL'S

COLUMN NAME	Pile/col detail	STIRRUPS	REMARKS
C1	<div>8-T12 TB@ 200 c/c 2-Tie</div>		FOUNDATION TO TERRACE
C1	<div>4-T12 TB@ 200 c/c 1-Tie</div>		TERMINATE AT GROUND LVL

DRG NO:	SHEET NO:	REV.	SCALE:
DP0001 DRG CL 01 101	3 OF 9	R0	NTS
DESIGNED:	DRAWN:	CHECKED:	VERIFIED:
UPENDRA SINGH	SIMRAN SONI	UPENDRA SINGH	ADMIN
ISSUED FOR:	UNIT:	DATE:	
TENDOR PURPOSE	MILIMETER	12.05.2022	

This drawing is the property of HUP DESIGN and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand

SWATI Architecture landscape interior

ARCHITECTS I PLANERS I ENGINEERING I INTERIOR DESIGN
282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com

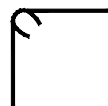
CHHATTISGARH STATE MINOR FOREST PRODUSE

INCUBATION CENTER AT DEOBHOG GARIYABAND

PRIMARY PROCESSING UNIT
COLUMN LAYOUT

NOTES-

1. USE - M 20 GRADE OF CONC. AS/IS 426-5000
 2. USE - FE 500 GRADE OF REINF. BY CLIENT
 3. PROVIDE CLEAR COVER TO MAIN REINF.
- FOUNDATION - 50MM
COLUMN - 40MM
BEAM - 25MM
SLAB - 20MM OR DIA OF BAR, WHICHEVER IS MORE,
R.C.C. WALL - 25MM
4. TIES SHOULD BE BEND INSIDE WITH 10# LENGTH IN BEAM & COLUMN



5. FOLLOW - IS-456-2000 FOR R.C.C. WORK
6. STRIPPING TIME FOR SHUTTERING / FORMWORK UNDER NORMAL CONDITION.

TYPE OF WORK	MINIMUM PERIOD BEFORE STRIKING FORM WORK
--------------	--

- | | |
|--|------------|
| a) VERTICAL FORMWORK TO COLUMN, WALLS, BEAM | 16-24 HOUR |
| b) SOFFITS FORMWORK TO SLABS (PROPS TO BE REFIXED- IMMEDIATELY AFTER REMOVAL OF FORMWORK) | 3 DAYS |
| c) SOFFIT FORMWORK TO BEAMS (PROPS TO BE REFIXED IMMEDIATELY AFTER REMOVAL OF FORMWORK) | 7DAYS |
| d) PROPS TO SLABS: | |
| 1) SPANNING UP TO 4.5M | 7DAYS |
| 2) SPANNING OVER 4.5M | 14 DAYS |
| e) PROPS TO BEAMS & ARCHES: | |
| 1) SPANNING UP TO 6M | 14DAYS |
| 2) SPANNING OVER 6M | 21DAYS |

7. CURING FOR R.C.C. MEMBER MINIMUM 14 DAYS CONTINUOUSLY PREFERABLE - 28 DAYS.
8. START EARLY CURING TO AVOID SHRINKAGE CRACKS, WHEN CONCRETE APPEARS TO HARDEN.
9. PROVIDE FOLLOWING SLUMP IN CONCRETE GENERALLY.

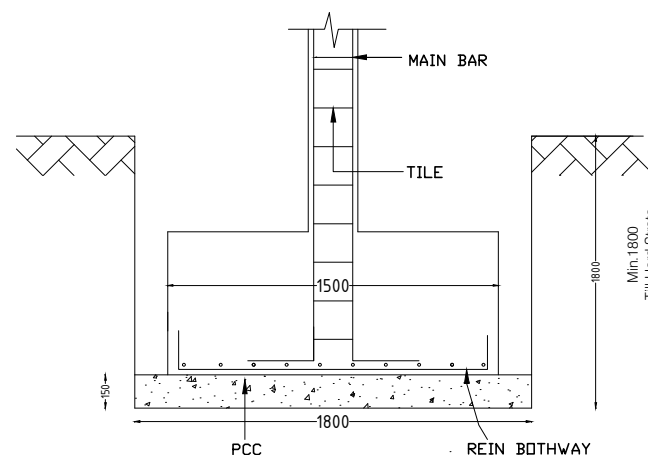
- | | |
|---|---------|
| a) SHALLOW SECTIONS, PAYMENTS, MASS CONC. LIGHT REINFORCEMENT SECTION IN SLAB, BEAM, WALL, COLUMN | 25-75 |
| b) HEAVILY REINFORCEMENT SECTION IN SLAB | 50-100 |
| c) HEAVILY REINFORCEMENT SECTION IN BEAMS, WALLS, COLUMNS SLIPFORM, OR PUMPED CONC. | 75-100 |
| d) TRENCH FILL, FILLING, PUMPED CONC. | 100-150 |
| 10) PROVIDE LAP/ DEVELOPEMENT LENGTH IN REINFORCEMENT BARS GRADE OF CONC. | |

M20- 47Ø

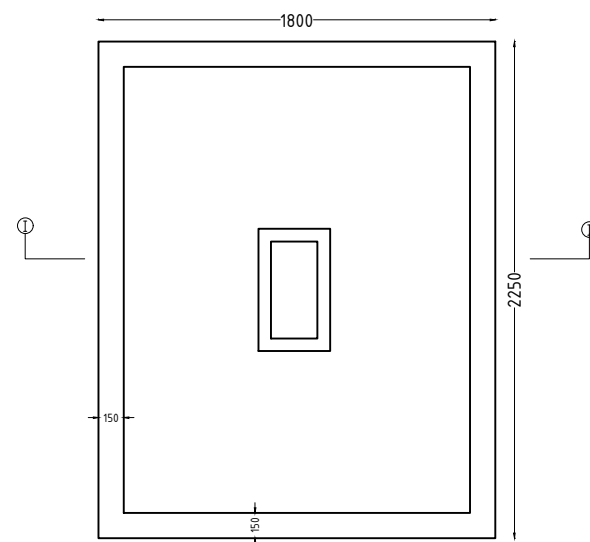
M25-41Ø

M30-38Ø

- 11) REFER RELEVANT DRG. WITH THIS DRG.
- 12) AVOID CORE CUTTING.



TYPICAL FOOTING SECTION (1-1')



TYPICAL FOOTING PLAN

FOOTING LAYOUT

FOOTING SCHEDULE

FE500 AND M20

Footings	Column	PCC Size	Footings Size	Total	Steel	Steel	Remarks
	Nos	X - Y mm	X - Y mm	Depth mm	to X mm	to Y mm	
F1	C1	1650 X 1650	1350 X 1350	400	T10@ 175C/C	T10@ 175 C/C	Bottom bars only
F2	C2	1200 X 1200	900 X 900	230	T8@200C/C	T8@ 200 C/C	Bottom bars only

DRG NO:

DP0001 DRG CL 01 101

SHEET NO:

4 OF 9

REV.

R0

SCALE:

NTS

DESIGNED:

UPENDRA SINGH

DRAWN:

SIMRAN SONI

CHECKED:

UPENDRA SINGH

VERIFIED:

ADMIN

APPROVED:

ADMIN

ISSUED FOR:

TENDOR PURPOSE

UNIT:

MILIMETER

DATE:

12.05.2022

CLIENT:

SWATI Architecture landscape interior

ARCHITECTS | PLANERS | ENGINEERING | INTERIOR DESIGN

282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com

CHHATTISGARH STATE MINOR FOREST PRODUCE

PROJECT:

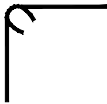
INCUBATION CENTER AT DEOBHOG GARIYABAND

TITLE:

PRIMARY PROCESSING UNIT
FOOTING LAYOUT

NOTES-

1. USE - M 20 GRADE OF CONC. AS/IS 426-5000
2. USE - FE 500 GRADE OF REINF. BY CLIENT
3. PROVIDE CLEAR COVER TO MAIN REINF.
- FOUNDATION- 50MM
- COLUMN - 40MM
- BEAM - 25MM
- SLAB - 20MM OR DIA OF BAR, WHICHEVER IS MORE,
- R.C.C. WALL - 25MM
- 4.TIES SHOULD BE BEND INSIDE WITH 10# LENGTH IN BEAM & COLUMN



- 5.FOLLOW - IS-456-2000 FOR R.C.C. WORK
- 6.STRIPPING TIME FOR SHUTTERING / FORMWORK UNDER NORMAL CONDITION.

TYPE OF WORK	MINIMUM PERIOD BEFORE STRIKING FORM WORK
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a) VERTICAL FORMWORK TO COLUMN, WALLS, BEAM 16-24 HOUR

b) SOFFITS FORMWORK TO SLABS (PROPS TO BE REFIXED- IMMEDIATELY AFTER REMOVAL OF FORMWORK) 3 DAYS

c) SOFFIT FORMWORK TO BEAMS (PROPS TO BE REFIXED IMMEDIATELY AFTER REMOVAL OF FORMWORK) 7DAYS

d) PROPS TO SLABS:
1) SPANNING UP TO 4.5M 7DAYS
2) SPANNING OVER 4.5M 14 DAYS

e) PROPS TO BEAMS & ARCHES:
1) SPANNING UP TO 6M 14DAYS
2) SPANNING OVER 6M 21DAYS

7. CURING FOR R.C.C. MEMBER MINIMUM 14 DAYS CONTINUOUSLY PREFERABLE - 28 DAYS.

8. START EARLY CURING TO AVOID SRINKAGE CRACKS, WHEN CONCRETE APPEARS TO HARDEN.

9) PROVIDE FOLLOWING SLUMP IN CONCRETE GENERALLY.

a) SHALLOW SECTIONS, PAYMENTS, MASS CONC. LIGTH REINFORCEMENT SECTION IN SLAB, BEAM, WALL, COLUMN 25-75

b) HEAVILY REINFORCEMENT SECTION IN SLAB 50-100

c) HEAVILY REINFORCEMENT SECTION IN BEAMS, WALLS, COLUMNS SLIPFORM, OR PUMPED CONC. 75-100

d) TRENCH FILL, PILLING, PUMPED CONC. 100-150

10) PROVIDE LAP/ DEVELOPEMENT LENGTH IN REINFORCEMENT BARS GRADE OF CONC.

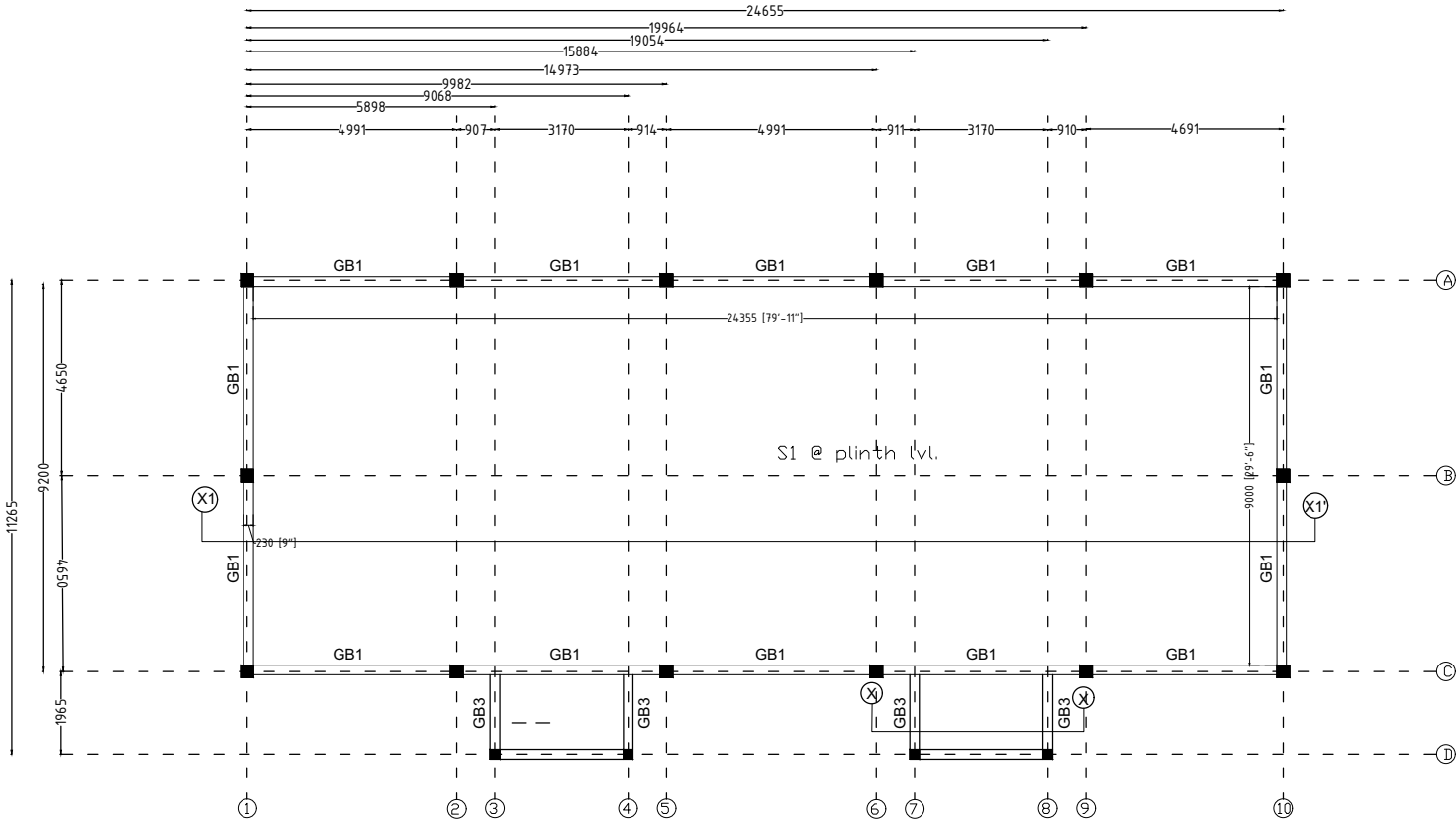
M20- 47Ø

M25-41Ø

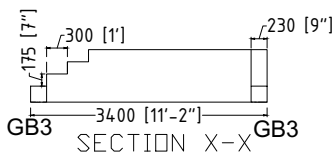
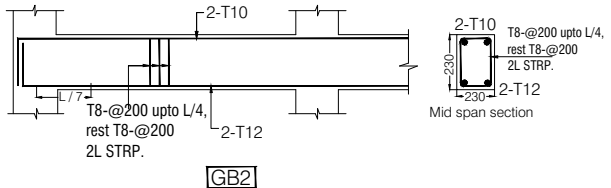
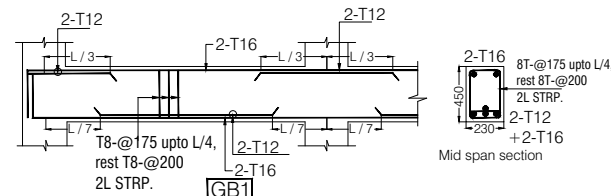
M30-38Ø

11) REFER RELEVANT DRG. WITH THIS DRG.

12) AVOID CORE CUTING.



GROUND BEAM PLAN



GROUND BEAM SECTIONAL DETAIL

BEAM SCHEDULE FOR GROUND/ PLINTH LVL.									
Beam No.	Beam Size	Top Bar	Bottom Bar	Top Bar	Bottom Bar	Top Bar	Bottom Bar	Top Bar	Bottom Bar
GB1	230X375	2-T12	2-T12	2-T16	2-T12	2-T12	T8 @200C/C	T8 @175C/C	T8 @175C/C
GB2	230X230	2-T12	-	2-T10	-	-	T8 @200C/C	T8 @200C/C	T8 @200C/C

SLAB SCHEDULE FOR GROUND FLOOR LVL.				
SLAB NAME	THICKNESS (mm)	Main Steel		remarks
		T8 @ 200 c/c	T8 @ 200 c/c	
S1	150 (MESH)	T8 @ 200 c/c	T8 @ 200 c/c	All straight

DRG NO:	SHEET NO:	REV.	SCALE:
DP0001 DRG CL 01 101	5 OF 9	R0	NTS
DESIGNED:	DRAWN:	CHECKED:	VERIFIED:
UPENDRA SINGH	SIMRAN SONI	UPENDRA SINGH	ADMIN
ISSUED FOR:	UNIT:	DATE:	
TENDOR PURPOSE	MILIMETER	12.05.2022	

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SWATI Architecture landscape interior

ARCHITECTS | PLANERS | ENGINEERING | INTERIOR DESIGN

282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com

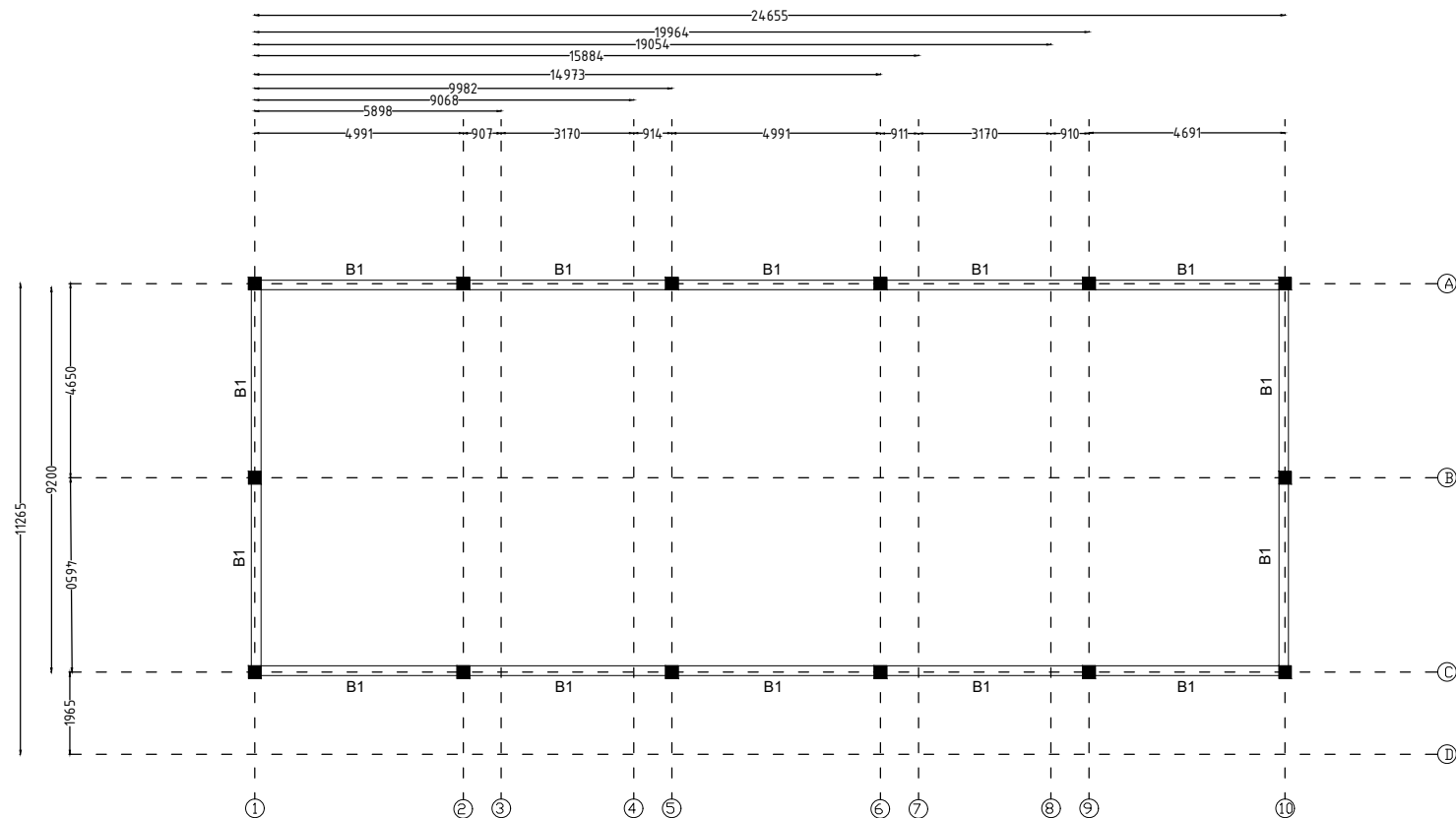
CHHATTISGARH STATE MINOR FOREST PRODUSE

INCUBATION CENTER AT DEOBHOG GARIYABAND

PRIMARY PROCESSING UNIT

BEAM LAYOUT

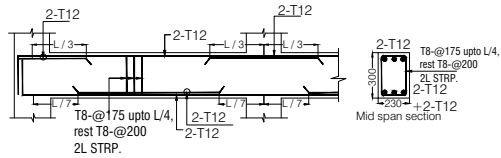
32



BEAM PLAN (2.4 M ABOVE BEAM)

BEAM SCHEDULE FOR 2.4m LVL. ABOVE PLINTH

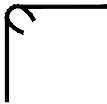
Beam	Size	Reinforcement					Stirrups			Slab Thk.
		Top	Bottom	Top	Bottom	Top	Bottom	Top	Bottom	
B1	230X300	2-T12	2-T12	2-T12	2-T12	2-T12	T8 @200C/C	T8 @175C/C	T8 @175C/C	SLAB THK. INCLUDED



GENERAL NOTES

NOTES-

- USE - M 20 GRADE OF CONC. AS/IS 426-5000
 - USE - FE 500 GRADE OF REINF. BY CLIENT
 - PROVIDE CLEAR COVER TO MAIN REINF.
- FOUNDATION- 50MM
COLUMN - 40MM
BEAM - 25MM
SLAB - 20MM OR DIA OF BAR, WHICHEVER IS MORE,
R.C.C. WALL - 25MM
- TIES SHOULD BE BEND INSIDE WITH 10# LENGTH IN BEAM & COLUMN



- FOLLOW - IS-456-2000 FOR R.C.C. WORK
- STRIPPING TIME FOR SHUTTERING / FORMWORK UNDER NORMAL CONDITION.

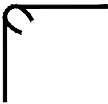
TYPE OF WORK	MINIMUM PERIOD BEFORE STRIKING FORM WORK
a) VERTICAL FORMWORK TO COLUMN, WALLS, BEAM	16-24 HOUR
b) SOFFITS FORMWORK TO SLABS (PROPS TO BE REFIXED- IMMEDIATELY AFTER REMOVAL OF FORMWORK)	3 DAYS
c) SOFFIT FORMWORK TO BEAMS (PROPS TO BE REFIXED IMMEDIATELY AFTER REMOVAL OF FORMWORK)	7DAYS
d) PROPS TO SLABS:	
1) SPANNING UP TO 4.5M	7DAYS
2) SPANNING OVER 4.5M	14 DAYS
e) PROPS TO BEAMS & ARCHES:	
1) SPANNING UP TO 6M	14DAYS
2) SPANNING OVER 6M	21DAYS

- CURING FOR R.C.C. MEMBER MINIMUM 14 DAYS CONTINOUSELY PREFERABLE - 28 DAYS.
 - START EARLY CURING TO AVOID SRINKAGE CRACKS, WHEN CONCRETE APPEARS TO HARDEN.
 - PROVIDE FOLLOWING SLUMP IN CONCRETE GENERALLY.
 - a) SHALLOW SECTIONS, PAYMENTS, MASS CONC. LIGTH REINFORCEMENT SECTION IN SLAB, BEAM, WALL, COLUMN
 - b) HEAVILY REINFORCEMENT SECTION IN SLAB
 - c) HEAVILY REINFORCEMENT SECTION IN BEAMS, WALLS, COLUMNS SLIPFORM, OR PUMPED CONC.
 - d) TRENCH FILL, PILLING, PUMPED CONC.
 - 10) PROVIDE LAP/ DEVELOPEMENT LENGTH IN REINFORCEMENT BARS GRADE OF CONC.
 - 11) REFER RELEVANT DRG. WITH THIS DRG.
 - 12) AVOID CORE CUTING.
- M20- 47Ø
M25-41Ø
M30-38Ø

DRG NO: DP0001 DRG CL 01 101					SHEET NO: 6 OF 9	REV. R0	SCALE: NTS	SWATI Architecture landscape interior ARCHITECTS PLANERS ENGINEERING INTERIOR DESIGN 282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com		
DESIGNED:		DRAWN:		CHECKED:	VERIFIED:	APPROVED:		CLIENT:		
UPENDRA SINGH		SIMRAN SONI		UPENDRA SINGH		ADMIN		ADMIN		
ISSUED FOR:					UNIT:		DATE:		PROJECT:	
TENDOR PURPOSE					MILIMETER		12.05.2022		INCUBATION CENTER AT DEOBHOG GARIYABAND	
148 This drawing is the property of HUP DESIGN and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand								TITLE:		
								PRIMARY PROCESSING UNIT BEAM LAYOUT		33

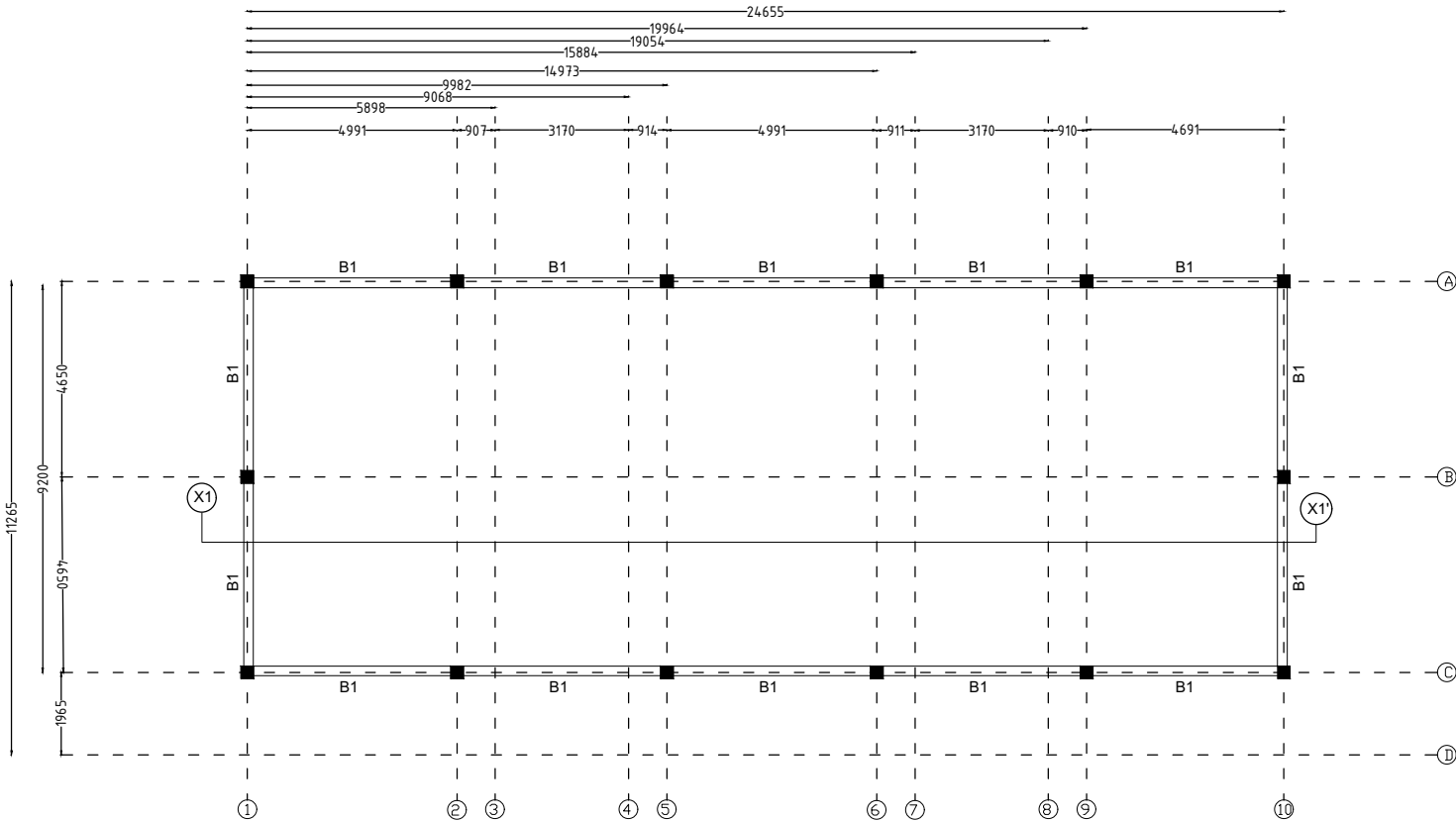
NOTES-

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3. PROVIDE CLEAR COVER TO MAIN REINF.
- FOUNDATION- 50MM
- COLUMN - 40MM
- BEAM - 25MM
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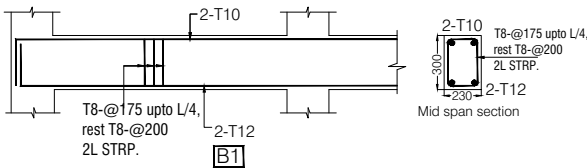


- 5.FOLLOW - IS-456-2000 FOR R.C.C. WORK
- 6.STRIPPING TIME FOR SHUTTERING / FORMWORK UNDER NORMAL CONDITION.

TYPE OF WORK	MINIMUM PERIOD BEFORE STRIKING FORM WORK
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e) PROPS TO BEAMS & ARCHES:	
1) SPANNING UP TO 6M	14DAYS
2) SPANNING OVER 6M	21DAYS
7. CURING FOR R.C.C. MEMBER MINIMUM 14 DAYS CONTINUOUSLY PREFERABLE - 28 DAYS.	
8. START EARLY CURING TO AVOID SRINKAGE CRACKS, WHEN CONCRETE APPEARS TO HARDEN.	
9) PROVIDE FOLLOWING SLUMP IN CONCRETE GENERALLY.	
a) SHALLOW SECTIONS, PAYMENTS, MASS CONC. LIGTH REINFORCEMENT SECTION IN SLAB, BEAM, WALL, COLUMN	25-75
b) HEAVILY REINFORCEMENT SECTION IN SLAB	50-100
c) HEAVILY REINFORCEMENT SECTION IN BEAMS, WALLS, COLUMNS SLIPFORM, OR PUMPED CONC.	75-100
d) TRENCH FILL, PILLING, PUMPED CONC.	100-150
10) PROVIDE LAP/ DEVELOPEMENT LENGTH IN REINFORCEMENT BARS GRADE OF CONC.	M20- 47Ø M25-41Ø M30-38Ø
11) REFER RELEVANT DRG. WITH THIS DRG.	
12) AVOID CORE CUTING.	



BEAM PLAN (4.5 M ABOVE BEAM)



BEAM SCHEDULE FOR 4.5m LVL. ABOVE PLINTH

Beam ID	Size	Top Bar	Bottom Bar	Stirrups	Other	Notes
B1	230X300	2-T12	-	2-T10	-	T8 @200C/C, T8 @175C/C, T8 @175C/C, SLAB THK. INCLUDED

DRG NO:
DP0001 DRG CL 01 101

SHEET NO:
7 OF 9

REV.
R0

SCALE:
NTS

DESIGNED:
UPENDRA SINGH

DRAWN:
SIMRAN SONI

CHECKED:
UPENDRA SINGH

VERIFIED:
ADMIN

APPROVED:
ADMIN

ISSUED FOR:
TENDOR PURPOSE

UNIT:
MILIMETER

DATE:
12.05.2022

CLIENT:
CHHATTISGARH STATE MINOR FOREST PRODUSE

PROJECT:
INCUBATION CENTER AT DEOBHOG GARIYABAND

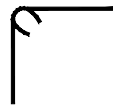
TITLE:
PRIMARY PROCESSING UNIT
BEAM LAYOUT

SWATI Architecture landscape interior
ARCHITECTS | PLANERS | ENGINEERING | INTERIOR DESIGN
282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com

34

NOTES-

1. USE - M 20 GRADE OF CONC. AS/IS 426-5000
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COLUMN - 40MM
BEAM - 25MM
SLAB - 20MM OR DIA OF BAR, WHICHEVER IS MORE,
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- 4.TIES SHOULD BE BEND INSIDE WITH 10# LENGTH IN BEAM & COLUMN



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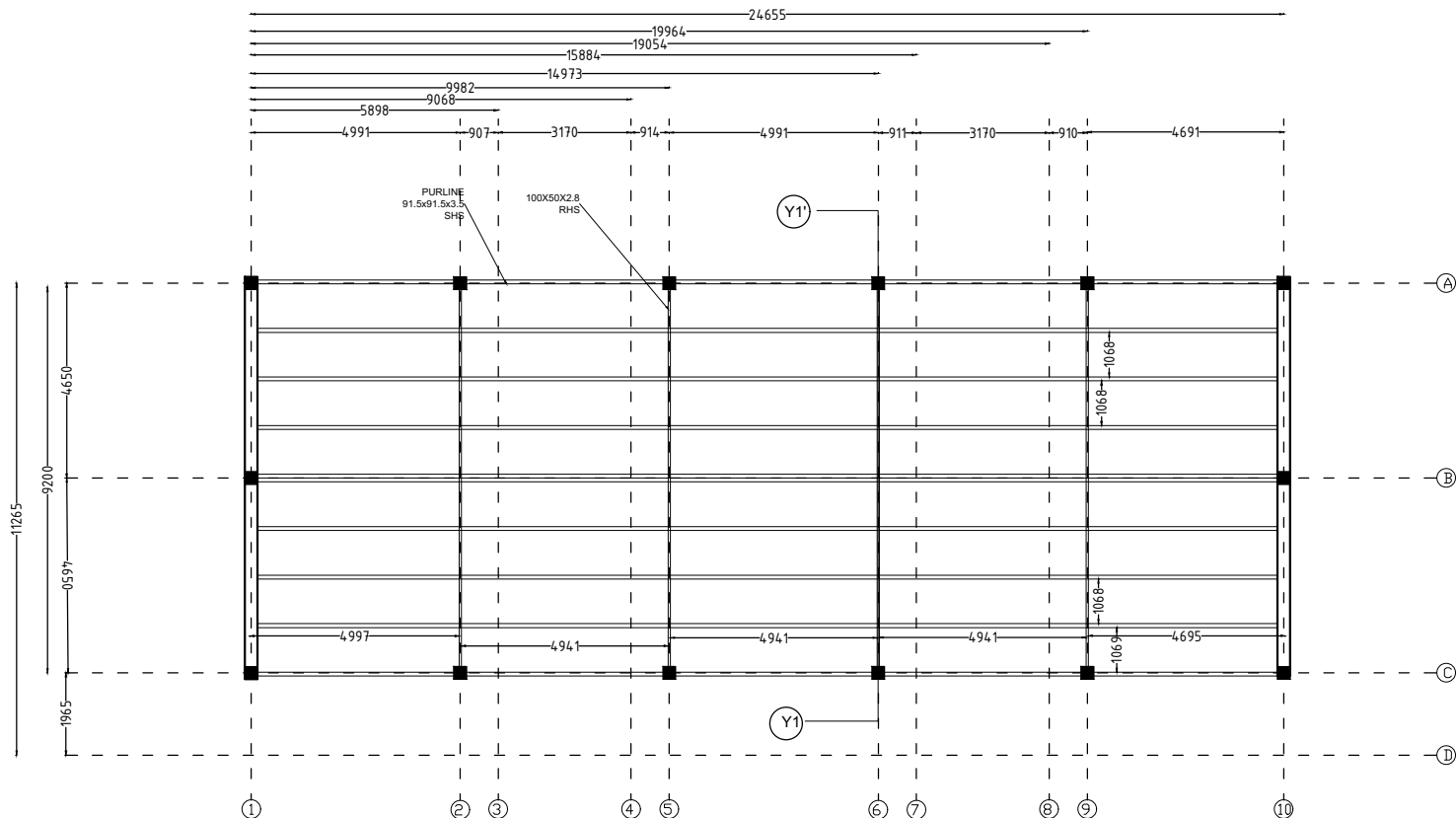
TYPE OF WORK	MINIMUM PERIOD BEFORE STRIKING FORM WORK
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- | | |
|--|------------|
| a) VERTICAL FORMWORK TO COLUMN, WALLS, BEAM | 16-24 HOUR |
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| e) PROPS TO BEAMS & ARCHES: | |
| 1) SPANNING UP TO 6M | 14DAYS |
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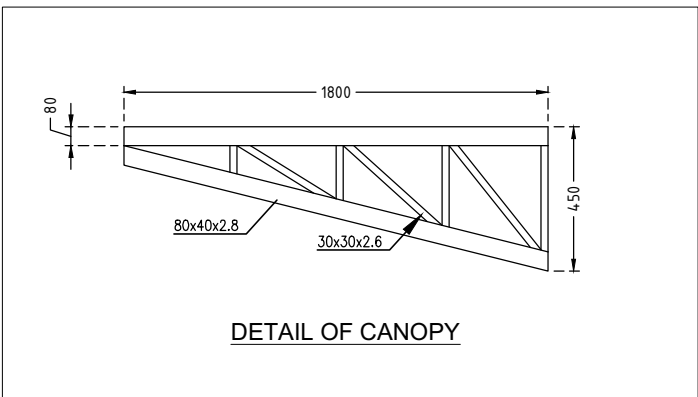
7. CURING FOR R.C.C. MEMBER MINIMUM 14 DAYS CONTINUOUSLY PREFERABLE - 28 DAYS.
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- 9) PROVIDE FOLLOWING SLUMP IN CONCRETE GENERALLY.

- | | |
|---|---------|
| a) SHALLOW SECTIONS, PAYMENTS, MASS CONC. LIGHT REINFORCEMENT SECTION IN SLAB, BEAM, WALL, COLUMN | 25-75 |
| b) HEAVILY REINFORCEMENT SECTION IN SLAB | 50-100 |
| c) HEAVILY REINFORCEMENT SECTION IN BEAMS, WALLS, COLUMNS SLIPFORM, OR PUMPED CONC. | 75-100 |
| d) TRENCH FILL, PILLING, PUMPED CONC. | 100-150 |

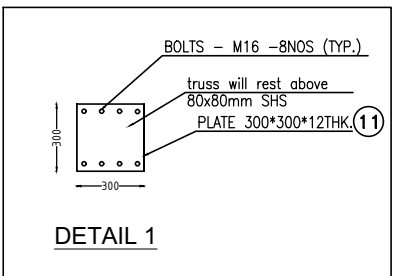
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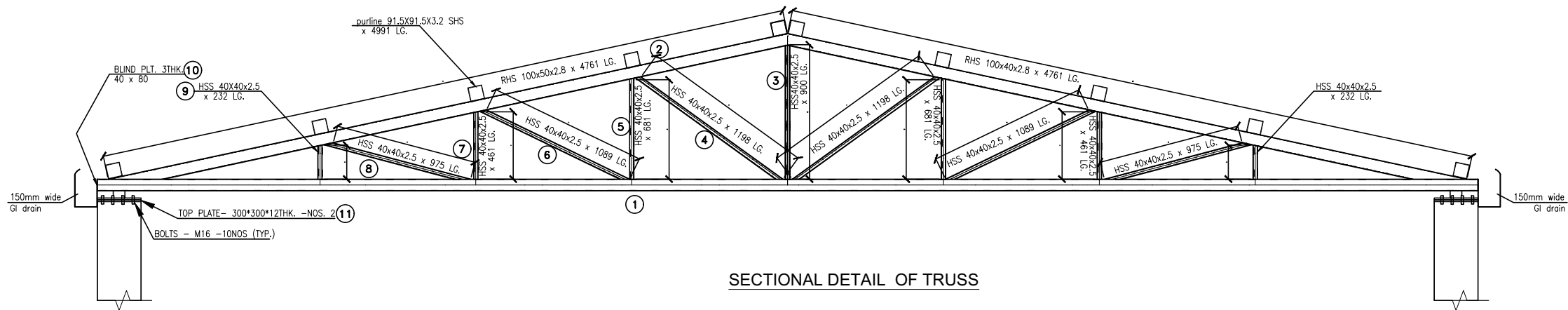
ROOF TRUSS PLAN



DETAIL OF CANOPY

















DETAIL 1



SECTIONAL DETAIL OF TRUSS

DRG NO: DP0001 DRG CL 01 101	SHEET NO: 8 OF 9	REV. R0	SCALE: NTS	SWATI Architecture landscape interior ARCHITECTS PLANERS ENGINEERING INTERIOR DESIGN 282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com	
DESIGNED: UPENDRA SINGH	DRAWN: SIMRAN SONI	CHECKED: UPENDRA SINGH	VERIFIED: ADMIN	APPROVED: ADMIN	CLIENT: CHHATTISGARH STATE MINOR FOREST PRODUCE
ISSUED FOR: TENDOR PURPOSE		UNIT: MILIMETER	DATE: 12.05.2022	PROJECT: INCUBATION CENTER AT DEOBHOG GARIYABAND	
This drawing is the property of HUP DESIGN and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand				TITLE: PRIMARY PROCESSING UNIT TRUSS DETAIL	35

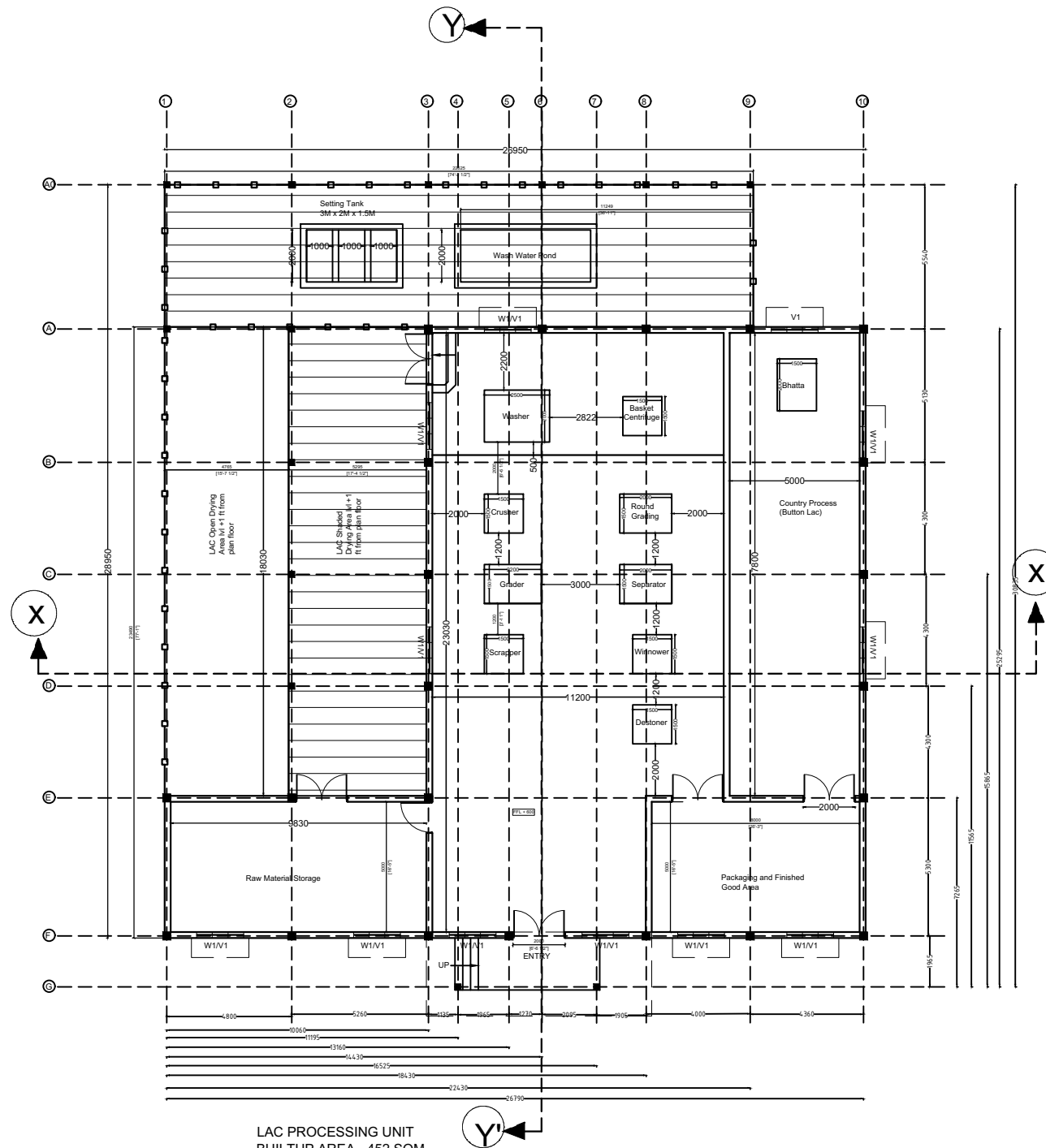


01	LED 50W 	50W FLOOD LIGHT (HIGH BAY)	12 No.
02		WALL LIGHT	02
03	 PP-1	16A SWITCH SOCKET	No. 04
04	 LP-1	6A SWITCH SOCKET	No. 04
05	4WAY SPN DB 	4WAY SPN DB	No. 08
06		PLDB 1 12 WAY VTPN DB	No. 01
07		1400 mm Ceiling Fan	08
08	 Led 20w	20w Led Tube Light	No. 14
09	 Ex Fan	450 mm Ex Fan	05
10	 LP-1	6A SWITCH SOCKET	No. 08
11	 SB1	SWITCH BOARD	No. 08
12		6 X 6 SQMM CU WIRE	No.
13		3 X 1.5 SQMM CU WIRE	
14		Earth Pit-1 Size=450 X 450 MM.	2 SET



MACHINE LIST			
1 - CLEANER CUM GRADER , NOS 1	6 HP	6 X 6 Sqmm CU wire	
2 - DESTONER (2 TONNER / HR) FIVE FANS	5 HP	6 X 6 Sqmm CU wire	
3 - COLOR SHORTER , NOS 1	5 HP	6 X 6 Sqmm CU wire	
4 - BAGFILLING AND PACKAGING MACHINE , 2 NOS	2 HP	6 X 6 Sqmm CU wire	
5 - ELEVATOR (NOS4) HEIGHT MAX 20 FT2, HRDS	1 HP	6 X 6 Sqmm CU wire	
6 - HOLDING BIN (CAPACITY 1 TON) , NOS 3	1 HP	6 X 6 Sqmm CU wire	
TOTAL LOAD	3P MCCB (17 KW) 22 HP	1R 4C 16 Sqmm Ar. CU	Cable
	100A (40 AMP)		

DRG NO: SHEET NO: REV. SCALE:					SWATI Architecture landscape interior ARCHITECTS PLANERS ENGINEERING INTERIOR DESIGN 282, tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com	
DP0001 DRG CL 01 101 9 OF 9 R0 NTS					CLIENT: CHHATTISGARH STATE MINOR FOREST PRODUCE	
DESIGNED: DRAWN: CHECKED: VERIFIED: APPROVED: UPENDRA SINGH SIMRAN SONI UPENDRA SINGH ADMIN ADMIN					PROJECT: INCUBATION CENTER AT DEOBHOG GARIYABAND	
ISSUED FOR: TENDOR PURPOSE UNIT: DATE: MILIMETER 12.05.2022					TITLE: PRIMARY PROCESSING UNIT ELECTRICAL LAYOUT	
151 This drawing is the property of HUP DESIGN and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand					36	



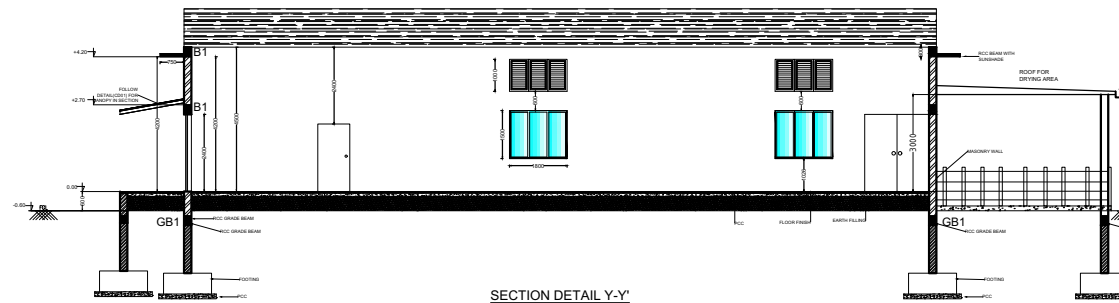
LAC PROCESSING UNIT
BUILTUP AREA - 452 SQM
OPEN DRYING AREA - 90 SQM
SHADED DRYING AREA - 90 SQM
FILTRATION TANK - 15 SQM

- LIST OF DRAWING
LAC PROCESSING UNIT
DP0001 DRG CL 01 107
- 1 - PLAN LAYOUT
 - 2 - SECTION / ELEVATION
 - 3 - COLUMN LAYOUT
 - 4 - FOOTING LAYOUT
 - 5 - GROUND BEAM LAYOUT
 - 6 - BEAM LAYOUT (2.5 M ABOVE)
 - 7 - BEAM LAYOUT (4.5 M ABOVE)
 - 8 - TRUSS DETAIL
 - 9 - ELECTRICAL LAYOUT

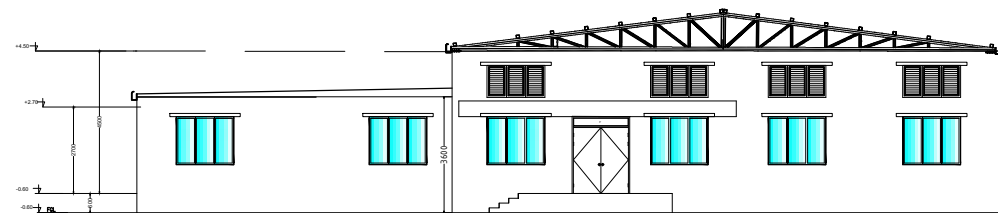
OPENING SCHEDULE			
NAME	SAYMBOL		
WINDOW	- W1		
VENTILATOR	- V1		
ROLLING SHUTTER	- R1		
DOOR	- D1		

SN	SAYMBOL	NOS	SIZE
01	W1	10	1.8M X 1.5M
02	V1	10	1.8 M X 1.1 M
03	D1	01	1 M X 2.1 M
04	D2	05	2M X 2.1 M

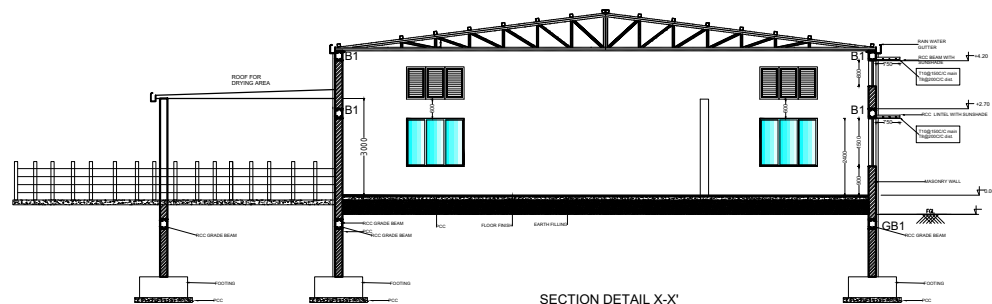
DRG NO: DP0001 DRG CL 01 107		SHEET NO: 1 OF 9	REV. R0	SCALE: NTS	<div>SWATI Architecture landscape interior</div> <div>ARCHITECTS PLANERS ENGINEERING INTERIOR DESIGN</div> <div>282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com</div>	
DESIGNED:	DRAWN:	CHECKED:	VERIFIED:	APPROVED:		CLIENT: CHHATTISGARH STATE MINOR FOREST PRODUCE
UPENDRA SINGH	SIMRAN SONI	UPENDRA SINGH	ADMIN	ADMIN		
ISSUED FOR: TENDOR PURPOSE			UNIT: MILIMETER	DATE: 12.05.2022		PROJECT: INCUBATION CENTER AT DEOBHOG GARIYABAND
This drawing is the property of HUP DESIGN and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand					TITLE: LAC PROCESSING UNIT BEAM LAYOUT	



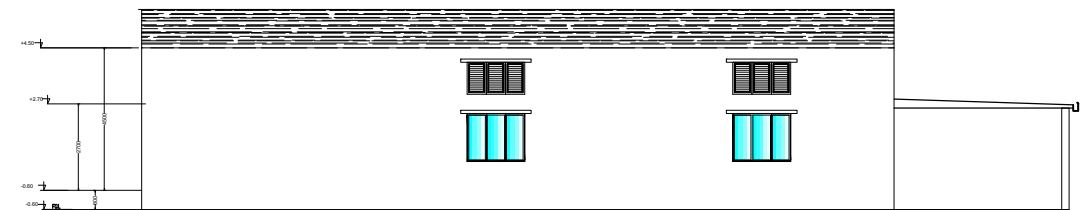
SECTION DETAIL Y-Y'



FRONT ELEVATION

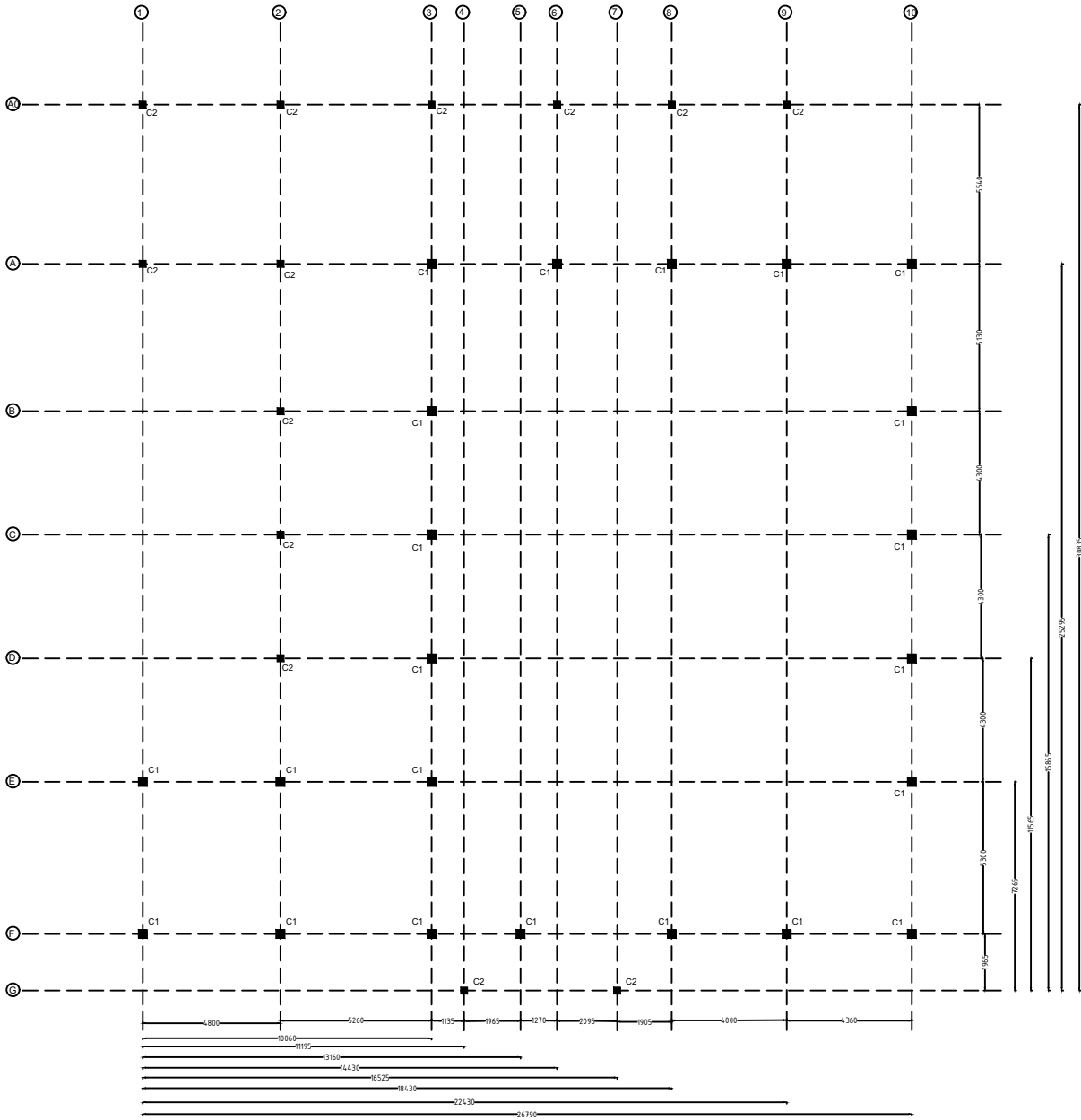


SECTION DETAIL X-X'

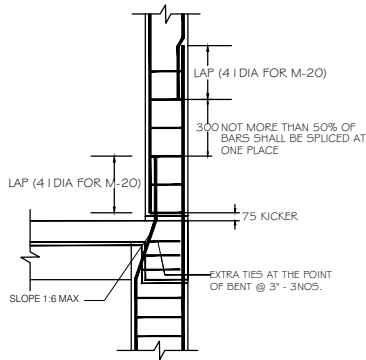


SIDE ELEVATION

<div>DRG NO:DP0001 DRG CL 01 107</div> <div>SHEET NO:2 OF 9</div> <div>REV.R0</div> <div>SCALE:NTS</div>					<div>SWATI Architecture landscape interior</div> <div>ARCHITECTS PLANERS ENGINEERING INTERIOR DESIGN</div> <div>282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com</div>	
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<div>ISSUED FOR:TENDOR PURPOSE</div> <div>UNIT:MILIMETER</div> <div>DATE:12.05.2022</div>					<div>PROJECT:INCUBATION CENTER AT DEOBHOG GARIYABAND</div>	
<div>153</div> <div>This drawing is the property of HUP DESIGN and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand</div>					<div>TITLE:SECTION / ELEVATION BEAM LAYOUT</div> <div>38</div>	



COLUMN LAYOUT



COLUMN DETAIL

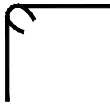
TYPICAL COLUMN DETAIL'S

COLUMN NAME	Pile/col detail		STIRRUPS	REMARKS
C1		8-T12 T8@ 200 c/c 2-Tie		FOUNDATION TO TERRACE
C2		4-T12 T8@ 200 c/c 1-Tie		TERMINATE AT GROUND LVL

GENERAL NOTES

NOTES-

1. USE - M 20 GRADE OF CONC. AS/IS 426-5000
 2. USE - FE 500 GRADE OF REINF. BY CLIENT
 3. PROVIDE CLEAR COVER TO MAIN REINF.
- FOUNDATION- 50MM
COLUMN - 40MM
BEAM - 25MM
SLAB - 20MM OR DIA OF BAR, WHICHEVER IS MORE,
R.C.C. WALL - 25MM
- 4.TIES SHOULD BE BEND INSIDE WITH 10# LENGTH IN BEAM & COLUMN



- 5.FOLLOW - IS-456-2000 FOR R.C.C. WORK
- 6.STRIPPING TIME FOR SHUTTERING / FORMWORK UNDER NORMAL CONDITION.

TYPE OF WORK	MINIMUM PERIOD BEFORE STRIKING FORM WORK
--------------	--

- a) VERTICAL FORMWORK TO COLUMN, WALLS, BEAM 16-24 HOUR
- b) SOFFITS FORMWORK TO SLABS (PROPS TO BE REFIXED- IMMEDIATELY AFTER REMOVAL OF FORMWORK) 3 DAYS
- c) SOFFIT FORMWORK TO BEAMS (PROPS TO BE REFIXED IMMEDIATELY AFTER REMOVAL OF FORMWORK) 7DAYS
- d) PROPS TO SLABS:
 - 1) SPANNING UP TO 4.5M 7DAYS
 - 2) SPANNING OVER 4.5M 14 DAYS
- e) PROPS TO BEAMS & ARCHES:
 - 1) SPANNING UP TO 6M 14DAYS
 - 2) SPANNING OVER 6M 21DAYS

7. CURING FOR R.C.C. MEMBER MINIMUM 14 DAYS CONTINUOUSLY PREFERABLE - 28 DAYS.
8. START EARLY CURING TO AVOID SRINKAGE CRACKS, WHEN CONCRETE APPEARS TO HARDEN.
- 9) PROVIDE FOLLOWING SLUMP IN CONCRETE GENERALLY.

- a) SHALLOW SECTIONS, PAYMENTS, MASS CONC. LIGTH REINFORCEMENT SECTION IN SLAB, BEAM, WALL, COLUMN 25-75
- b) HEAVILY REINFORCEMENT SECTION IN SLAB 50-100
- c) HEAVILY REINFORCEMENT SECTION IN BEAMS, WALLS, COLUMNS SLIPFORM, OR PUMPED CONC. 75-100
- d) TRENCH FILL, PILLING, PUMPED CONC. 100-150
- 10) PROVIDE LAP/ DEVELOPEMENT LENGTH IN REINFORCEMENT BARS GRADE OF CONC.

M20- 47Ø
M25-41Ø
M30-38Ø

- 11) REFER RELEVANT DRG. WITH THIS DRG.
- 12) AVOID CORE CUTING.

DRG NO:	SHEET NO:	REV.	SCALE:
DP0001 DRG CL 01 107	3 OF 9	R0	NTS
DESIGNED:	DRAWN:	CHECKED:	VERIFIED:
UPENDRA SINGH	SIMRAN SONI	UPENDRA SINGH	ADMIN
ISSUED FOR:	UNIT:	DATE:	
TENDOR PURPOSE	MILIMETER	12.05.2022	

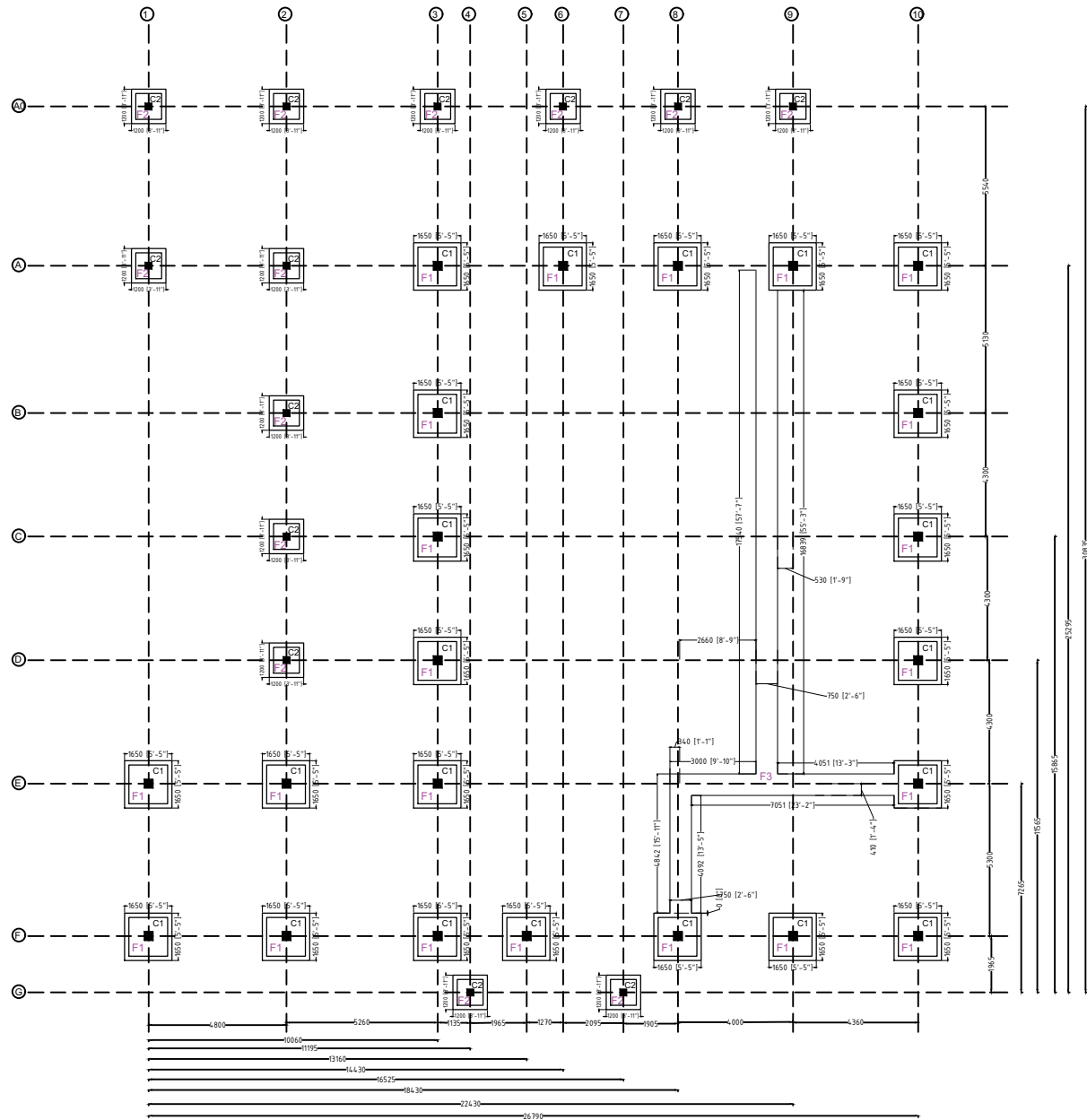
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SWATI Architecture landscape interior
ARCHITECTS | PLANERS | ENGINEERING | INTERIOR DESIGN
282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com

CHHATTISGARH STATE MINOR FOREST PRODUCE

INCUBATION CENTER AT DEOBHOG GARIYABAND

LAC PROCESSING UNIT
COLUMN LAYOUT

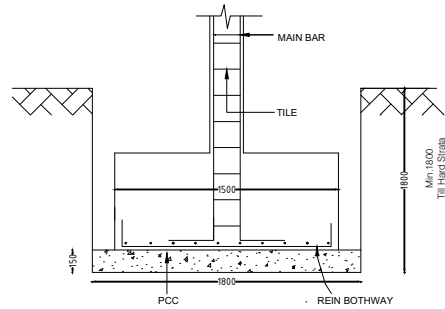


FOOTING LAYOUT

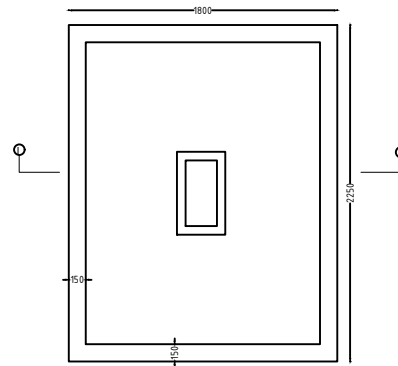
FOOTING SCHEDULE

FE500 AND M20

Footings	Column	PCC Size	Footings Size	Total	Steel	Steel	Remarks
	Nos	X - Y mm	X - Y mm	Depth mm	to X mm	to Y mm	
F1	C1	1650 X 1650	1350 X 1350	400	T10@ 175C/C	T10@ 175 C/C	Bottom bars only
F2	C2	1200 X 1200	900 X 900	230	T8@200C/C	T8@ 200 C/C	Bottom bars only



TYPICAL FOOTING SECTION (1'-1')



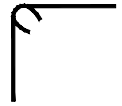
TYPICAL FOOTING PLAN

GENERAL NOTES

NOTES-

1. USE - M 20 GRADE OF CONC. AS/IS 426-5000
2. USE - FE 500 GRADE OF REINF. BY CLIENT
3. PROVIDE CLEAR COVER TO MAIN REINF.

FOUNDATION- 50MM
COLUMN - 40MM
BEAM - 25MM
SLAB - 20MM OR DIA OF BAR, WHICHEVER IS MORE,
R.C.C. WALL - 25MM
4.TIES SHOULD BE BEND INSIDE WITH 10# LENGTH
IN BEAM & COLUMN



- 5.FOLLOW - IS-456-2000 FOR R.C.C. WORK
- 6.STRIPPING TIME FOR SHUTTERING / FORMWORK
UNDER NORMAL CONDITION.

TYPE OF WORK	MINIMUM PERIOD BEFORE STRIKING FORM WORK
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- a) VERTICAL FORMWORK TO
COLUMN, WALLS, BEAM 16-24 HOUR
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SLABS (PROPS TO BE REFIXED-
- IMMEDIATELY AFTER REMOVAL
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- c) SOFFIT FORMWORK TO BEAMS
(PROPS TO BE REFIXED IMMEDIATELY
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7. CURING FOR R.C.C. MEMBER MINIMUM 14 DAYS
CONTINUOUSLY PREFERABLE - 28 DAYS.
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CRACKS, WHEN CONCRETE APPEARS TO HARDEN.
- 9) PROVIDE FOLLOWING SLUMP IN CONCRETE GEN-
-ERALLY.

- a) SHALLOW SECTIONS, PAYMENTS,
MASS CONC. LIGTH REINFORCEMENT
SECTION IN SLAB, BEAM, WALL, COLUMN 25-75
- b) HEAVILY REINFORCEMENT SECTION IN
SLAB 50-100
- c) HEAVILY REINFORCEMENT SECTION IN
BEAMS, WALLS, COLUMNS SLIPFORM, OR
PUMPED CONC. 75-100
- d) TRENCH FILL, PILLING, PUMPED CONC.
100-150
- 10) PROVIDE LAP/ DEVELOPEMENT LENGTH
IN REINFORCEMENT BARS GRADE OF CONC.

- 11) REFER RELEVANT DRG. WITH THIS DRG.
- 12) AVOID CORE CUTING.

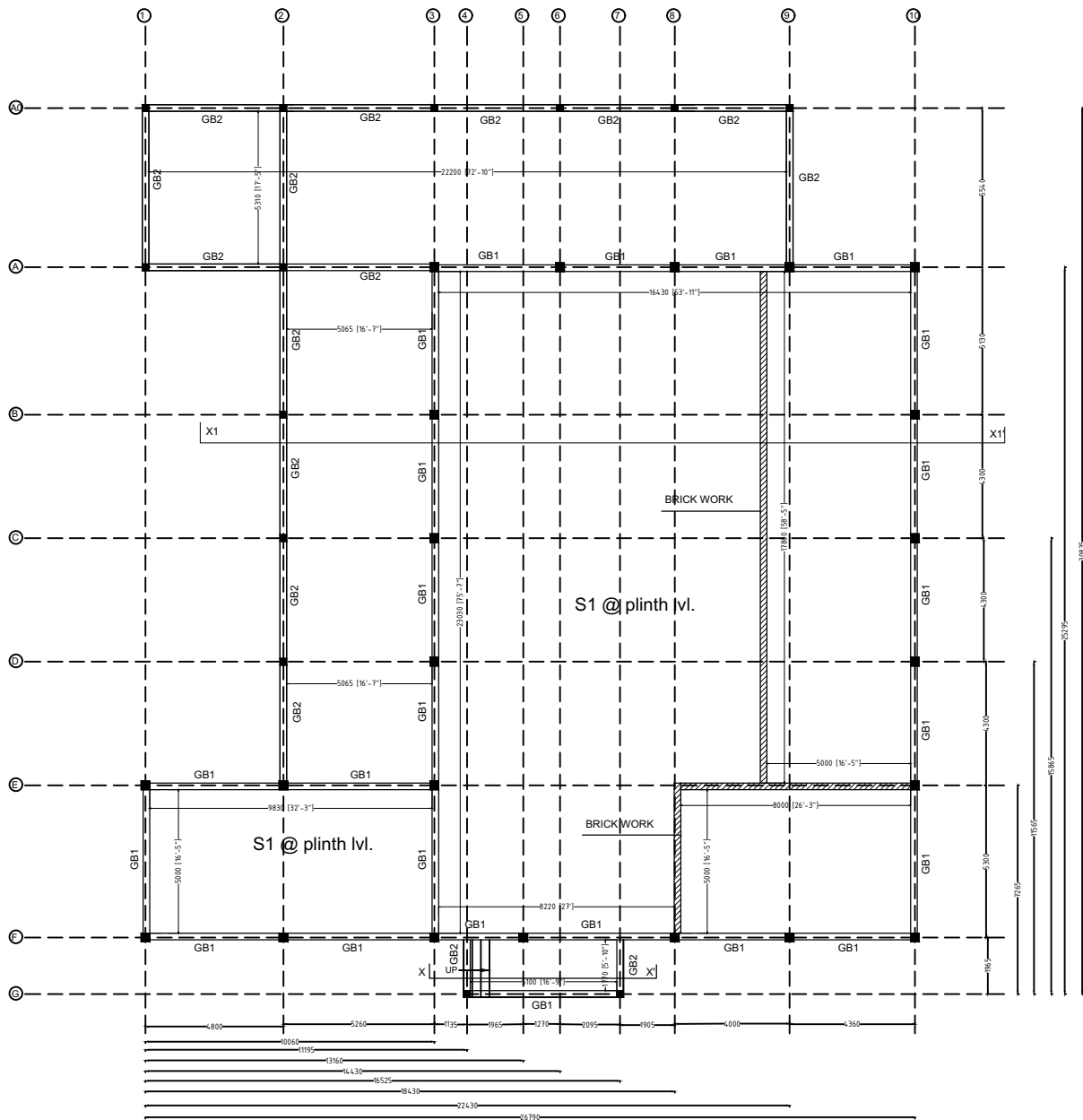
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UPENDRA SINGH	SIMRAN SONI	UPENDRA SINGH	ADMIN
ISSUED FOR:	TENDOR PURPOSE	UNIT:	DATE:
		MILIMETER	12.05.2022

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ARCHITECTS | PLANERS | ENGINEERING | INTERIOR DESIGN
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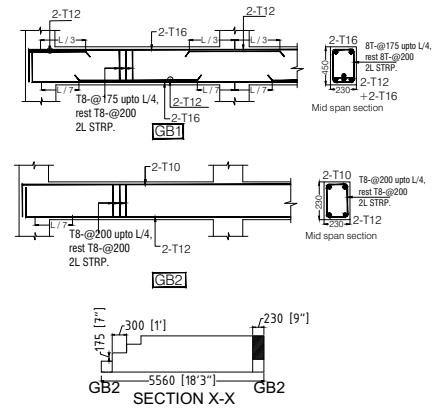
CHHATTISGARH STATE MINOR FOREST PRODUCE

INCUBATION CENTER AT DEOBHOG GARIYABAND

LAC PROCESSING UNIT
FOOTING LAYOUT



GROUND BEAM PLAN



GROUND BEAM SECTIONAL DETAIL

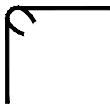
BEAM SCHEDULE FOR GROUND/ PLINTH LVL.									
		2-T16	2-T12	2-T16	2-T12	2-T12	T8 @200C/C	T8 @175C/C	T8 @175C/C
GB1	230X375								SLAB THK INCLUDED
GB2	230X230	2-T12	-	2-T10	-	-	T8 @200C/C	T8 @200C/C	SLAB THK INCLUDED

SLAB SCHEDULE FOR GROUND FLOOR LVL.				
SLAB NAME	THICKNESS (mm)	Main Steel	Other Steel	remarks
S1	150 (MESH)	T8 @ 200 c/c	T8 @ 200 c/c	All straight

GENERAL NOTES

NOTES-

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COLUMN - 40MM
BEAM - 25MM
SLAB - 20MM OR DIA OF BAR, WHICHEVER IS MORE,
R.C.C. WALL - 25MM
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- SHALLOW SECTIONS, PAYMENTS, MASS CONC. LIGHT REINFORCEMENT SECTION IN SLAB, BEAM, WALL, COLUMN 25-75
 - HEAVILY REINFORCEMENT SECTION IN SLAB 50-100
 - HEAVILY REINFORCEMENT SECTION IN BEAMS, WALLS, COLUMNS SLIPFORM, OR PUMPED CONC. 75-100
 - TRENCH FILL, PILLING, PUMPED CONC. 100-150
- PROVIDE LAP/ DEVELOPEMENT LENGTH IN REINFORCEMENT BARS GRADE OF CONC.

- M20- 47Ø
M25-41Ø
M30-38Ø
- REFER RELEVANT DRG. WITH THIS DRG.
 - AVOID CORE CUTING.

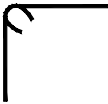
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CHHATTISGARH STATE MINOR FOREST PRODUCE	
INCUBATION CENTER AT DEOBHOG GARIYABAND	
TITLE: LAC PROCESSING UNIT BEAM LAYOUT	

GENERAL NOTES

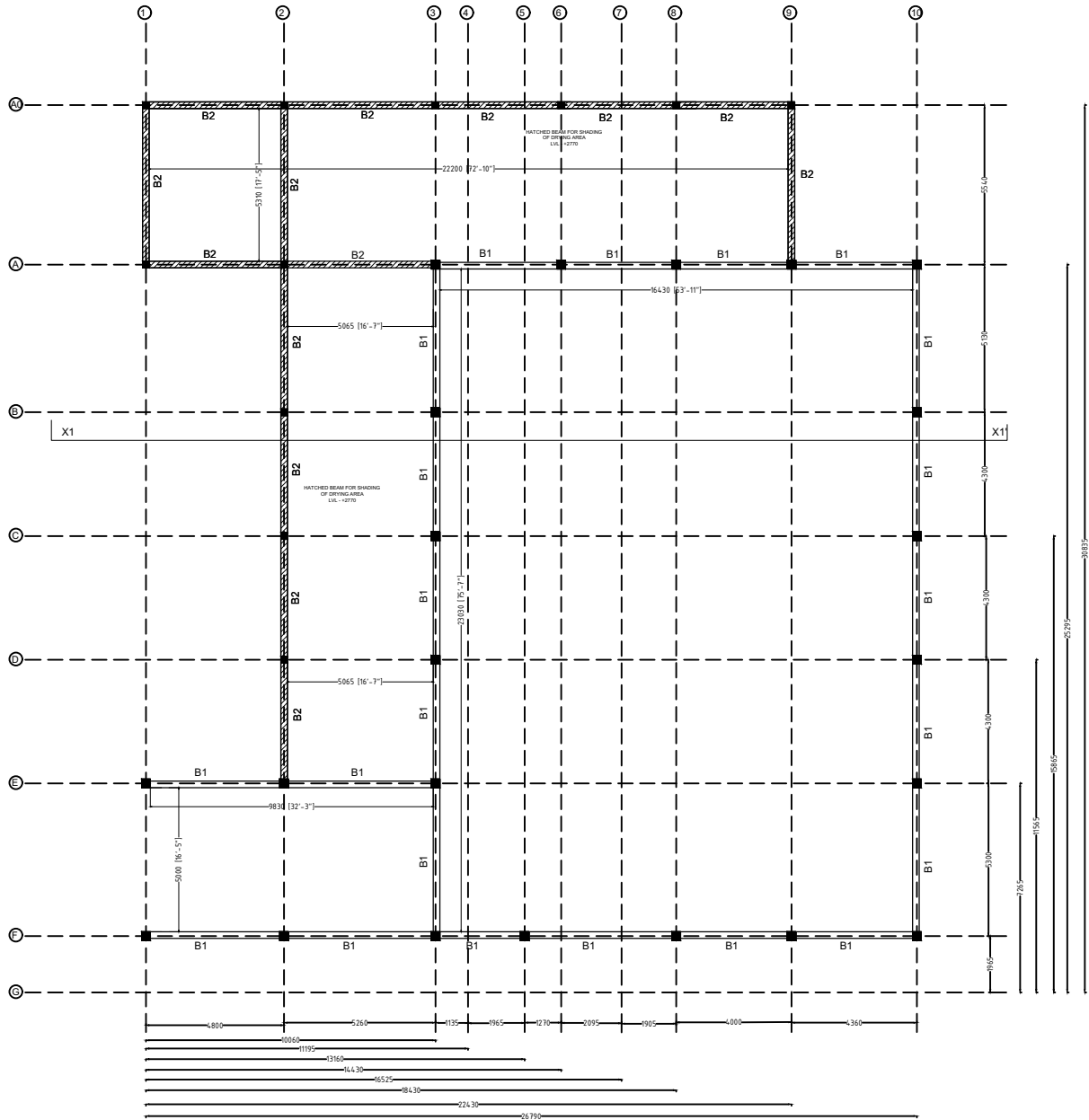
NOTES-

1. USE - M 20 GRADE OF CONC. AS/IS 426-5000
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- FOUNDATION- 50MM
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- 5.FOLLOW - IS-456-2000 FOR R.C.C. WORK
6.STRIPPING TIME FOR SHUTTERING / FORMWORK
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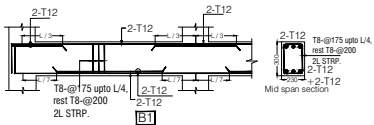
TYPE OF WORK	MINIMUM PERIOD BEFORE STRIKING FORM WORK
a) VERTICAL FORMWORK TO COLUMN, WALLS, BEAM	16-24 HOUR
b) SOFFITS FORMWORK TO SLABS (PROPS TO BE REFIXED- - IMMEDIATELY AFTER REMOVAL OF FORMWORK)	3 DAYS
c) SOFFIT FORMWORK TO BEAMS (PROPS TO BE REFIXED IMMEDIATELY AFTER REMOVAL OF FORMWORK)	7DAYS
d) PROPS TO SLABS:	
1) SPANNING UP TO 4.5M	7DAYS
2) SPANNING OVER 4.5M	14 DAYS
e) PROPS TO BEAMS & ARCHES:	
1) SPANNING UP TO 6M	14DAYS
2) SPANNING OVER 6M	21DAYS
7. CURING FOR R.C.C. MEMBER MINIMUM 14 DAYS CONTINUOUSLY PREFERABLE - 28 DAYS.	
8. START EARLY CURING TO AVOID SRINKAGE CRACKS, WHEN CONCRETE APPEARS TO HARDEN.	
9) PROVIDE FOLLOWING SLUMP IN CONCRETE GEN- -ERALLY.	
a) SHALLOW SECTIONS, PAYMENTS, MASS CONC. LIGTH REINFORCEMENT SECTION IN SLAB, BEAM, WALL, COLUMN	25-75
b) HEAVILY REINFORCEMENT SECTION IN SLAB	50-100
c) HEAVILY REINFORCEMENT SECTION IN BEAMS, WALLS, COLUMNS SLIPFORM, OR PUMPED CONC.	75-100
d) TRENCH FILL, PILLING, PUMPED CONC.	100-150
10) PROVIDE LAP/ DEVELOPEMENT LENGTH IN REINFORCEMENT BARS GRADE OF CONC.	
	M20- 47Ø
	M25-41Ø
	M30-38Ø
11) REFER RELEVANT DRG. WITH THIS DRG.	
12) AVOID CORE CUTING.	



BEAM PLAN(2.4 m ABOVE PLINTH LVL)

BEAM SCHEDULE FOR 2.4m LVL. ABOVE PLINTH

Beam ID	Width	Height	Top Reinforcement	Bottom Reinforcement	Stirrups	Other
B1	230X300	2-T12	2-T12	2-T12	2-T12	2-T12
B2	230X300	2-T12	2-T12	2-T12	2-T12	2-T12



DRG NO:	SHEET NO:	REV.	SCALE:
DP0001 DRG CL 01 107	6 OF 9	R0	NTS
DESIGNED:	DRAWN:	CHECKED:	VERIFIED:
UPENDRA SINGH	SIMRAN SONI	UPENDRA SINGH	ADMIN
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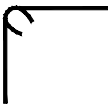
CLIENT:	CHHATTISGARH STATE MINOR FOREST PRODUSE
PROJECT:	INCUBATION CENTER AT DEOBHOG GARIYABAND
TITLE:	LAC PROCESSING UNIT BEAM LAYOUT

SWATI Architecture landscape interior
ARCHITECTS | PLANERS | ENGINEERING | INTERIOR DESIGN
282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.archi@outlook.com

GENERAL NOTES

NOTES-

- USE - M 20 GRADE OF CONC. AS/IS 426-5000
 - USE - FE 500 GRADE OF REINF. BY CLIENT
 - PROVIDE CLEAR COVER TO MAIN REINF.
- FOUNDATION- 50MM
COLUMN - 40MM
BEAM - 25MM
SLAB - 20MM OR DIA OF BAR, WHICHEVER IS MORE,
R.C.C. WALL - 25MM
- TIES SHOULD BE BEND INSIDE WITH 10# LENGTH IN BEAM & COLUMN



- FOLLOW - IS-456-2000 FOR R.C.C. WORK
- STRIPPING TIME FOR SHUTTERING / FORMWORK UNDER NORMAL CONDITION.

TYPE OF WORK	MINIMUM PERIOD BEFORE STRIKING FORM WORK
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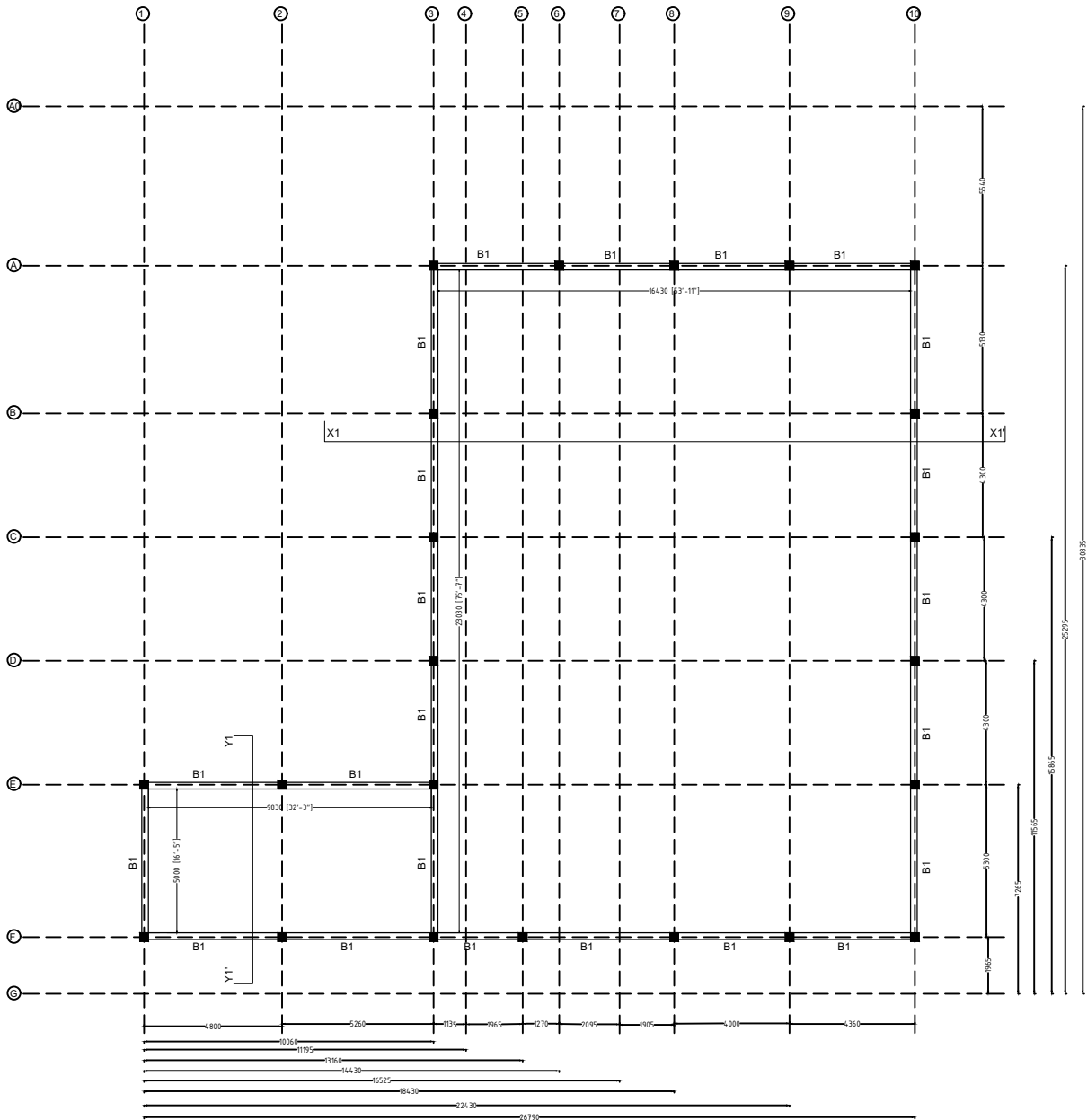
- VERTICAL FORMWORK TO COLUMN, WALLS, BEAM 16-24 HOUR
- SOFFITS FORMWORK TO SLABS (PROPS TO BE REFIXED- IMMEDIATELY AFTER REMOVAL OF FORMWORK) 3 DAYS
- SOFFIT FORMWORK TO BEAMS (PROPS TO BE REFIXED IMMEDIATELY AFTER REMOVAL OF FORMWORK) 7DAYS
- PROPS TO SLABS:
 - 1) SPANNING UP TO 4.5M 7DAYS
 - 2) SPANNING OVER 4.5M 14 DAYS
- PROPS TO BEAMS & ARCHES:
 - 1) SPANNING UP TO 6M 14DAYS
 - 2) SPANNING OVER 6M 21DAYS

- CURING FOR R.C.C. MEMBER MINIMUM 14 DAYS CONTINUOUSLY PREFERABLE - 28 DAYS.
- START EARLY CURING TO AVOID SRINKAGE CRACKS, WHEN CONCRETE APPEARS TO HARDEN.
- PROVIDE FOLLOWING SLUMP IN CONCRETE GENERALLY.

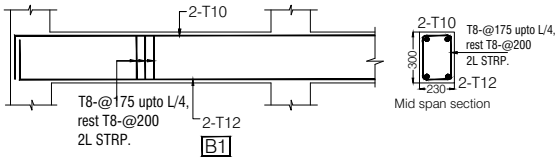
- SHALLOW SECTIONS, PAYMENTS, MASS CONC. LIGTH REINFORCEMENT SECTION IN SLAB, BEAM, WALL, COLUMN 25-75
- HEAVILY REINFORCEMENT SECTION IN SLAB 50-100
- HEAVILY REINFORCEMENT SECTION IN BEAMS, WALLS, COLUMNS SLIPFORM, OR PUMPED CONC. 75-100
- TRENCH FILL, PILLING, PUMPED CONC. 100-150
- PROVIDE LAP/ DEVELOPEMENT LENGTH IN REINFORCEMENT BARS GRADE OF CONC.

M20- 47Ø
M25-41Ø
M30-38Ø

- REFER RELEVANT DRG. WITH THIS DRG.
- AVOID CORE CUTING.



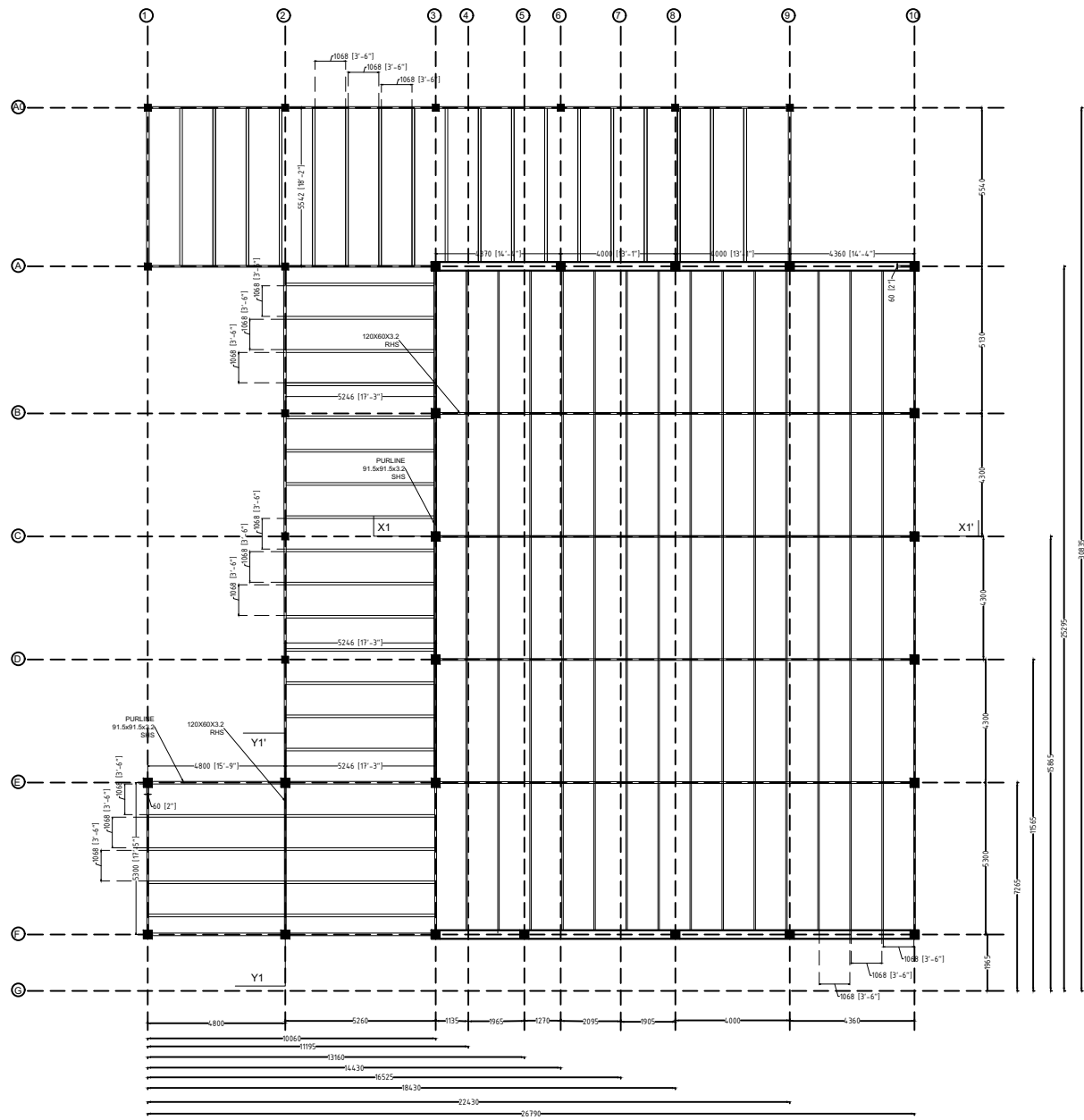
BEAM PLAN (4.5 ABOVE PLINTH LVL)



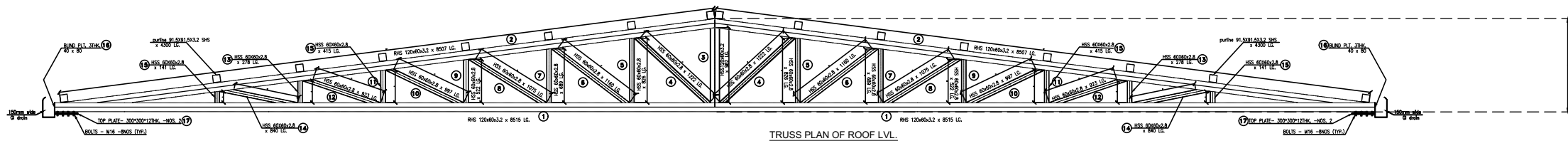
BEAM SCHEDULE FOR 4.5m LVL. ABOVE PLINTH

Beam ID	Size	Reinforcement	Notes
B1	230X300	2-T12, 2-T10	T8 @200C/C, T8 @175C/C, T8 @175C/C, SLAB THK. INCLUDED

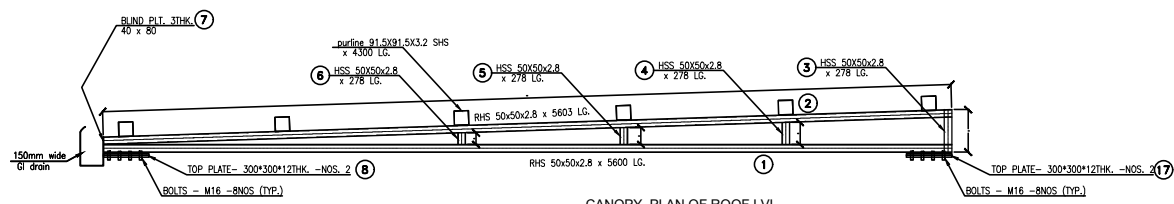
DRG NO: DP0001 DRG CL 01 107	SHEET NO: 7 OF 9	REV. R0	SCALE: NTS	SWATI Architecture landscape interior ARCHITECTS I PLANERS I ENGINEERING I INTERIOR DESIGN 282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com
DESIGNED: UPENDRA SINGH	DRAWN: SIMRAN SONI	CHECKED: UPENDRA SINGH	VERIFIED: ADMIN	APPROVED: ADMIN
ISSUED FOR: TENDOR PURPOSE	UNIT: MILIMETER	DATE: 12.05.2022	PROJECT: INCUBATION CENTER AT DEOBHOG GARIYABAND	TITLE: LAC PROCESSING UNIT BEAM LAYOUT



PURLIN PLAN OF ROOF LVL.



TRUSS PLAN OF ROOF LVL.

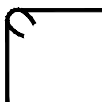


CANOPY PLAN OF ROOF LVL.

GENERAL NOTES

NOTES-

1. USE - M 20 GRADE OF CONC. AS/IS 426-5000
 2. USE - FE 500 GRADE OF REINF. BY CLIENT
 3. PROVIDE CLEAR COVER TO MAIN REINF.
- FOUNDATION- 50MM
COLUMN - 40MM
BEAM - 25MM
SLAB - 20MM OR DIA OF BAR, WHICHEVER IS MORE,
R.C.C. WALL - 25MM
4. TIES SHOULD BE BEND INSIDE WITH 10# LENGTH IN BEAM & COLUMN



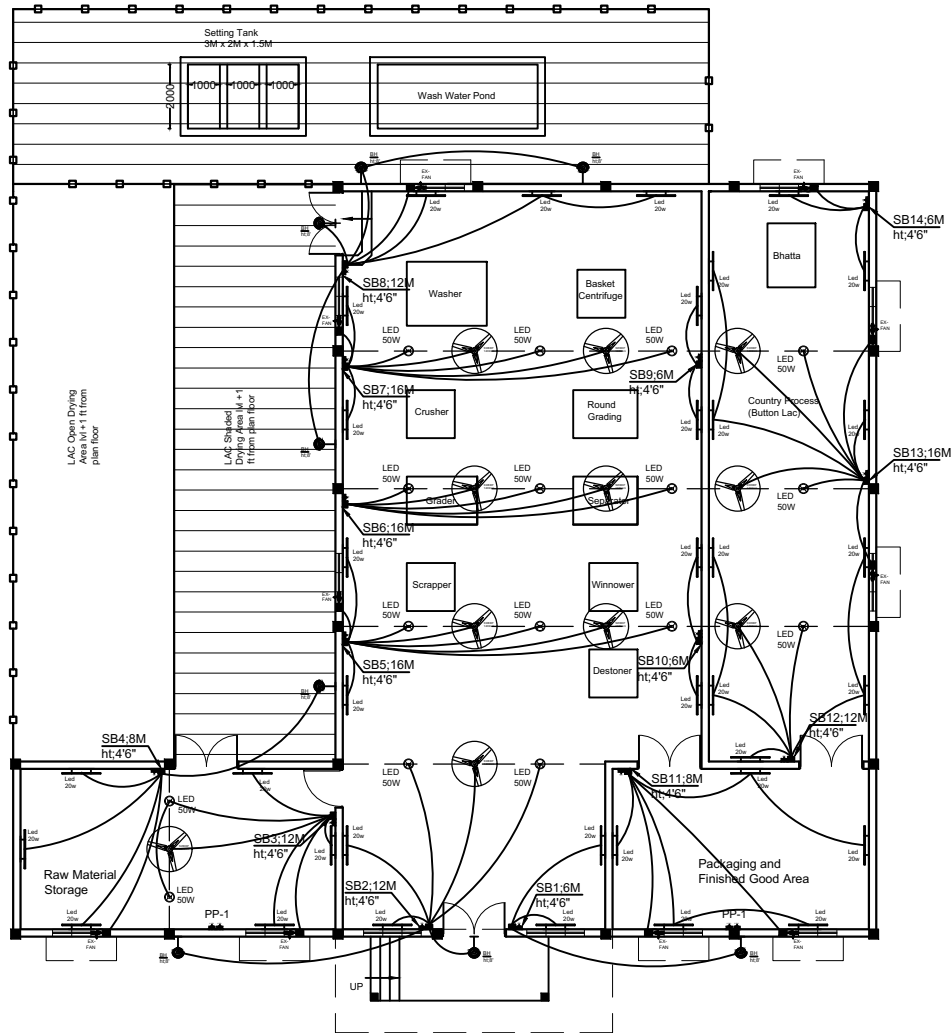
5. FOLLOW - IS-456-2000 FOR R.C.C. WORK
6. STRIPPING TIME FOR SHUTTERING / FORMWORK UNDER NORMAL CONDITION.

TYPE OF WORK	MINIMUM PERIOD BEFORE STRIKING FORM WORK
a) VERTICAL FORMWORK TO COLUMN, WALLS, BEAM	16-24 HOUR
b) SOFFITS FORMWORK TO SLABS (PROPS TO BE REFIXED- IMMEDIATELY AFTER REMOVAL OF FORMWORK)	3 DAYS
c) SOFFIT FORMWORK TO BEAMS (PROPS TO BE REFIXED IMMEDIATELY AFTER REMOVAL OF FORMWORK)	7DAYS
d) PROPS TO SLABS:	
1) SPANNING UP TO 4.5M	7DAYS
2) SPANNING OVER 4.5M	14 DAYS
e) PROPS TO BEAMS & ARCHES:	
1) SPANNING UP TO 6M	14DAYS
2) SPANNING OVER 6M	21DAYS

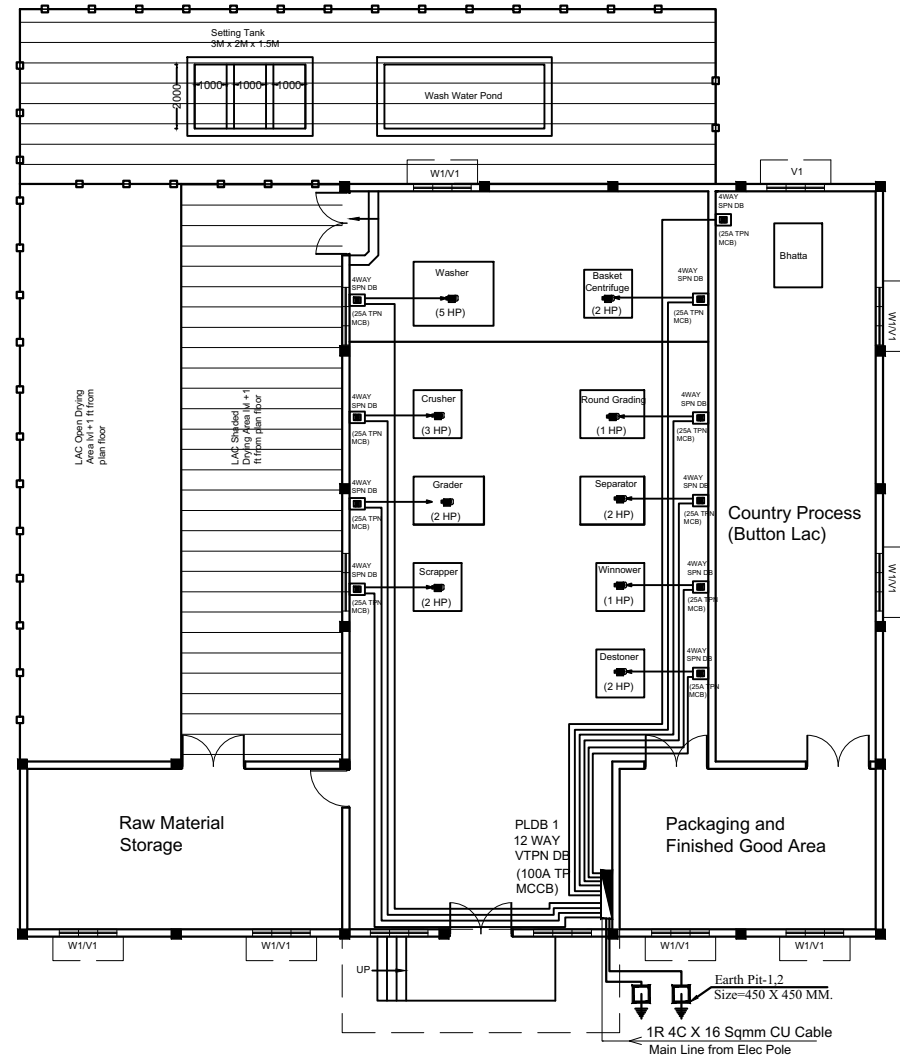
7. CURING FOR R.C.C. MEMBER MINIMUM 14 DAYS CONTINUOUSLY PREFERABLE - 28 DAYS.
 8. START EARLY CURING TO AVOID SHRINKAGE CRACKS, WHEN CONCRETE APPEARS TO HARDEN.
 - 9) PROVIDE FOLLOWING SLUMP IN CONCRETE GENERALLY.
- | | |
|---|---------|
| a) SHALLOW SECTIONS, PAYMENTS, MASS CONC. LIGHT REINFORCEMENT SECTION IN SLAB, BEAM, WALL, COLUMN | 25-75 |
| b) HEAVILY REINFORCEMENT SECTION IN SLAB | 50-100 |
| c) HEAVILY REINFORCEMENT SECTION IN BEAMS, WALLS, COLUMNS SLIPFORM, OR PUMPED CONC. | 75-100 |
| d) TRENCH FILL, PILLING, PUMPED CONC. | 100-150 |
- 10) PROVIDE LAP/ DEVELOPEMENT LENGTH IN REINFORCEMENT BARS GRADE OF CONC.
- M20- 47Ø
M25-41Ø
M30-38Ø
- 11) REFER RELEVANT DRG. WITH THIS DRG.
 - 12) AVOID CORE CUTTING.

DRG NO:	SHEET NO:	REV.	SCALE:
DP0001 DRG CL 01 107	8 OF 9	R0	NTS
DESIGNED:	DRAWN:	CHECKED:	VERIFIED:
UPENDRA SINGH	SIMRAN SONI	UPENDRA SINGH	ADMIN
ISSUED FOR:	UNIT:	DATE:	
TENDOR PURPOSE	MILIMETER	12.05.2022	

SWATI Architecture landscape interior ARCHITECTS PLANERS ENGINEERING INTERIOR DESIGN 282 , tulip , A Block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com	
CLIENT:	CHHATTISGARH STATE MINOR FOREST PRODUSE
PROJECT:	INCUBATION CENTER AT DEOBHOG GARIYABAND
TITLE:	LAC PROCESSING UNIT TRUSS LAYOUT



ELECTRICAL LAYOUT

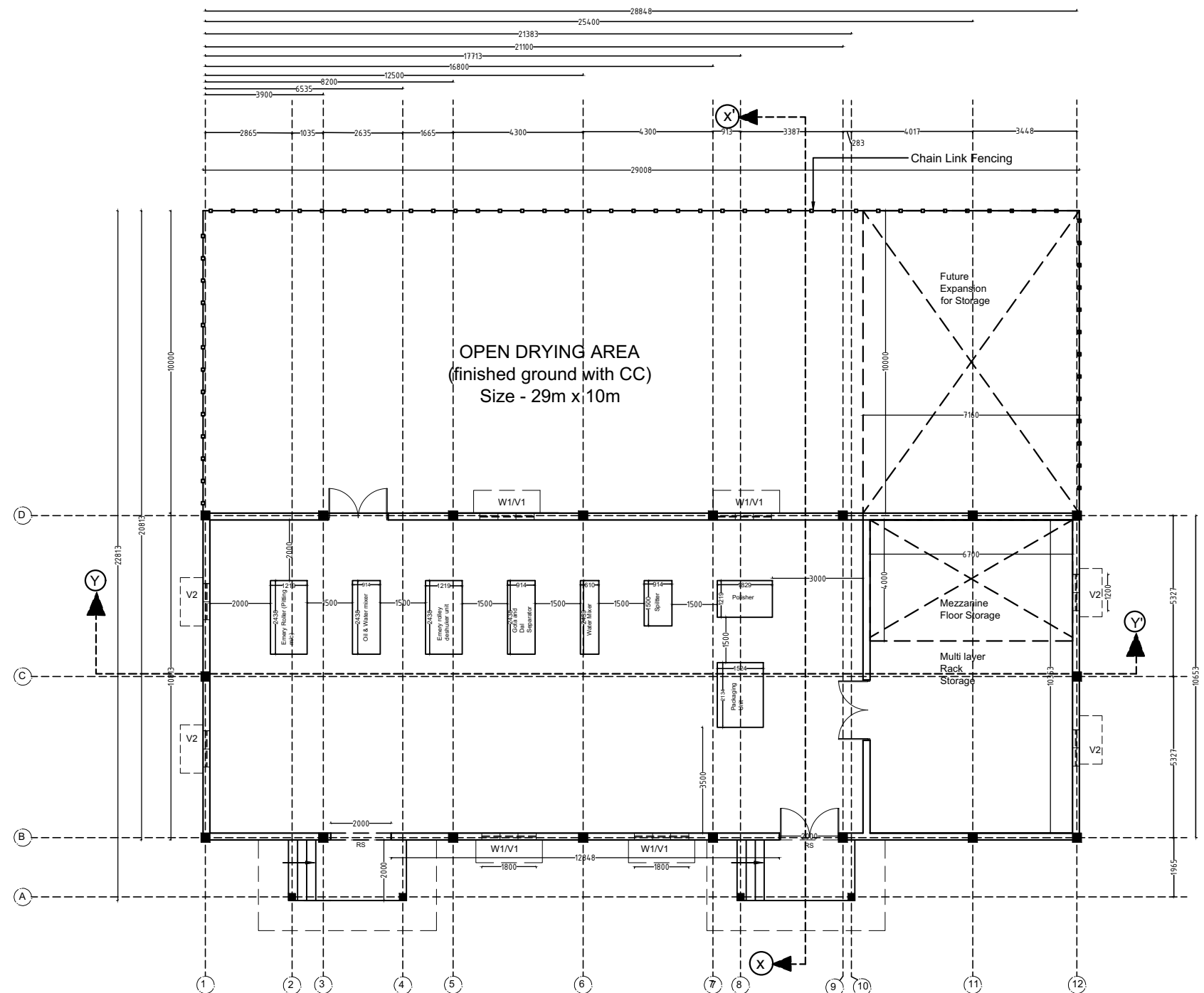


LAC PROCESSING UNIT

MACHINE LIST					
1 - SCRAPPER - 100kg/hr- nos 1	2 HP	01	2 HP	6 X 6 Sqmm CU wire	
2 - GRADING MACHINE - 100kg/hr - nos 1	2 HP	01	2 HP	6 X 6 Sqmm CU wire	
3 - CRUSHER - 100kg/ HR - nos 1	3 HP	01	3 HP	6 X 6 Sqmm CU wire	
4 - WASHER - 100kg/hr - nos1	5 HP	01	5 HP	6 X 6 Sqmm CU wire	
5 - BASKET CENTRIFUGE -50 KG / BATCH - nos 1	2 HP	01	2 HP	6 X 6 Sqmm CU wire	
6 - ROUND GRADING MACHINE -100 KG / HR nos 1	1 HP	01	1 HP	6 X 6 Sqmm CU wire	
7 - WINNOWER - 100KG / HR - nos 1	1 HP	01	1 HP	6 X 6 Sqmm CU wire	
8 - DESTONER - 100KG / HR - NOS 1	2 HP	01	2 HP	6 X 6 Sqmm CU wire	
9 - SEPARATOR - 100 KG / HR - NOS 1	2 HP	01	2 HP	6 X 6 Sqmm CU wire	
TOTAL LOAD	3P MCCB 100A	(15 KW)	(40 AMP)	20 HP	1R 4C 16 Sqmm Ar. CU Cable

01	LED 50W	50W FLOOD LIGHT (HIGH BAY)	16 No.
02	WALL LIGHT		08 No.
03	PP-1	16A SWITCH SOCKET	04 No.
04	LP-1	6A SWITCH SOCKET	02 No.
05	4WAY SPN DB	4WAY SPN DB	09 No.
06	PLDB 1 12 WAY VTPN DB		01 No.
07	1400 mm Ceiling Fan		04 No.
08	20w Led Tube Light		36 No.
09	450 mm Ex Fan		10 No.
10	LP-1	6A SWITCH SOCKET	14 No.
11	SB1	SWITCH BOARD	14 No.
12	6 X 6 SQMM CU WIRE		
13	3 X 1.5 SQMM CU WIRE		
14	Earth Pit-1 Size=450 X 450 MM.		2 SET

DRG NO: SHEET NO: REV. SCALE:					<div>SWATI Architecture landscape interior</div> <div>ARCHITECTS PLANERS ENGINEERING INTERIOR DESIGN</div> <div>282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com</div>				
DP0001 DRG CL 01 107 9 OF 9 R0 NTS									
DESIGNED:		DRAWN:		CHECKED:	VERIFIED:	APPROVED:	CLIENT:	CHHATTISGARH STATE MINOR FOREST PRODUCE	
UPENDRA SINGH		SIMRAN SONI		UPENDRA SINGH	ADMIN	ADMIN			
ISSUED FOR:					UNIT:	DATE:	PROJECT:	INCUBATION CENTER AT DEOBHOG GARIYABAND	
TENDOR PURPOSE					MILIMETER	12.05.2022			
<div>This drawing is the property of HUP DESIGN and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand</div>							TITLE:	LAC PROCESSING UNIT	45
							ELECTRICAL LAYOUT		



- LIST OF DRAWING**
PULSE MILLING UNIT
DP0001 DRG CL 01 106
- 1 - PLAN LAYOUT
 - 2 - SECTION / ELEVATION
 - 3 - COLUMN LAYOUT
 - 4 - FOOTING LAYOUT
 - 5 - GROUND BEAM LAYOUT
 - 6 - BEAM LAYOUT (2.5 M ABOVE)
 - 7 - BEAM LAYOUT (4.5 M ABOVE)
 - 8 - TRUSS DETAIL
 - 9 - ELECTRICAL LAYOUT

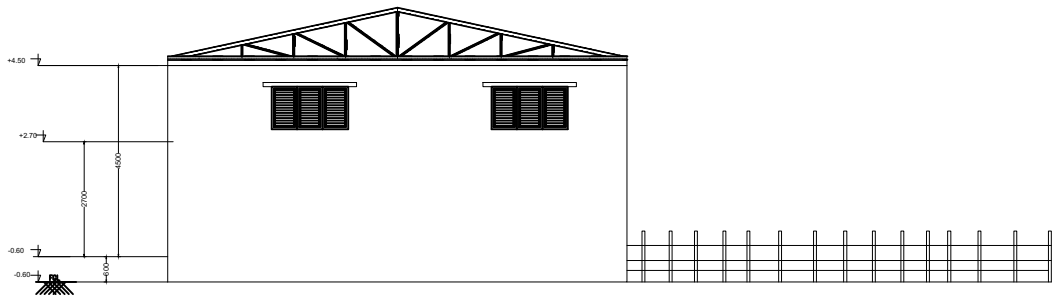
OPENING SCHEDULE

NAME	SAYMBOL
WINDOW	- W1
VENTILATOR	- V1
ROLLING SHUTTER	- R1
DOOR	- D1

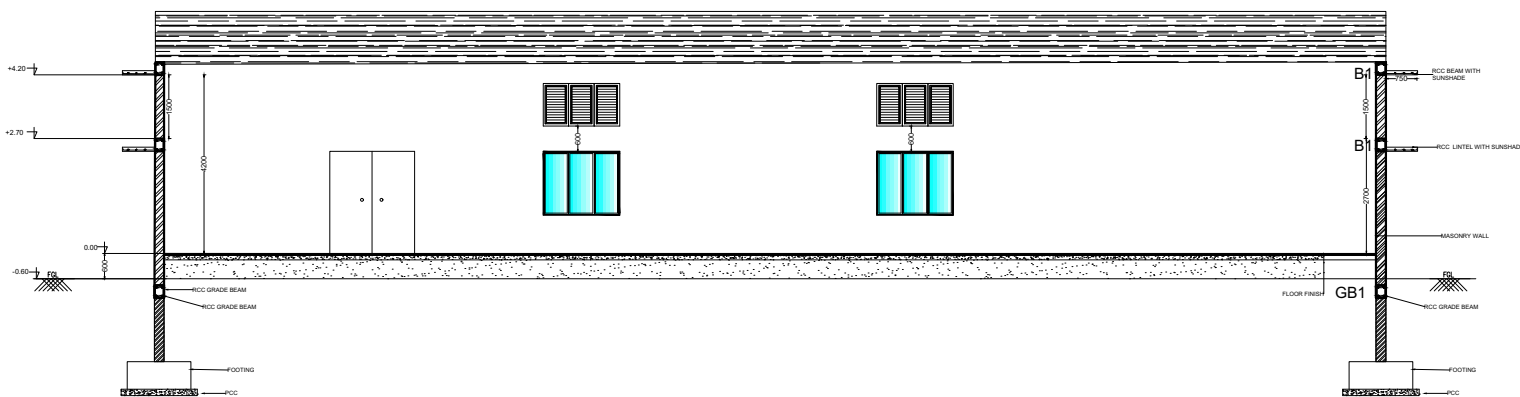
SN	SAYMBOL	NOS	SIZE
01	W1	04	1.8M X 1.5M
02	V1	08	1.8 M X 1 M
03	D2	03	2M X 2.1 M
04	R1	01	2.5M X 2.4 M

PULSE MILLING UNIT
BUILTUP AREA - 314 SQM
DRYING PLATFORM AREA - 290 SQM

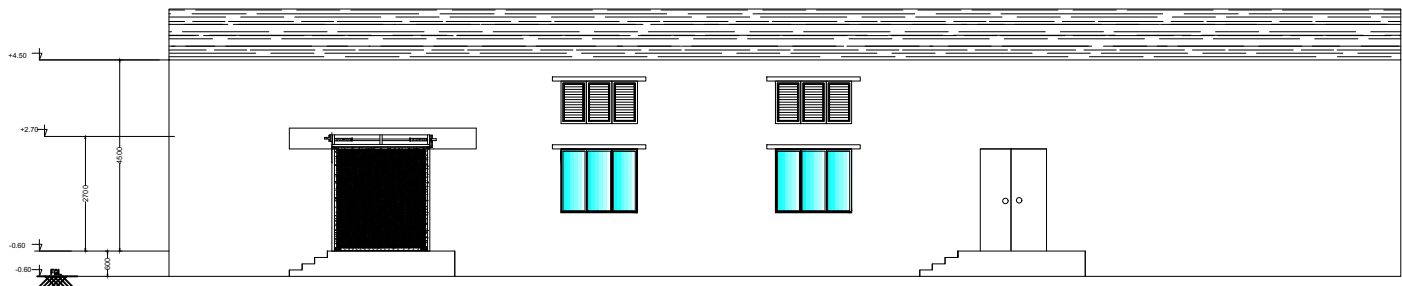
DRG NO: DP0001 DRG CL 01 106	SHEET NO: 1 OF 9	REV. R0	SCALE: NTS	SWATI Architecture landscape interior ARCHITECTS PLANERS ENGINEERING INTERIOR DESIGN 282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com
DESIGNED: UPENDRA SINGH	DRAWN: SIMRAN SONI	CHECKED: UPENDRA SINGH	VERIFIED: ADMIN	APPROVED: ADMIN
ISSUED FOR: TENDOR PURPOSE	UNIT: MILIMETER	DATE: 12.05.2022	CLIENT: CHHATTISGARH STATE MINOR FOREST PRODUCE	PROJECT: INCUBATION CENTER AT DEOBHOG GARIYABAND
TITLE: PULSE MILLING UNIT PLAN LAYOUT				46



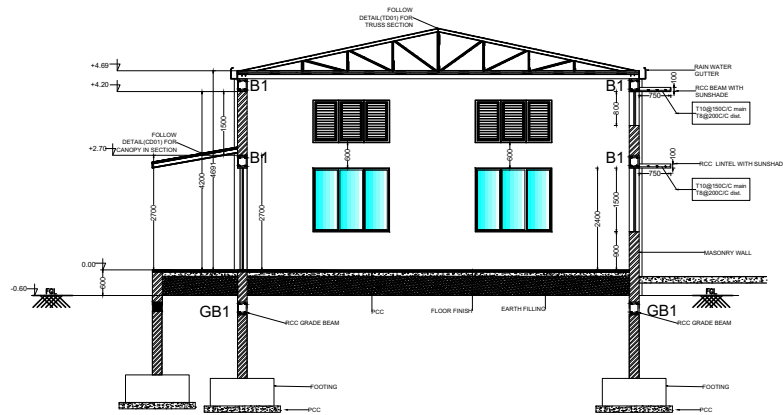
SIDE ELEVATION



SECTION Y-Y'

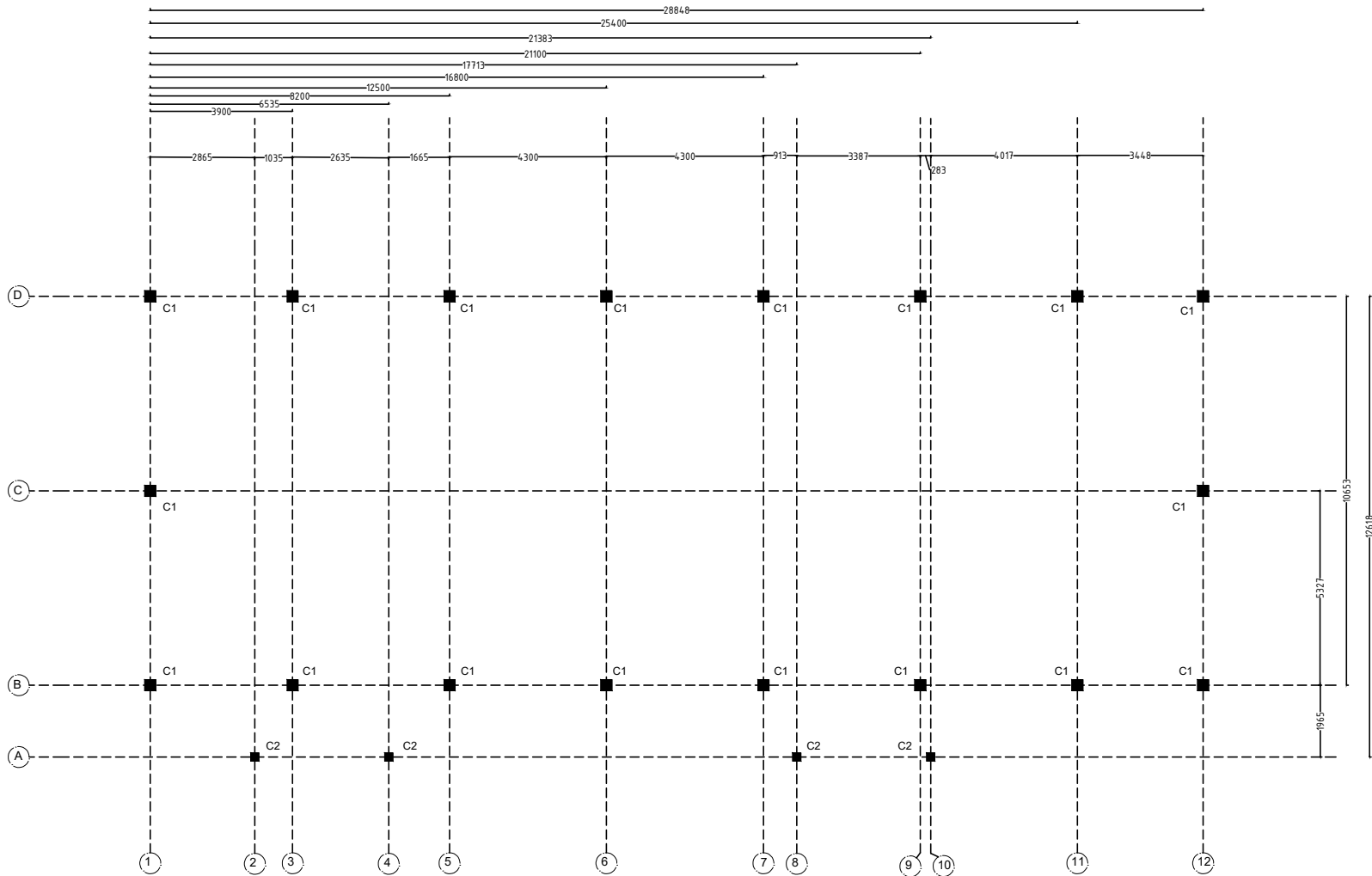


FRONT ELEVATION

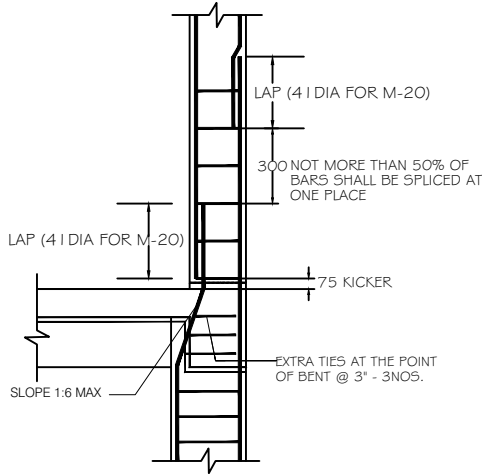


SECTION X-X'

DRG NO: DP0001 DRG CL 01 106	SHEET NO: 2 OF 9	REV. R0	SCALE: NTS	SWATI Architecture landscape interior ARCHITECTS PLANERS ENGINEERING INTERIOR DESIGN 282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com	
DESIGNED: UPENDRA SINGH	DRAWN: SIMRAN SONI	CHECKED: UPENDRA SINGH	VERIFIED: ADMIN	APPROVED: ADMIN	CLIENT: CHHATTISGARH STATE MINOR FOREST PRODUCE
ISSUED FOR: TENDOR PURPOSE	UNIT: MILIMETER	DATE: 12.05.2022	PROJECT: INCUBATION CENTER AT DEOBHOG GARIYABAND		
This drawing is the property of HUP DESIGN and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand				TITLE: PULSE MILLING UNIT SECTION / ELEVATION	47



COLUMN LAYOUT

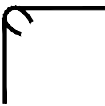


COLUMN DETAIL

GENERAL NOTES

NOTES-

- 1. USE - M 20 GRADE OF CONC. AS/IS 426-5000
- 2. USE - FE 500 GRADE OF REINF. BY CLIENT
- 3. PROVIDE CLEAR COVER TO MAIN REINF.
- FOUNDATION- 50MM
- COLUMN - 40MM
- BEAM - 25MM
- SLAB - 20MM OR DIA OF BAR, WHICHEVER IS MORE,
- R.C.C. WALL - 25MM
- 4.TIES SHOULD BE BEND INSIDE WITH 10# LENGTH IN BEAM & COLUMN



- 5.FOLLOW - IS-456-2000 FOR R.C.C. WORK
- 6.STRIPPING TIME FOR SHUTTERING / FORMWORK UNDER NORMAL CONDITION.

TYPE OF WORK	MINIMUM PERIOD BEFORE STRIKING FORM WORK
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- a) VERTICAL FORMWORK TO COLUMN, WALLS, BEAM 16-24 HOUR
- b) SOFFITS FORMWORK TO SLABS (PROPS TO BE REFIXED- - IMMEDIATELY AFTER REMOVAL OF FORMWORK) 3 DAYS
- c) SOFFIT FORMWORK TO BEAMS (PROPS TO BE REFIXED IMMEDIATELY AFTER REMOVAL OF FORMWORK) 7DAYS
- d) PROPS TO SLABS:
 - 1) SPANNING UP TO 4.5M 7DAYS
 - 2) SPANNING OVER 4.5M 14 DAYS
- e) PROPS TO BEAMS & ARCHES:
 - 1) SPANNING UP TO 6M 14DAYS
 - 2) SPANNING OVER 6M 21DAYS

- 7. CURING FOR R.C.C. MEMBER MINIMUM 14 DAYS CONTINUOUSLY PREFERABLE - 28 DAYS.
- 8. START EARLY CURING TO AVOID SRINKAGE CRACKS, WHEN CONCRETE APPEARS TO HARDEN.
- 9) PROVIDE FOLLOWING SLUMP IN CONCRETE GENERALLY.

- a) SHALLOW SECTIONS, PAYMENTS, MASS CONC. LIGTH REINFORCEMENT SECTION IN SLAB, BEAM, WALL, COLUMN 25-75
- b) HEAVILY REINFORCEMENT SECTION IN SLAB 50-100
- c) HEAVILY REINFORCEMENT SECTION IN BEAMS, WALLS, COLUMNS SLIPFORM, OR PUMPED CONC. 75-100
- d) TRENCH FILL, PILLING, PUMPED CONC. 100-150
- 10) PROVIDE LAP/ DEVELOPEMENT LENGTH IN REINFORCEMENT BARS GRADE OF CONC.

M20- 47Ø
M25-41Ø
M30-38Ø

- 11) REFER RELEVANT DRG. WITH THIS DRG.
- 12) AVOID CORE CUTING.

TYPICAL COLUMN DETAIL'S

COLUMN NAME	Pile/col detail	STIRRUPS	REMARKS
C1	 8-T12 TB@ 200 c/c 2-Tie		FOUNDATION TO TERRACE
C1	 4-T12 TB@ 200 c/c 1-Tie		TERMINATE AT GROUND LVL

DRG NO:	SHEET NO:	REV.	SCALE:
DP0001 DRG CL 01 106	3 OF 9	R0	NTS
DESIGNED:	DRAWN:	CHECKED:	VERIFIED:
UPENDRA SINGH	SIMRAN SONI	UPENDRA SINGH	ADMIN
ISSUED FOR:	UNIT:	DATE:	
TENDOR PURPOSE	MILIMETER	12.05.2022	

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SWATI Architecture landscape interior
ARCHITECTS I PLANERS I ENGINEERING I INTERIOR DESIGN
282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com

CHHATTISGARH STATE MINOR FOREST PRODUSE

INCUBATION CENTER AT DEOBHOG GARIYABAND

TITLE: PULSE MILLING UNIT
COLUMN LAYOUT

GENERAL NOTES

NOTES-

1. USE - M 20 GRADE OF CONC. AS/IS 426-5000
 2. USE - FE 500 GRADE OF REINF. BY CLIENT
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R.C.C. WALL - 25MM
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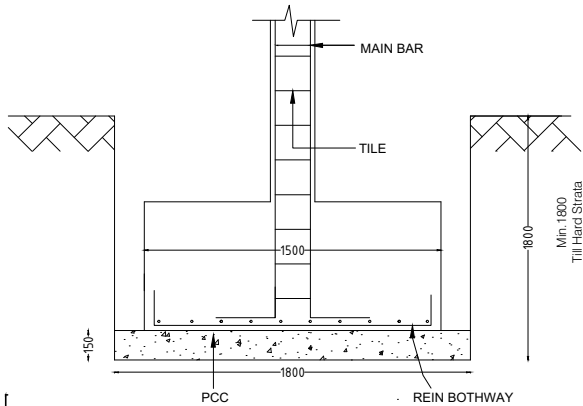
- | | |
|--|------------|
| a) VERTICAL FORMWORK TO COLUMN, WALLS, BEAM | 16-24 HOUR |
| b) SOFFITS FORMWORK TO SLABS (PROPS TO BE REFIXED- IMMEDIATELY AFTER REMOVAL OF FORMWORK) | 3 DAYS |
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| d) PROPS TO SLABS: | |
| 1) SPANNING UP TO 4.5M | 7DAYS |
| 2) SPANNING OVER 4.5M | 14 DAYS |
| e) PROPS TO BEAMS & ARCHES: | |
| 1) SPANNING UP TO 6M | 14DAYS |
| 2) SPANNING OVER 6M | 21DAYS |

7. CURING FOR R.C.C. MEMBER MINIMUM 14 DAYS CONTINUOUSLY PREFERABLE - 28 DAYS.
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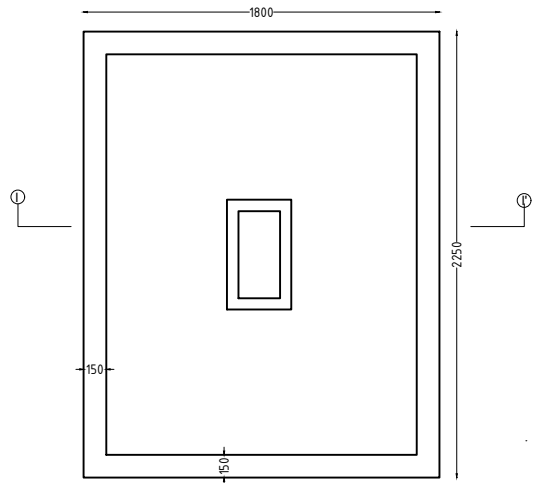
- | | |
|---|---------|
| a) SHALLOW SECTIONS, PAYMENTS, MASS CONC. LIGHT REINFORCEMENT SECTION IN SLAB, BEAM, WALL, COLUMN | 25-75 |
| b) HEAVILY REINFORCEMENT SECTION IN SLAB | 50-100 |
| c) HEAVILY REINFORCEMENT SECTION IN BEAMS, WALLS, COLUMNS SLIPFORM, OR PUMPED CONC. | 75-100 |
| d) TRENCH FILL, FILLING, PUMPED CONC. | 100-150 |
| 10) PROVIDE LAP/ DEVELOPEMENT LENGTH IN REINFORCEMENT BARS GRADE OF CONC. | |

M20- 47Ø
M25-41Ø
M30-38Ø

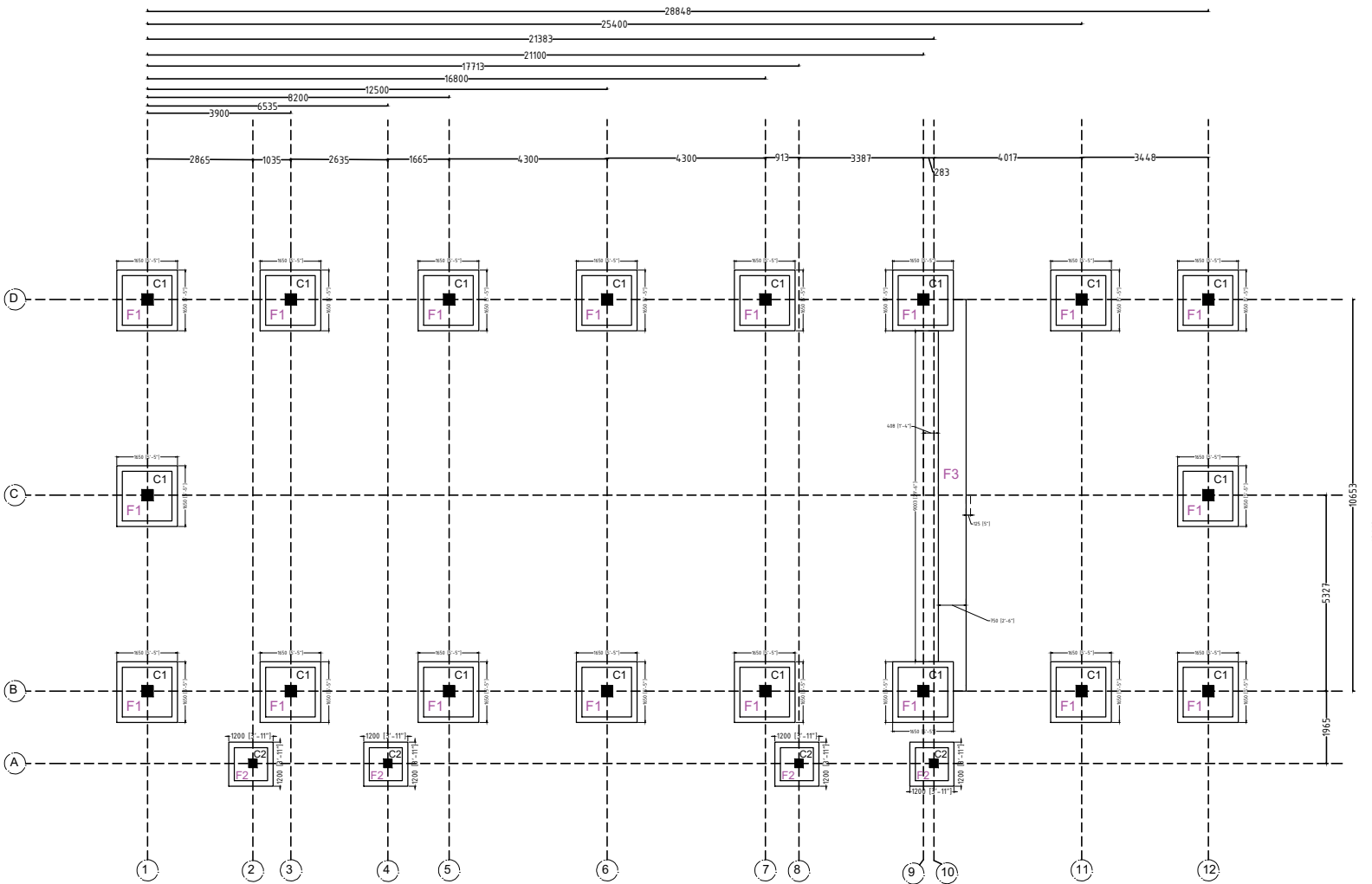
- 11) REFER RELEVANT DRG. WITH THIS DRG.
- 12) AVOID CORE CUTTING.



TYPICAL FOOTING SECTION (1-1')



TYPICAL FOOTING PLAN



FOOTING LAYOUT

FOOTING SCHEDULE

FE500 AND M20

Footings	Column Nos	PCC Size X - Y mm	Footings Size X - Y mm	Total Depth mm	Steel to X mm	Steel to Y mm	Remarks
F1	C1	1650 X 1650	1350 X 1350	400	T10@ 175C/C	T10@ 175 C/C	Bottom bars only
F2	C2	1200 X 1200	900 X 900	230	T8@200C/C	T8@ 200 C/C	Bottom bars only

DRG NO:

DP0001 DRG CL 01 106

SHEET NO:

4 OF 9

REV.

R0

SCALE:

NTS

DESIGNED:

UPENDRA SINGH

DRAWN:

SIMRAN SONI

CHECKED:

UPENDRA SINGH

VERIFIED:

ADMIN

APPROVED:

ADMIN

ISSUED FOR:

TENDOR PURPOSE

UNIT:

MILIMETER

DATE:

12.05.2022

SWATI Architecture landscape interior

ARCHITECTS | PLANERS | ENGINEERING | INTERIOR DESIGN
282 , tulip , A block , Talpuri International colony , Bhillai , C.G. Email - swati.arch@outlook.com

CLIENT:

CHHATTISGARH STATE MINOR FOREST PRODUCE

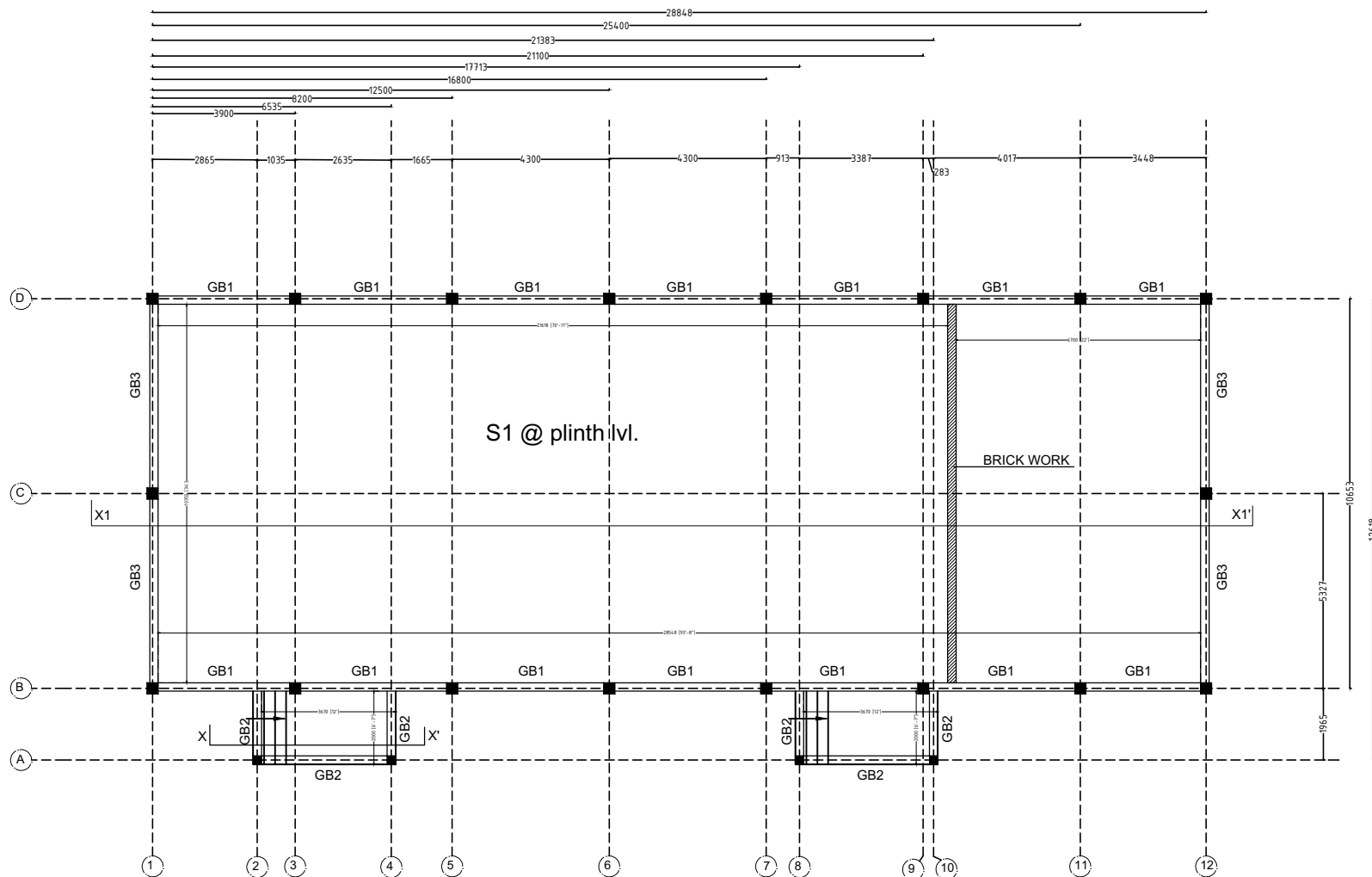
PROJECT:

INCUBATION CENTER AT DEOBHOG GARIYABAND

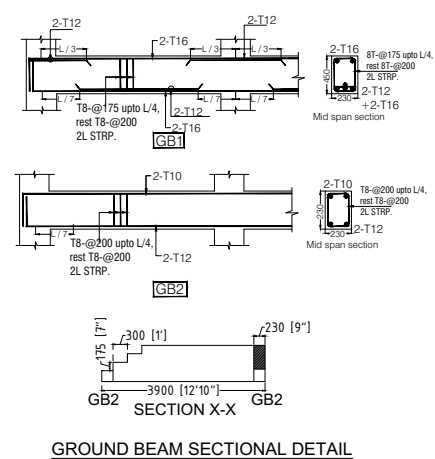
TITLE:

PULSE MILLING UNIT
FOOTING LAYOUT

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GROUND BEAM PLAN



GROUND BEAM SECTIONAL DETAIL

- GENERAL NOTES
- NOTES-
- USE - M 20 GRADE OF CONC. AS/IS 426-5000
 - USE - FE 500 GRADE OF REINF. BY CLIENT
 - PROVIDE CLEAR COVER TO MAIN REINF.
- FOUNDATION- 50MM
COLUMN - 40MM
BEAM - 25MM
SLAB - 20MM OR DIA OF BAR, WHICHEVER IS MORE,
R.C.C. WALL - 25MM
- 4.TIES SHOULD BE BEND INSIDE WITH 10# LENGTH IN BEAM & COLUMN
- 5.FOLLOW - IS-456-2000 FOR R.C.C. WORK
- 6.STRIPPING TIME FOR SHUTTERING / FORMWORK UNDER NORMAL CONDITION.
- TYPE OF WORK MINIMUM PERIOD BEFORE STRIKING FORM WORK
- VERTICAL FORMWORK TO COLUMN, WALLS, BEAM 16-24 HOUR
 - SOFFITS FORMWORK TO SLABS (PROPS TO BE REFIXED- IMMEDIATELY AFTER REMOVAL OF FORMWORK) 3 DAYS
 - SOFFIT FORMWORK TO BEAMS (PROPS TO BE REFIXED IMMEDIATELY AFTER REMOVAL OF FORMWORK) 7DAYS
 - PROPS TO SLABS:
 - 1) SPANNING UP TO 4.5M 7DAYS
 - 2) SPANNING OVER 4.5M 14 DAYS
 - PROPS TO BEAMS & ARCHES:
 - 1) SPANNING UP TO 6M 14DAYS
 - 2) SPANNING OVER 6M 21DAYS
7. CURING FOR R.C.C. MEMBER MINIMUM 14 DAYS CONTINUOUSLY PREFERABLE - 28 DAYS.
8. START EARLY CURING TO AVOID SRINKAGE CRACKS, WHEN CONCRETE APPEARS TO HARDEN.
- 9) PROVIDE FOLLOWING SLUMP IN CONCRETE GENERALLY.
- SHALLOW SECTIONS, PAYMENTS, MASS CONC. LGTH REINFORCEMENT SECTION IN SLAB, BEAM, WALL, COLUMN 25-75
 - HEAVILY REINFORCEMENT SECTION IN SLAB 50-100
 - HEAVILY REINFORCEMENT SECTION IN BEAMS, WALLS, COLUMNS SLIPFORM, OR PUMPED CONC. 75-100
 - TRENCH FILL, PILLING, PUMPED CONC. 100-150
- 10) PROVIDE LAP/ DEVELOPEMENT LENGTH IN REINFORCEMENT BARS GRADE OF CONC.
- M20- 47Ø
M25-41Ø
M30-38Ø
- 11) REFER RELEVANT DRG. WITH THIS DRG.
- 12) AVOID CORE CUTING.

BEAM SCHEDULE FOR GROUND/ PLINTH LVL.									
Beam No.	Size	Top	Bottom	Top	Bottom	Top	Bottom	Top	Bottom
GB1	230X375	2-T16	2-T12	2-T16	2-T12	2-T12	T8 @200C/C	T8 @175C/C	T8 @175C/C
GB2	230X230	2-T12	-	2-T10	-	-	T8 @200C/C	T8 @200C/C	T8 @200C/C

SLAB SCHEDULE FOR GROUND FLOOR LVL.				
Slab Name	Thickness (mm)	Main Steel	Other Steel	remarks
S1	150 (MESH)	T8 @ 200 c/c	T8 @ 200 c/c	All straight

DRG NO:
DP0001 DRG CL 01 106

SHEET NO:
5 OF 9

REV.
R0

SCALE:
NTS

DESIGNED:
UPENDRA SINGH

DRAWN:
SIMRAN SONI

CHECKED:
UPENDRA SINGH

VERIFIED:
ADMIN

APPROVED:
ADMIN

ISSUED FOR:
TENDOR PURPOSE

UNIT:
MILIMETER

DATE:
12.05.2022

CLIENT:
CHHATTISGARH STATE MINOR FOREST PRODUCE

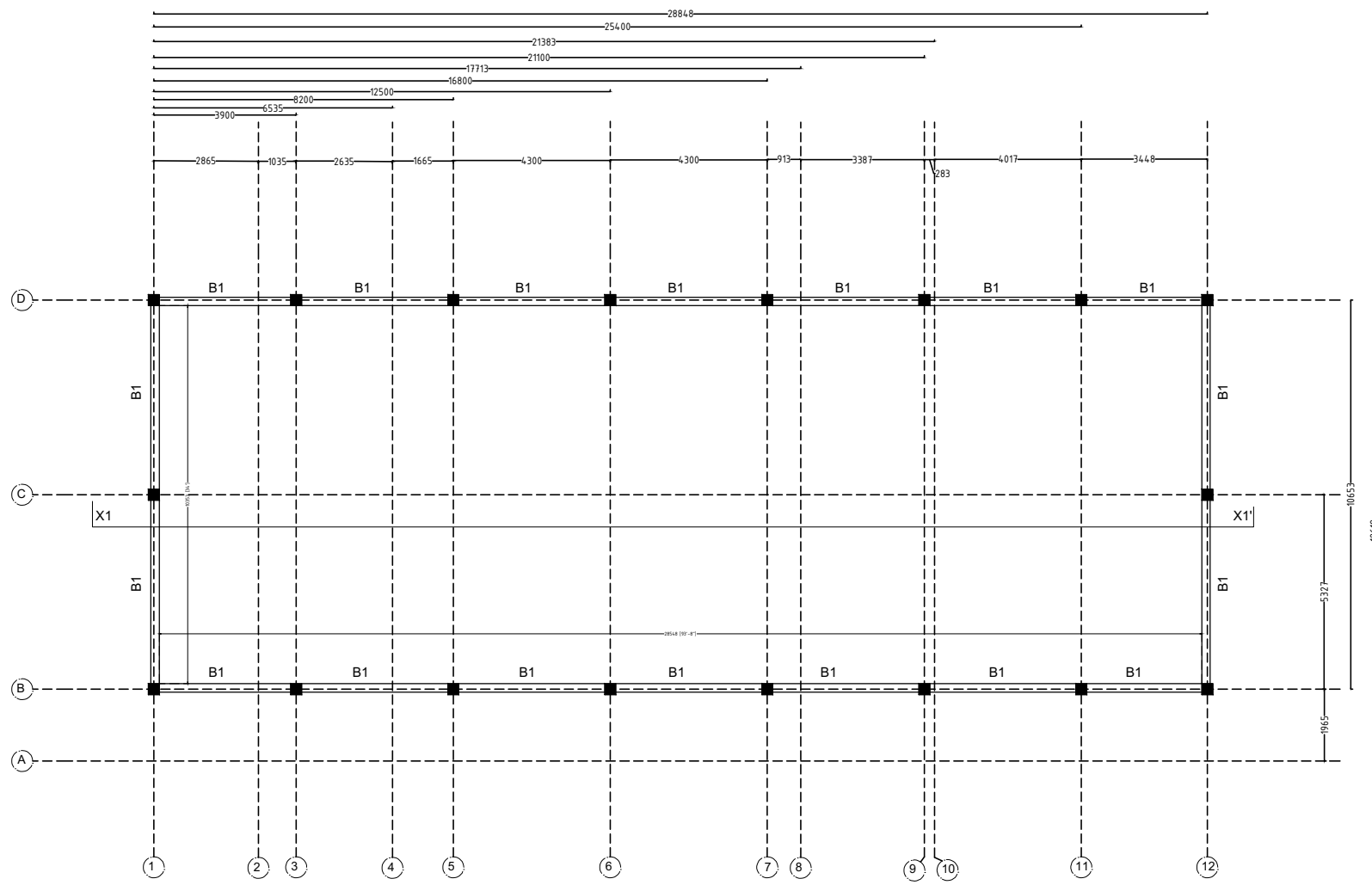
PROJECT:
INCUBATION CENTER AT DEOBHOG GARIYABAND

TITLE:
PULSE MILLING UNIT
BEAM LAYOUT

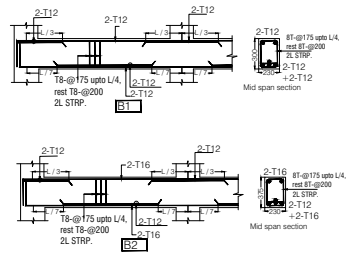
SWATI Architecture landscape interior
ARCHITECTS I PLANERS I ENGINEERING I INTERIOR DESIGN
282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com

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50



BEAM PLAN(2.4 m ABOVE PLINTH LVL)



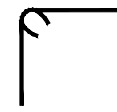
BEAM SCHEDULE FOR 2.4m LVL. ABOVE PLINTH

B1	230X300	2-T12	2-T12	2-T12	2-T12	2-T12	T8 @200C/C	T8 @175C/C	T8 @175C/C	SLAB THK INCLUDED	
B2	230X375	2-T16	2-T12	2-T16	2-T12	2-T12	T8 @150C/C	T8 @150C/C	T8 @150C/C	SLAB THK INCLUDED	

GENERAL NOTES

NOTES-

- USE - M 20 GRADE OF CONC. AS/IS 426-5000
 - USE - FE 500 GRADE OF REINF. BY CLIENT
 - PROVIDE CLEAR COVER TO MAIN REINF.
- FOUNDATION- 50MM
COLUMN - 40MM
BEAM - 25MM
SLAB - 20MM OR DIA OF BAR, WHICHEVER IS MORE,
R.C.C. WALL - 25MM
- TIES SHOULD BE BEND INSIDE WITH 10# LENGTH IN BEAM & COLUMN



- FOLLOW - IS-456-2000 FOR R.C.C. WORK
- STRIPPING TIME FOR SHUTTERING / FORMWORK UNDER NORMAL CONDITION.

TYPE OF WORK	MINIMUM PERIOD BEFORE STRIKING FORM WORK
a) VERTICAL FORMWORK TO COLUMN, WALLS, BEAM	16-24 HOUR
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2) SPANNING OVER 4.5M	14 DAYS
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1) SPANNING UP TO 6M	14DAYS
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 - START EARLY CURING TO AVOID SRINKAGE CRACKS, WHEN CONCRETE APPEARS TO HARDEN.
 - PROVIDE FOLLOWING SLUMP IN CONCRETE GENERALLY.
- | | |
|---|----------|
| a) SHALLOW SECTIONS, PAYMENTS, MASS CONC. LIGHT REINFORCEMENT SECTION IN SLAB, BEAM, WALL, COLUMN | 25-75 |
| b) HEAVILY REINFORCEMENT SECTION IN SLAB | 50-100 |
| c) HEAVILY REINFORCEMENT SECTION IN BEAMS, WALLS, COLUMNS SLIPFORM, OR PUMPED CONC. | 75-100 |
| d) TRENCH FILL, PILLING, PUMPED CONC. | 100-150 |
| 10) PROVIDE LAP/ DEVELOPEMENT LENGTH IN REINFORCEMENT BARS GRADE OF CONC. | |
| | M20- 47Ø |
| | M25-41Ø |
| | M30-38Ø |
- REFER RELEVANT DRG. WITH THIS DRG.
 - AVOID CORE CUTING.

DRG NO:
DP0001 DRG CL 01 106

SHEET NO:
6 OF 9

REV.
R0

SCALE:
NTS

DESIGNED:
UPENDRA SINGH

DRAWN:
SIMRAN SONI

CHECKED:
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MILIMETER

DATE:
12.05.2022

SWATI Architecture landscape interior
ARCHITECTS I PLANERS I ENGINEERING I INTERIOR DESIGN
282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com

CHHATTISGARH STATE MINOR FOREST PRODUSE

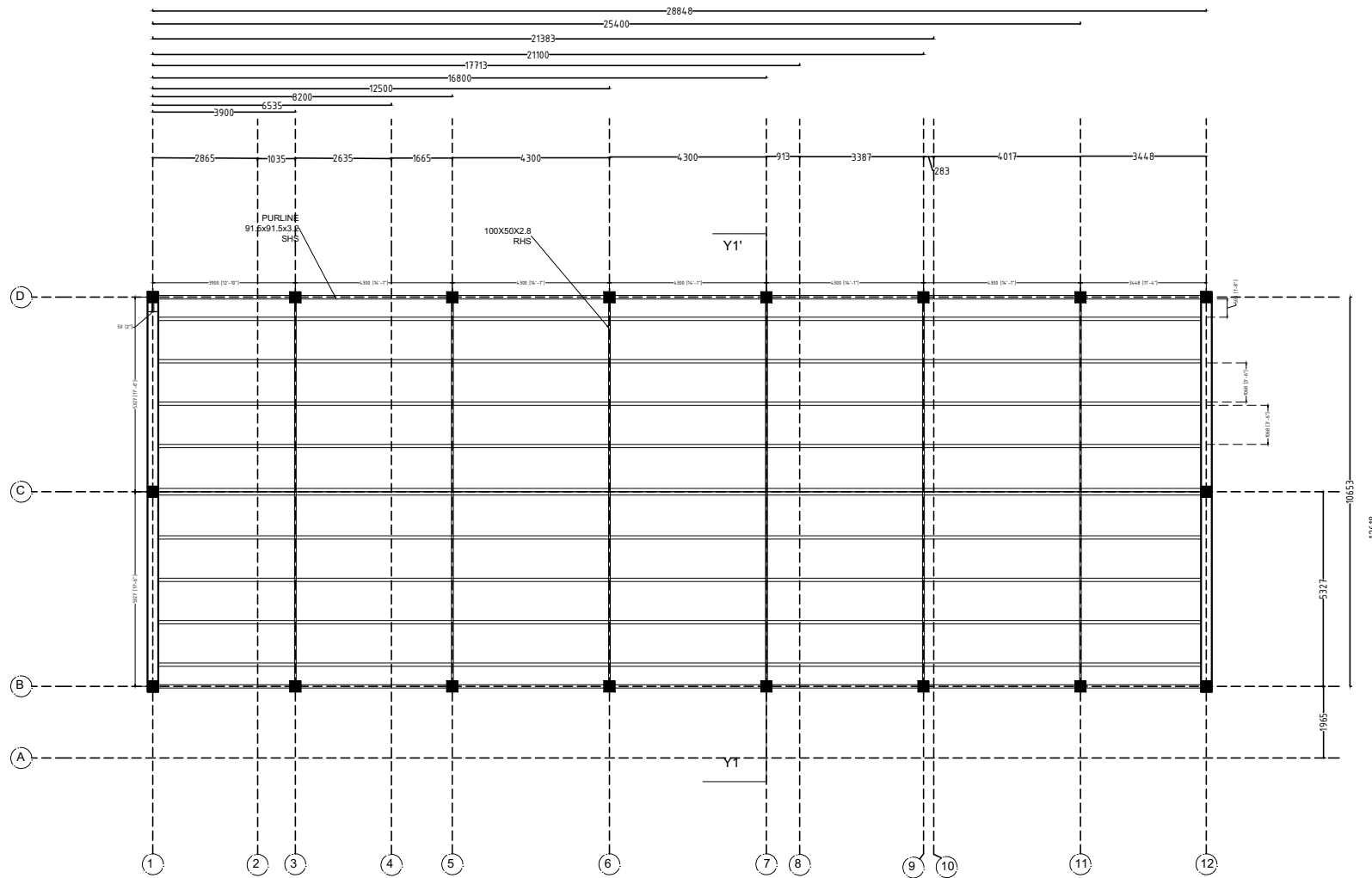
INCUBATION CENTER AT DEOBHOG GARIYABAND

PULSE MILLING UNIT
BEAM LAYOUT

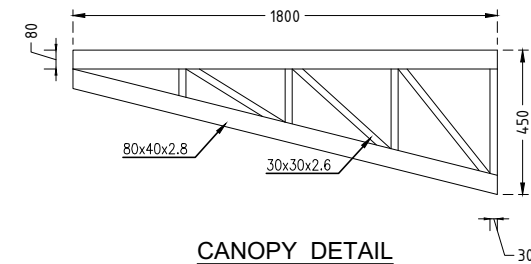
166

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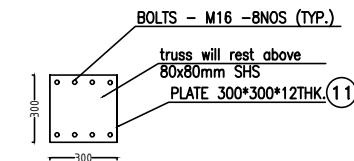
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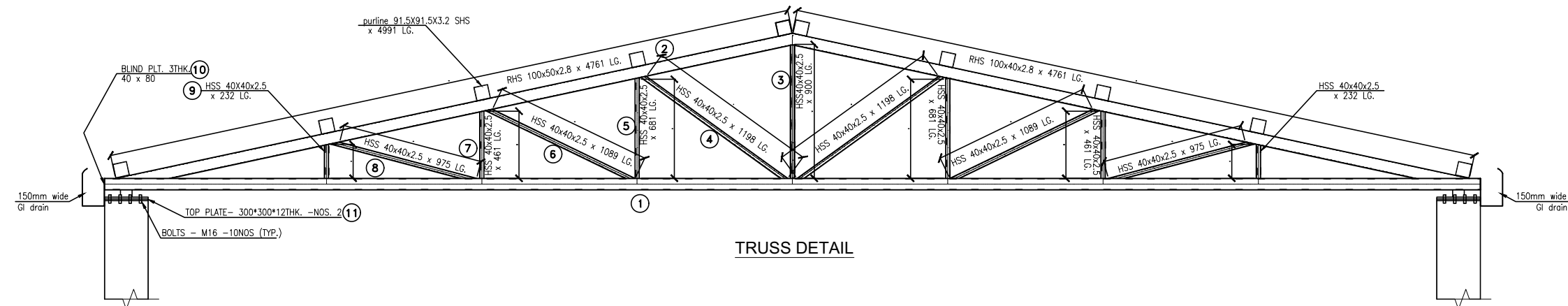
PLAN OF ROOF LVL.



CANOPY DETAIL



DETAIL 1



TRUSS DETAIL

GENERAL NOTES

NOTES-

1. USE - M 20 GRADE OF CONC. AS/IS 426-5000
2. USE - FE 500 GRADE OF REINF. BY CLIENT
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R.C.C. WALL - 25MM
4.TIES SHOULD BE BEND INSIDE WITH 10# LENGTH IN BEAM & COLUMN

- 5.FOLLOW - IS-456-2000 FOR R.C.C. WORK
- 6.STRIPPING TIME FOR SHUTTERING / FORMWORK UNDER NORMAL CONDITION.

TYPE OF WORK	MINIMUM PERIOD BEFORE STRIKING FORM WORK
--------------	--

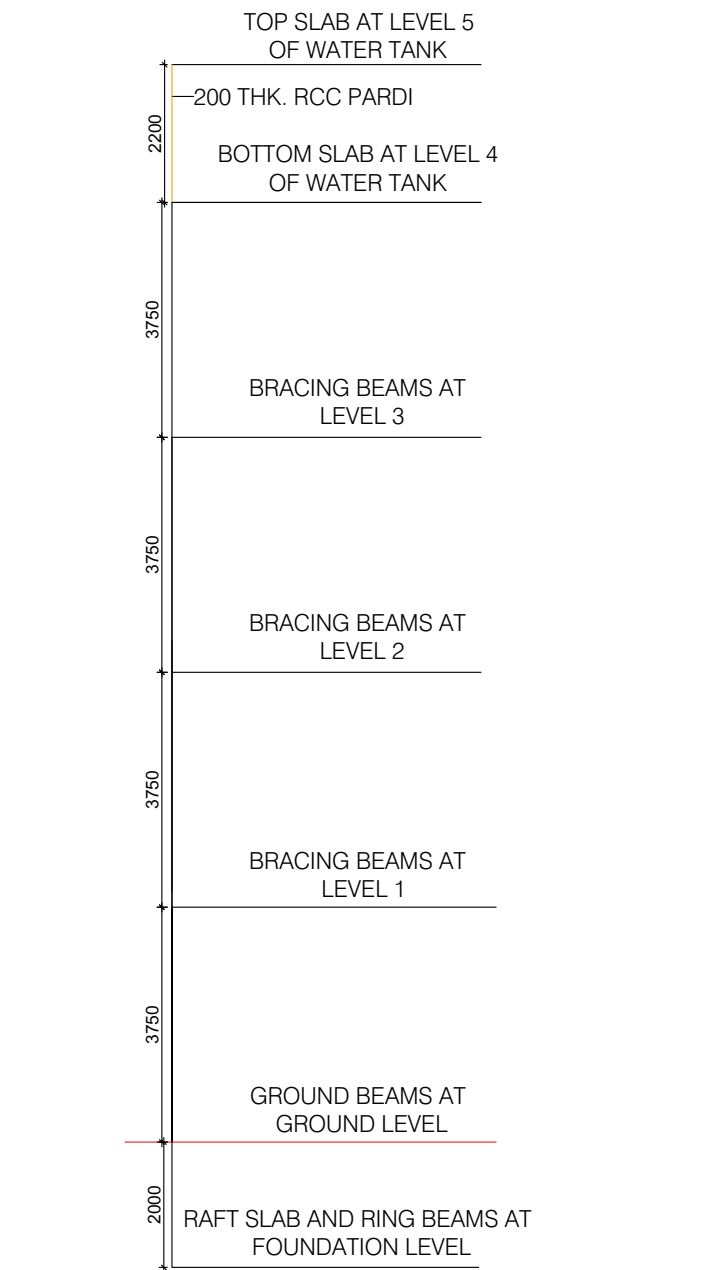
- a) VERTICAL FORMWORK TO COLUMN, WALLS, BEAM 16-24 HOUR
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- 9) PROVIDE FOLLOWING SLUMP IN CONCRETE GENERALLY.
 - a) SHALLOW SECTIONS, PAYMENTS, MASS CONC. LIGTH REINFORCEMENT SECTION IN SLAB, BEAM, WALL, COLUMN 25-75
 - b) HEAVILY REINFORCEMENT SECTION IN SLAB 50-100
 - c) HEAVILY REINFORCEMENT SECTION IN BEAMS, WALLS, COLUMNS SLIPFORM, OR PUMPED CONC. 75-100
 - d) TRENCH FILL, PILLING, PUMPED CONC. 100-150
- 10) PROVIDE LAP/ DEVELOPEMENT LENGTH IN REINFORCEMENT BARS GRADE OF CONC.

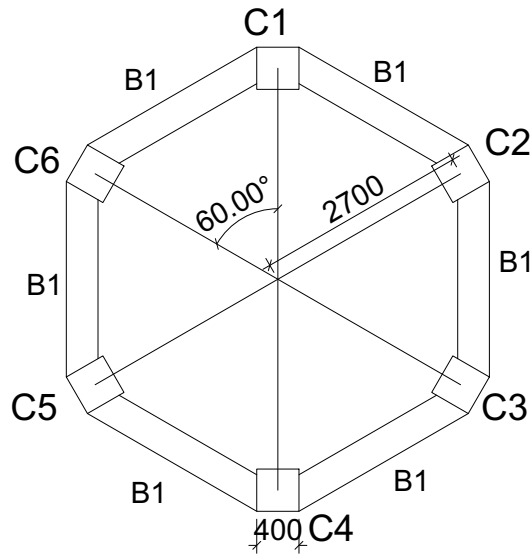
- 11) REFER RELEVANT DRG. WITH THIS DRG.
- 12) AVOID CORE CUTING.

DRG NO:	SHEET NO:	REV.	SCALE:
DP0001 DRG CL 01 106	8 OF 9	R0	NTS
DESIGNED:	DRAWN:	CHECKED:	VERIFIED:
UPENDRA SINGH	SIMRAN SONI	UPENDRA SINGH	ADMIN
ISSUED FOR:	UNIT:	DATE:	
TENDOR PURPOSE	MILIMETER	12.05.2022	

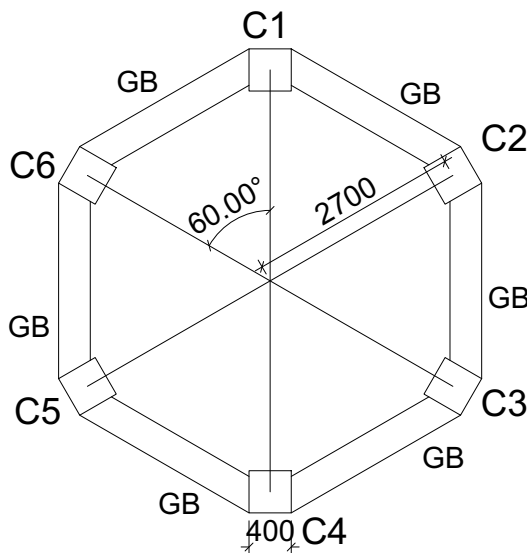
CLIENT:	CHHATTISGARH STATE MINOR FOREST PRODUSE
PROJECT:	INCUBATION CENTER AT DEOBHOG GARIYABAND
TITLE:	PULSE MILLING UNIT TRUSS LAYOUT



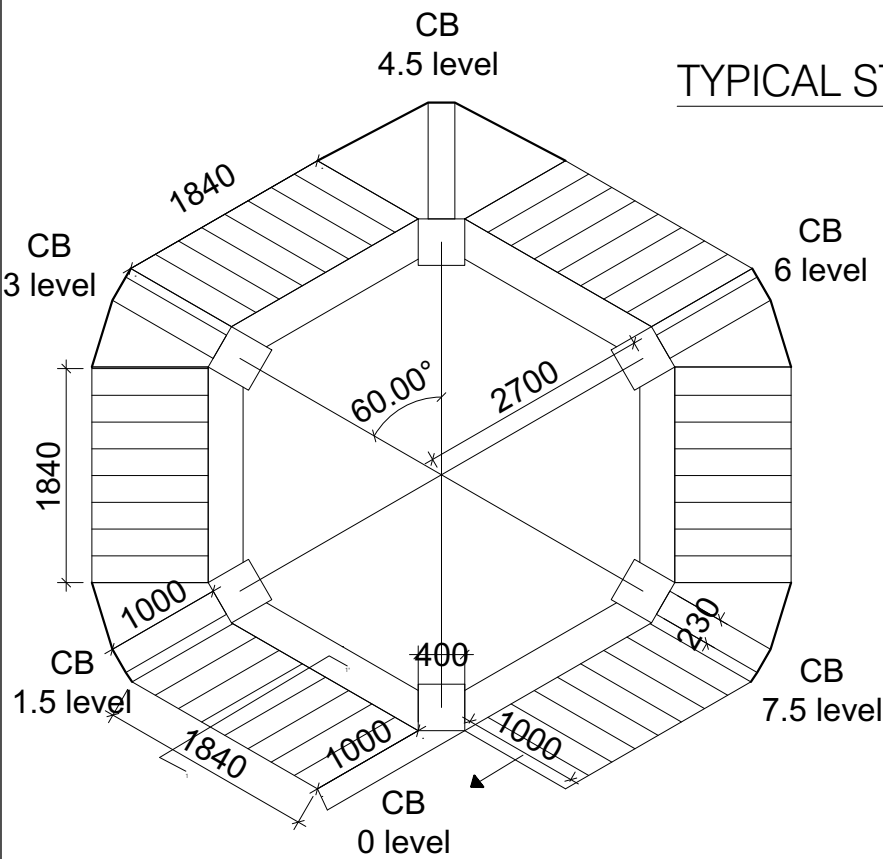
CROSSSECTIONAL PLAN AT DIFFERENT LVL.



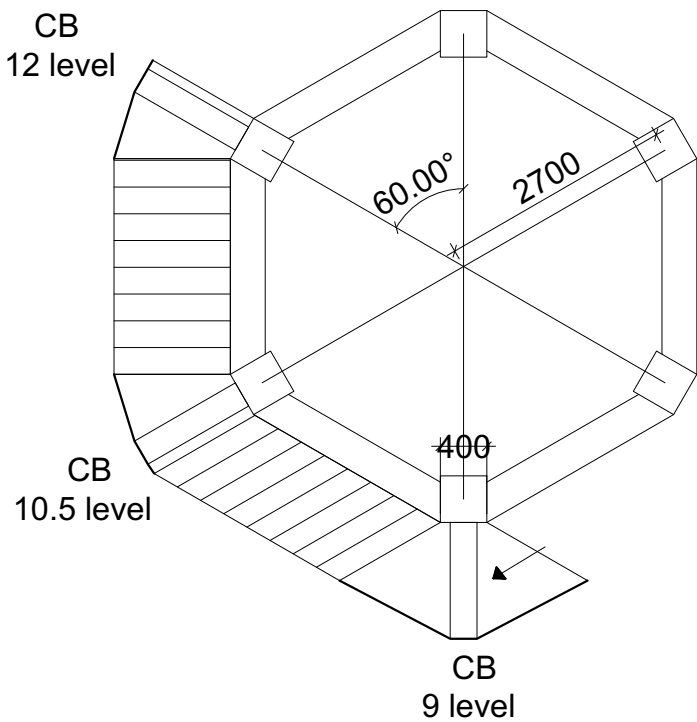
TYPICAL STRAIGHT BEAM, COLUMN PLAN
@ 1,2,3 LEVEL



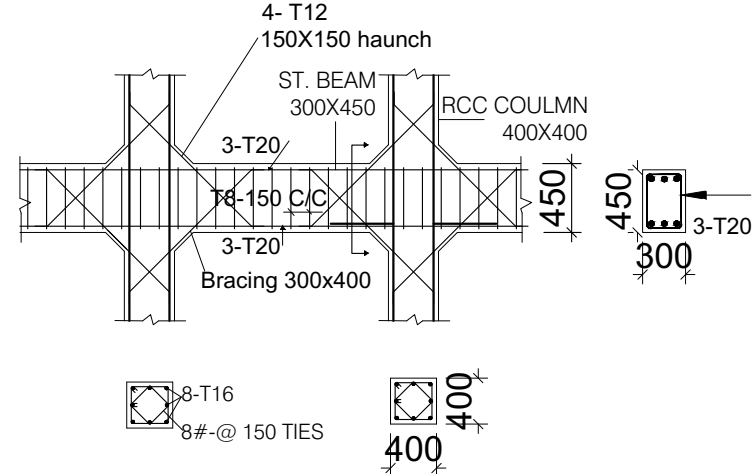
TYPICAL STRAIGHT BEAM, COLUMN PLAN
@ GROUND LEVEL



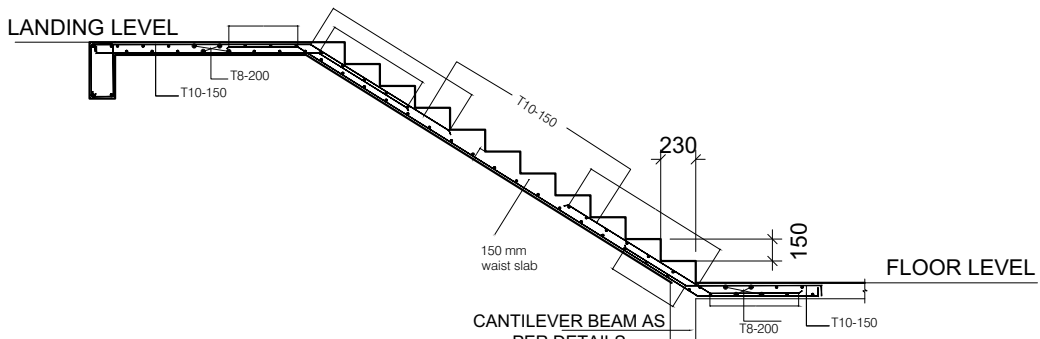
TYPICAL CANTILEVER BEAM, LANDING SLAB
AND STAIR @ DIFFERENT LEVELS



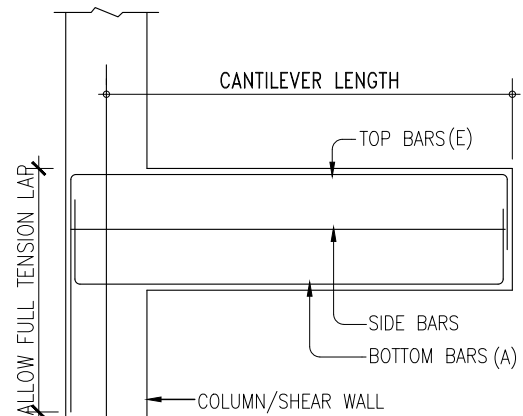
BEAM	BEAM SIZE	BOTTOM REINFORCEMENT		TOP REINFORCEMENT			STIRUPS			REMARKS
		BOTTOM STRAIGHT	CURTAIL	TOP STRAIGHT	LEFT EXTRA	RIGHT EXTRA	LEFT	RIGHT	CENTER	
B1	300X450	3-T20	-	3-T20	-	-	T8 @100C/C	T8 @100C/C	T8 @150C/C	STRAIGHT BEAM, BRACING AT LEVEL 1,2,3 ONLY
GB	300X450	3-T16	-	3-T16	-	-	T8 @150C/C	T8 @150C/C	T8 @150C/C	STRAIGHT GROUND BEAM



LONGITUDINAL SECTION OF BEAM (B1)
@1,2 LEVEL



TYPICAL SECTION AT 1-1'



TYPICAL CANTILEVER BEAM DETAIL

BEAM	BEAM SIZE	BOTTOM REINFORCEMENT		TOP REINFORCEMENT			STIRUPS			REMARKS
		BOTTOM STRAIGHT	CURTAIL	TOP STRAIGHT	LEFT EXTRA	RIGHT EXTRA	LEFT	RIGHT	CENTER	
CB	230X375	2-T12	-	2-T16	-	-	T8 @150C/C	T8 @150C/C	T8 @150C/C	CANTILEVER BEAM including SLAB THK.

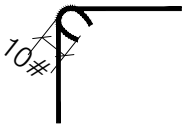
DRG NO: DP0001 DRG CL 01 801		SHEET NO: 1 OF 3		REV. R0		SCALE: NTS		<div>SWATI Architecture landscape interior</div> <div>ARCHITECTS PLANERS ENGINEERING INTERIOR DESIGN</div> <div>282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com</div>					
DESIGNED:		DRAWN:		CHECKED:		VERIFIED:						APPROVED:	
UPENDRA SINGH		SIMRAN SONI		UPENDRA SINGH		ADMIN		ADMIN		CHHATTISGARH STATE MINOR FOREST PRODUCE			
ISSUED FOR:				UNIT:		DATE:		PROJECT:					
TENDOR PURPOSE				MILIMETER		12.05.2022		INCUBATION CENTER AT DEOBHOG GARIYABAND					
<div>This drawing is the property of HUP DESIGN and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand</div>								TITLE:					
								OVER HEAD WATER TANK					

170

55

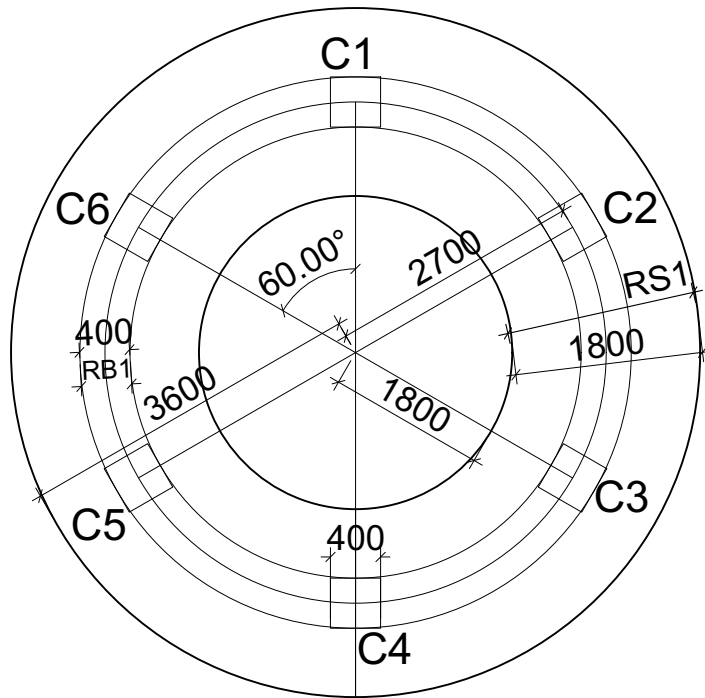
GENERAL NOTES

- NOTES-
1. USE M-20 (1:1.5:3) GRADE OF CONC.AS/ IS 456-2000
 2. USE - FE 500 GRADE OF REINF. AS/ IS-1786/TMT BARS
 3. PROVIDE CLEAR COVER TO MAIN REINF.
- FOUNDATION- 50MM
COLUMN - 40MM
BEAM - 25MM
SLAB - 15MM OR DIA OF BAR, WHICHEVER IS MORE,
R.C.C. WALL - 25MM
4.TIES SHOULD BE BEND INSIDE WITH 10# LENGTH IN BEAM & COLUMN

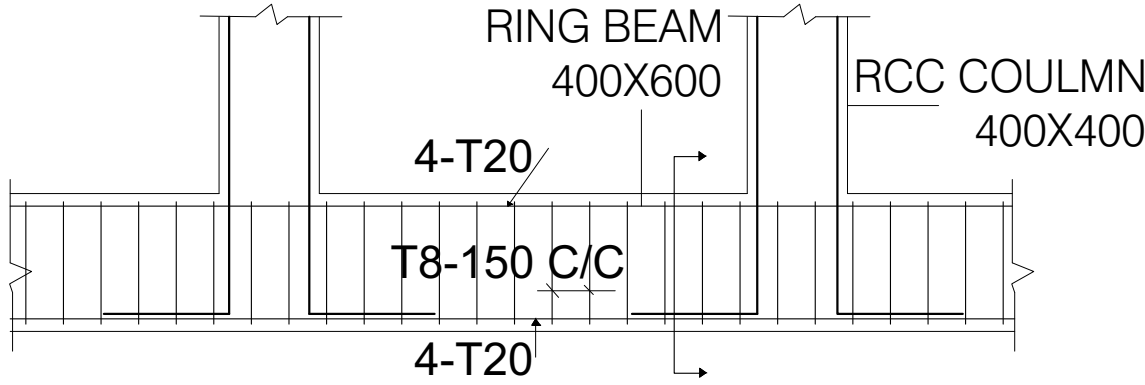


- 5.FOLLOW - IS-456-2000 FOR R.C.C. WORK
- 6.STRIPPING TIME FOR SHUTTERING / FORMWORK UNDER NORMAL CONDITION.

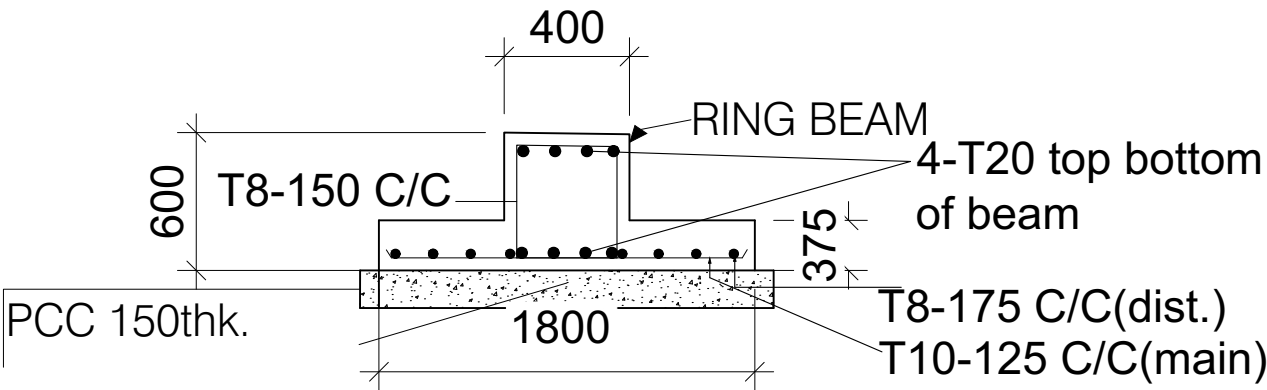
TYPE OF WORK	MINIMUM PERIOD BEFORE STRIKING FORM WORK
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9) PROVIDE FOLLOWING SLUMP IN CONCRETE GEN-ERALLY.	
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d) TRENCH FILL, PILLING, PUMPED CONC.	100-150
10) PROVIDE LAP/ DEVELOPEMENT LENGTH IN REINFORCEMENT BARS GRADE OF CONC.	M20- 47Ø M25-41Ø M30-38Ø
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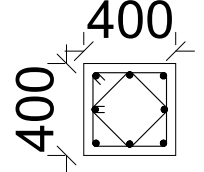
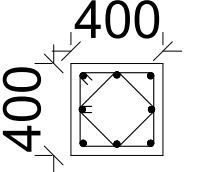
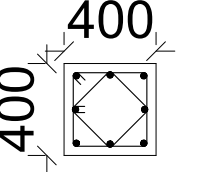
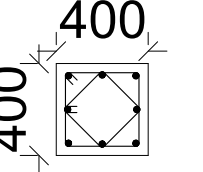
TYPICAL RAFT SLAB, RING BEAM, COLUMN PLAN
@ FOUNDATION LEVEL



LONGITUDINAL SECTION OF RING BEAM
@FOUNDATION LEVEL



SECTION @ X-X @ FOUNDATION LEVEL

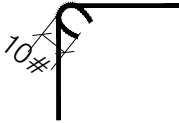
S.NO	COLUMN TYPE	GROUND FLOOR	FIRST FLOOR	SECOND FLOOR	THIRD FLOOR
1.	C1 TO C6	 8-T16 8#-@ 150 TIES	 8-T16 8#-@ 150 TIES	 8-T16 8#-@ 150 TIES	 8-T16 8#-@ 150 TIES

Footing	Column	PCC Size	Footing Size	Column size	Total	Column	Stirups
	Nos				Depth mm	Steel	
RS1	C1,C2,C3, C4,C5,C6	1800 WIDE CIRCULAR	1500 WIDE CIRCULAR	400x400 mm	375	8-T16	T8 - 150 c/c

BEAM	BEAM SIZE	BOTTOM REINFORCEMENT		TOP REINFORCEMENT			STIRUPS			REMARKS
		THROUGHTOUT	CURTAIL	TOP FULL	LEFT	RIGHT	LEFT	RIGHT	CENTER	
RB1	400X600	4-T20	-	4-T20	-	-	T8 @150C/C	T8 @150C/C	T8 @150C/C	FOUNDATION RING BEAM

GENERAL NOTES

- NOTES-
- USE M-20 (1:1.5:3) GRADE OF CONC.AS/ IS 456-2000
 - USE - FE 500 GRADE OF REINF. AS/ IS-1786/TMT BARS
 - PROVIDE CLEAR COVER TO MAIN REINF.
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DRG NO:	SHEET NO:	REV.	SCALE:
DP0001 DRG CL 01 801	2 OF 3	R0	NTS
DESIGNED:	DRAWN:	CHECKED:	VERIFIED:
UPENDRA SINGH	SIMRAN SONI	UPENDRA SINGH	ADMIN
ISSUED FOR:		UNIT:	DATE:
	TENDOR PURPOSE	MILIMETER	12.05.2022

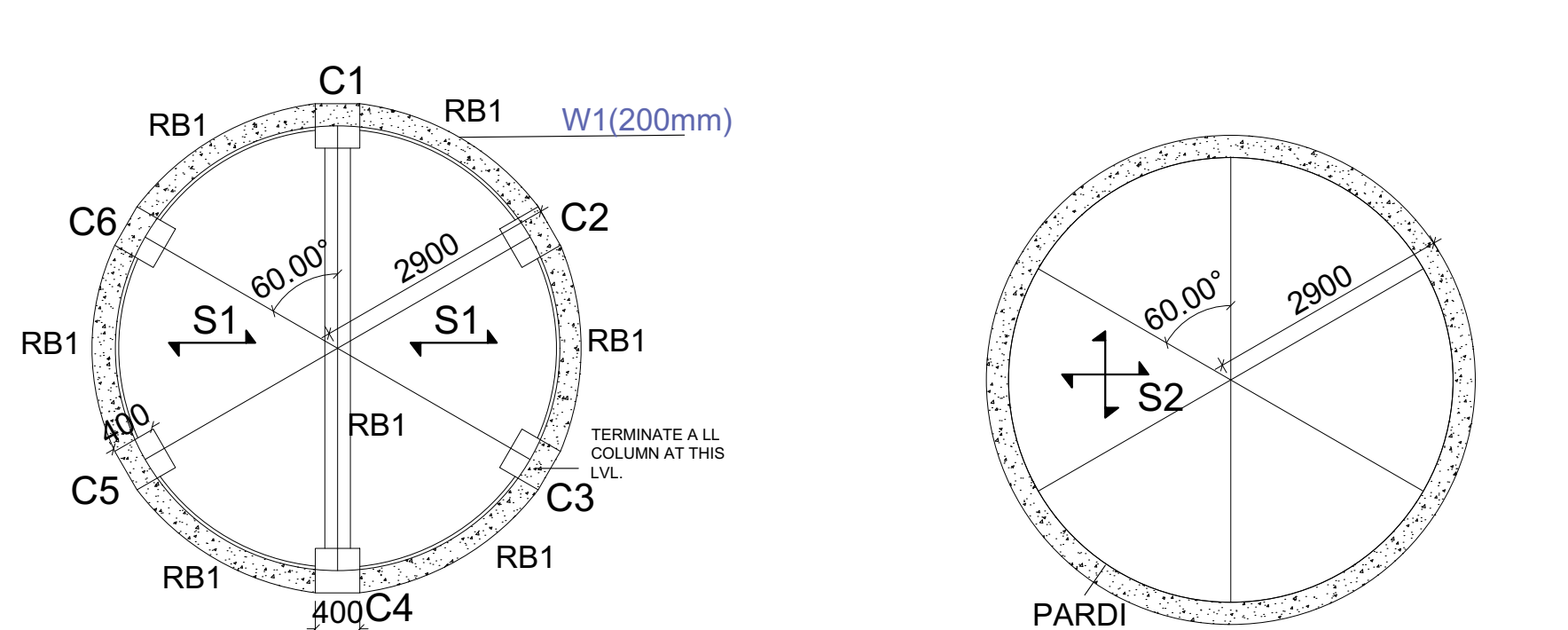
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SWATI Architecture landscape interior
ARCHITECTS | PLANERS | ENGINEERING | INTERIOR DESIGN
282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com

CLIENT:
CHHATTISGARH STATE MINOR FOREST PRODUSE

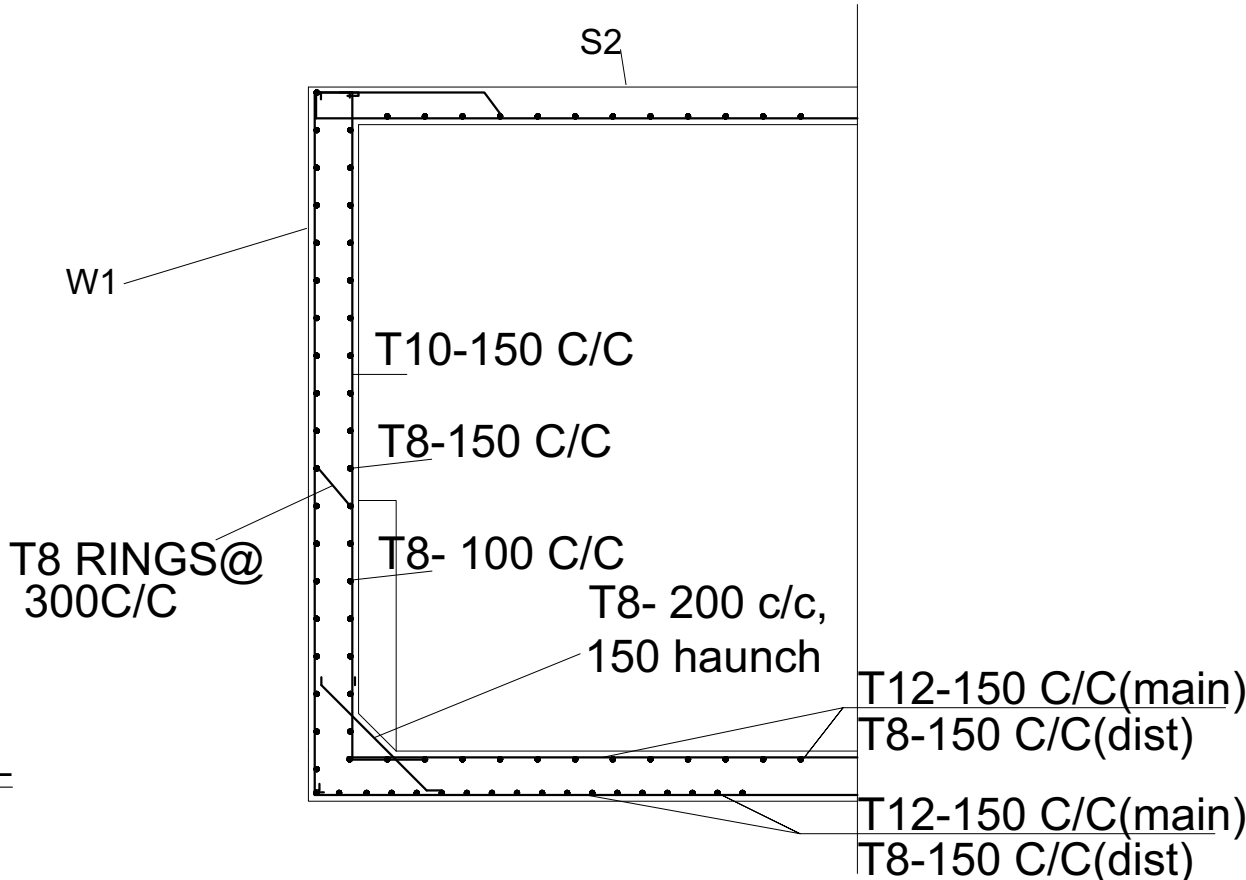
PROJECT:
INCUBATION CENTER AT DEOBHOG GARIYABAND

TITLE:
OVER HEAD WATER TANK

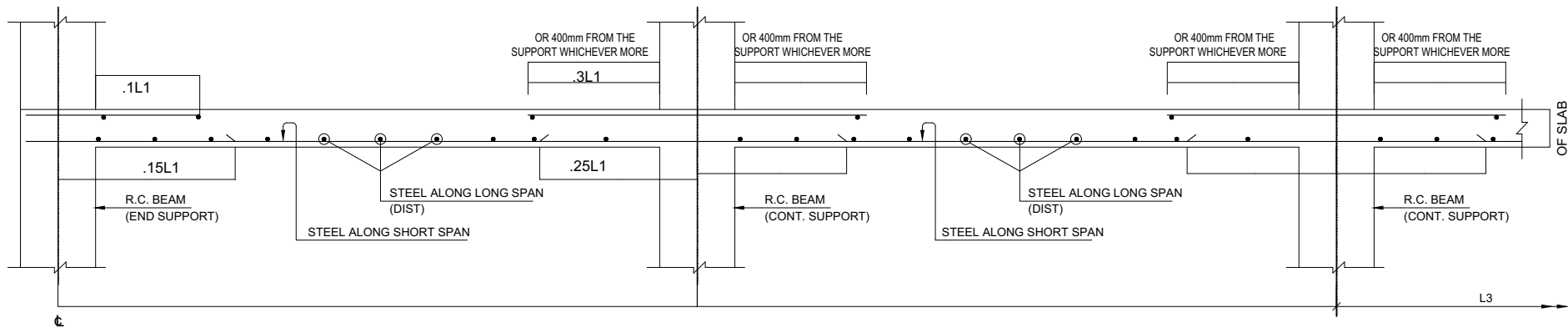


RING BEAM + PARDI SLAB PLAN @ FOURTH LEVEL

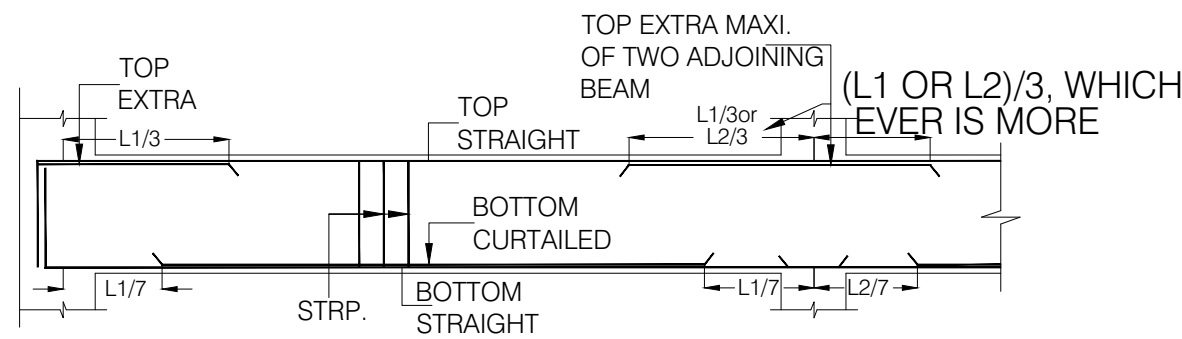
PARDI SLAB PLAN @ 5TH LEVEL



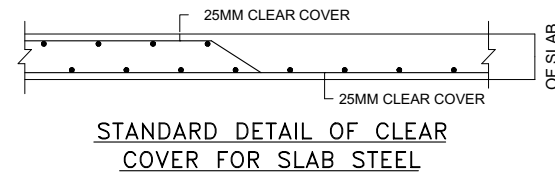
TYPICAL SECTION OF WATER TANK



TYPICAL SECTION OF SLAB



TYP. BEAM SECTION DETAIL

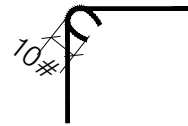


BEAM	BEAM SIZE	BOTTOM REINFORCEMENT		TOP REINFORCEMENT			STIRUPS			REMARKS
		BOTTOM STRAIGHT	CURTAIL	TOP STRAIGHT	LEFT EXTRA	RIGHT EXTRA	LEFT	RIGHT	CENTER	
RB1	230X600	3-T20	2-T16	3-T16	2-T16	2-T16	T8 @125C/C	T8 @125C/C	T8 @150C/C	SLAB THK. INCLUDED

SLAB NAME	THICKNESS (mm)	SLAB REINFORCEMENT BOTTOM		SLAB REINFORCEMENT TOP		remarks
		Main Steel	Other Steel	Main Steel	Other Steel	
S1	200 Thk. one Way	T12 @ 150 c/c	T8 @ 150 c/c	T10 @ 150 c/c	T8 @ 150 c/c	provide 2 layer
S2	150 Thk. 2 WAY	T10 @ 100 c/c	T10 @ 100 c/c			ALTERNATE BENTUP
PARDI	W1(200mm Thk.)	T10 @ 150 c/c	T8 @ 100,150 c/c	T10 @ 150 c/c	T8 @ 100,150 c/c	VERTICAL IS MAIN STEEL

GENERAL NOTES

- NOTES-
- USE M-20 (1:1.5:3) GRADE OF CONC.AS/ IS 456-2000
 - USE - FE 500 GRADE OF REINF. AS/ IS-1786/TMT BARS
 - PROVIDE CLEAR COVER TO MAIN REINF.
- FOUNDATION- 50MM
COLUMN - 40MM
BEAM - 25MM
SLAB - 15MM OR DIA OF BAR, WHICHEVER IS MORE,
R.C.C. WALL - 25MM
- TIES SHOULD BE BEND INSIDE WITH 10# LENGTH IN BEAM & COLUMN



- FOLLOW - IS-456-2000 FOR R.C.C. WORK
- STRIPPING TIME FOR SHUTTERING / FORMWORK UNDER NORMAL CONDITION.

TYPE OF WORK	MINIMUM PERIOD BEFORE STRIKING FORM WORK
--------------	--

- VERTICAL FORMWORK TO COLUMN, WALLS, BEAM 16-24 HOUR
- SOFFITS FORMWORK TO SLABS (PROPS TO BE REFIXED- IMMEDIATELY AFTER REMOVAL OF FORMWORK) 3 DAYS
- SOFFIT FORMWORK TO BEAMS (PROPS TO BE REFIXED IMMEDIATELY AFTER REMOVAL OF FORMWORK) 7DAYS
- PROPS TO SLABS:
 - SPANNING UP TO 4.5M 7DAYS
 - SPANNING OVER 4.5M 14 DAYS
- PROPS TO BEAMS & ARCHES:
 - SPANNING UP TO 6M 14DAYS
 - SPANNING OVER 6M 21DAYS

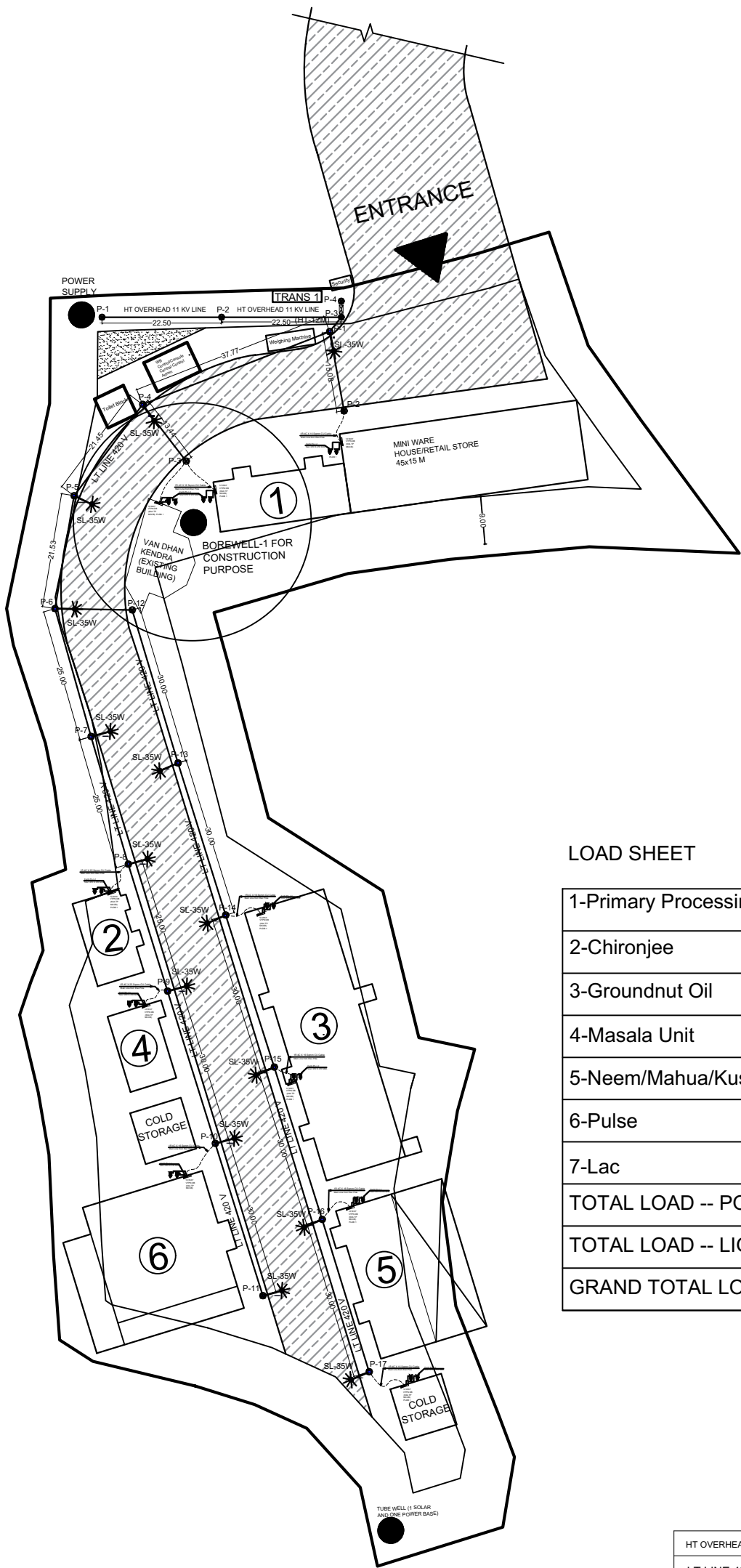
- CURING FOR R.C.C. MEMBER MINIMUM 14 DAYS CONTINOUSELY PREFERABLE - 28 DAYS.
- START EARLY CURING TO AVOID SRINKAGE CRACKS, WHEN CONCRETE APPEARS TO HARDEN.
- PROVIDE FOLLOWING SLUMP IN CONCRETE GEN-ERALLY.
 - SHALLOW SECTIONS, PAVMENTS, MASS CONC. LIGTH REINFORCEMENT SECTION IN SLAB, BEAM, WALL, COLUMN 25-75
 - HEAVILY REINFORCEMENT SECTION IN SLAB 50-100
 - HEAVILY REINFORCEMENT SECTION IN BEAMS, WALLS, COLUMNS SLIPFORM, OR PUMPED CONC. 75-100
 - TRENCH FILL, PILLING, PUMPED CONC. 100-150
- PROVIDE LAP/ DEVELOPEMENT LENGTH IN REINFORCEMENT BARS GRADE OF CONC.
 - M20- 47Ø
 - M25-41Ø
 - M30-38Ø

- REFER RELEVANT DRG. WITH THIS DRG.

DRG NO: DP0001 DRG CL 01 801		SHEET NO: 3 OF 3	REV. R0	SCALE: NTS	SWATI Architecture landscape interior ARCHITECTS PLANERS ENGINEERING INTERIOR DESIGN 282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com	
DESIGNED:	DRAWN:	CHECKED:	VERIFIED:	APPROVED:	CLIENT:	CHHATTISGARH STATE MINOR FOREST PRODUSE
UPENDRA SINGH	SIMRAN SONI	UPENDRA SINGH	ADMIN	ADMIN		
ISSUED FOR: TENDOR PURPOSE			UNIT: MILIMETER	DATE: 12.05.2022	PROJECT:	INCUBATION CENTER AT DEOBHOG GARIYABAND
This drawing is the property of HUP DESIGN and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand					TITLE:	OVER HEAD WATER TANK

172

57



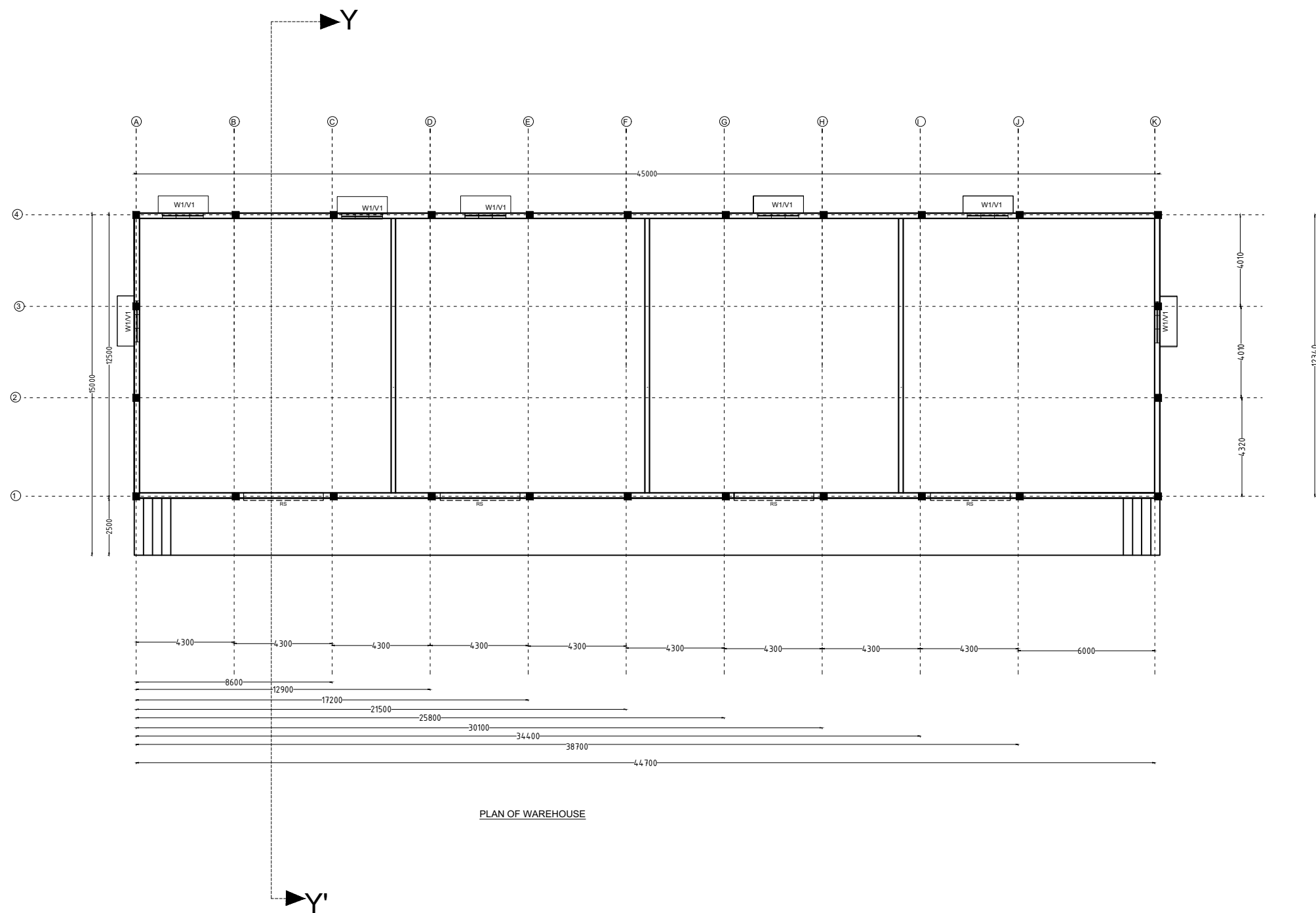
LOAD SHEET

1-Primary Processing Unit	1R 4C 16 Sqmm Ar. CU Cable 3P MCCB 100A (17 KW) 22 HP (40 AMP)
2-Chironjee	1R 4C 25 Sqmm Ar. CU Cable 3P MCCB 125A (32 KW) 43 HP (83 AMP)
3-Groundnut Oil	1R 4C 50 Sqmm Ar. CU Cable 3P MCCB 160A (53 KW) 71 HP (138 AMP)
4-Masala Unit	1R 4C 25 Sqmm Ar. CU Cable 3P MCCB 125A (25 KW) 33 HP (64 AMP)
5-Neem/Mahua/Kusum Oil	1R 4C 50 Sqmm Ar. CU Cable 3P MCCB 160A (50 KW) 66 HP (128 AMP)
6-Pulse	1R 4C 25 Sqmm Ar. CU Cable 3P MCCB 100A (27 KW) 36 HP (70 AMP)
7-Lac	1R 4C 16 Sqmm Ar. CU Cable 3P MCCB 100A (15 KW) 20 HP (40 AMP)
TOTAL LOAD -- POWER (219 KW)	
TOTAL LOAD -- LIGHT & FAN (20 KW)	
GRAND TOTAL LOAD (239 KW) (300 KVA)	

ELECTRICAL SYMBOLS LIST

HT OVERHEAD 11 KV LINE		50 MTR
LT LINE 420 V		400 MTR
SERVICE CABLE		100 MTR
	STREET LIGHT 35W	14 NO.
	LT LINE POLE 7.5 MTR. HEIGHT	17 NO.
	HT LINE POLE 12 MTR. HEIGHT	04 NO.
TRANSFORMER POLE MOUNTED TYPE	TR	Pole Mounted Sub Station 11/.433 KV Oil Immersed Transformer 315 KVA Capacity

DRG NO: DP0001 DRG CL 01 100		SHEET NO: 2 OF 2	REV. R0	SCALE: NTS	<div>SWATI Architecture landscape interior</div> <div>ARCHITECTS PLANERS ENGINEERING INTERIOR DESIGN</div> <div>282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com</div>	
DESIGNED:	DRAWN:	CHECKED:	VERIFIED:	APPROVED:	CLIENT:	CHHATTISGARH STATE MINOR FOREST PRODUSE
UPENDRA SINGH	SIMRAN SONI	UPENDRA SINGH	ADMIN	ADMIN		
ISSUED FOR:			UNIT:	DATE:	PROJECT:	INCUBATION CENTER AT DEOBHOG GARIYABAND
TENDOR PURPOSE			MILIMETER	12.05.2022		
<div>This drawing is the property of HUP DESIGN and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand</div>					TITLE:	<div>MASTER PLAN</div> <div>ELECTRICAL LAYOUT</div> <div>58</div>



PLAN OF WAREHOUSE

- LIST OF DRAWING**
WARE HOUSE
DP0001 DRG CL 01 108
1 - PLAN LAYOUT
2 - SECTION / ELEVATION
3 - COLUMN LAYOUT
4 - FOOTING LAYOUT
5 - GROUND BEAM LAYOUT
6 - BEAM LAYOUT(2.5 M ABOVE)
7 - BEAM LAYOUT (4.5 M ABOVE)
8 - TRUSS DETAIL
9 - ELECTRICAL LAYOUT

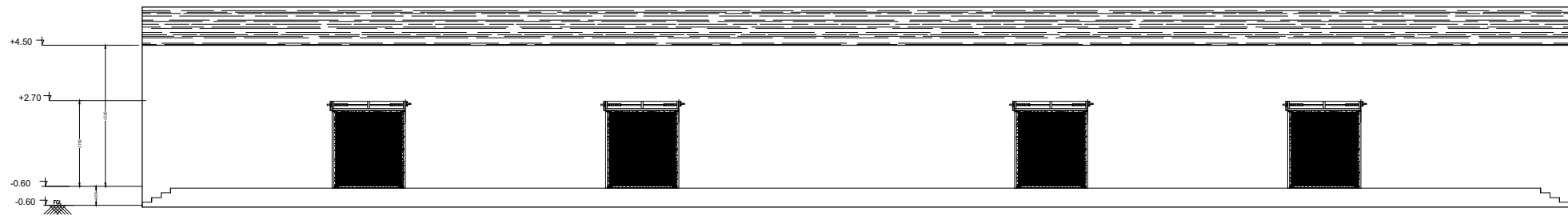
OPENING SCHEDULE

NAME	SAYMBOL
WINDOW	- W1
VENTILATOR	- V1
ROLLING SHUTTER	- R1
DOOR	- D1

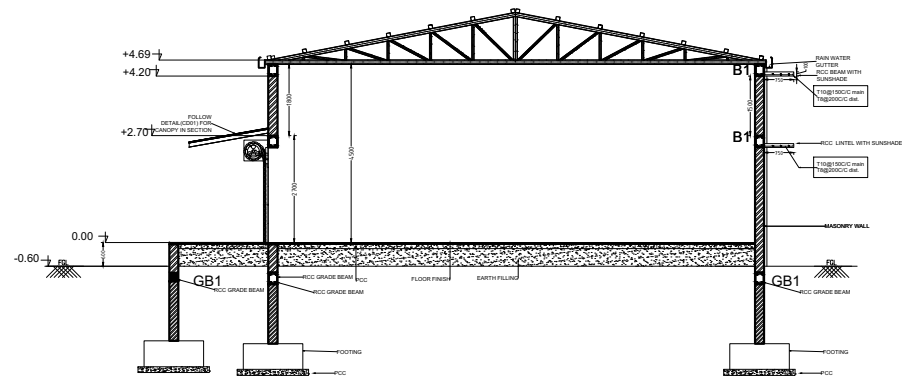
SN	SAYMBOL	NOS	SIZE
01	W1	07	1.8M X 1.5M
02	V1	07	1.8 M X 1 M
03	R1	04	2.5M X 2.4 M

DRG NO:	SHEET NO:	REV.	SCALE:
DP0001 DRG CL 01 108	1 OF 9	R0	NTS
DESIGNED:	DRAWN:	CHECKED:	VERIFIED:
UPENDRA SINGH	SIMRAN SONI	UPENDRA SINGH	ADMIN
ISSUED FOR:	UNIT:	DATE:	
TENDOR PURPOSE	MILIMETER	12.05.2022	

SWATI Architecture landscape interior ARCHITECTS PLANERS ENGINEERING INTERIOR DESIGN 282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com	
CLIENT:	CHHATTISGARH STATE MINOR FOREST PRODUCE
PROJECT:	INCUBATION CENTER AT DEOBHOG GARIYABAND
TITLE:	WAREHOUSE UNIT PLAN LAYOUT

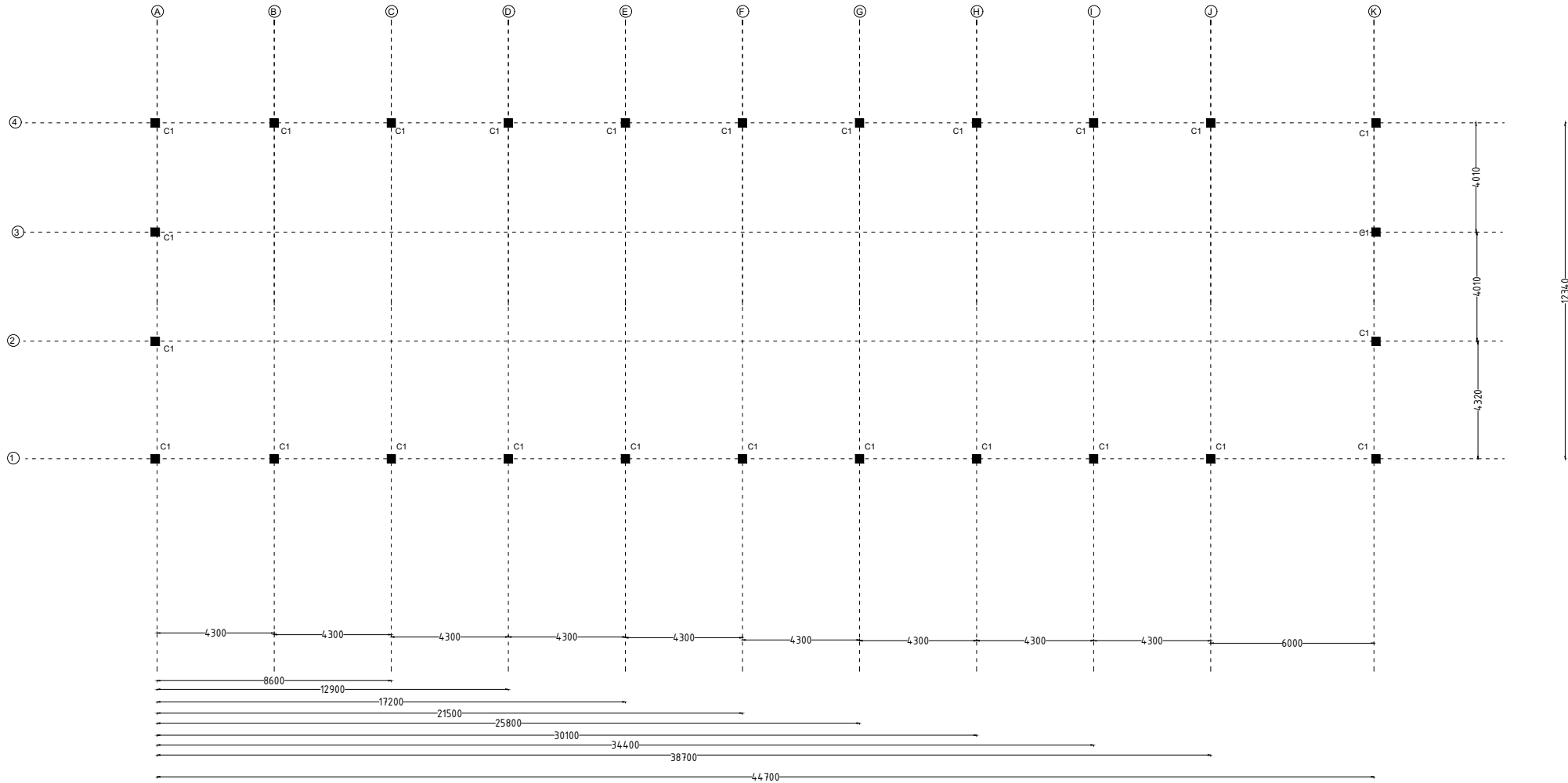


FRONT ELEVATION .

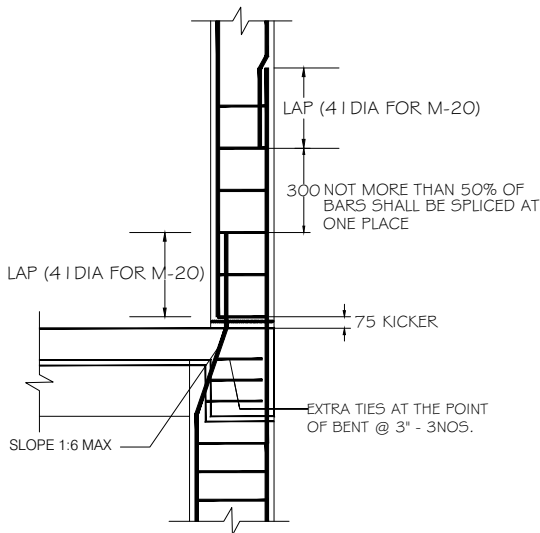


SECTION YY'.

DRG NO:					SHEET NO:		REV.		SCALE:		<div>SWATI Architecture landscape interior</div> <div>ARCHITECTS PLANERS ENGINEERING INTERIOR DESIGN</div> <div>282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com</div>				
DP0001		DRG CL 01 108			2 OF 9		R0		NTS						
DESIGNED:		DRAWN:		CHECKED:		VERIFIED:		APPROVED:		CLIENT:					
UPENDRA SINGH		SIMRAN SONI		UPENDRA SINGH		ADMIN		ADMIN		CHHATTISGARH STATE MINOR FOREST PRODUSE					
ISSUED FOR:						UNIT:		DATE:		PROJECT:					
TENDOR PURPOSE						MILIMETER		12.05.2022		INCUBATION CENTER AT DEOBHOG GARIYABAND					
This drawing is the property of HUP DESIGN and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand										TITLE:					
										WAREHOUSE UNIT SECTION / ELEVATION					
										60					







COLUMN LAYOUT



COLUMN DETAIL

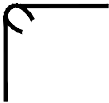
TYPICAL COLUMN DETAIL'S

COLUMN NAME	Pile/col detail	STIRRUPS	REMARKS
C1	 <div>8-T12 T8@ 200 c/c 2-T16</div>		FOUNDATION TO TERRACE
C1	 <div>4-T12 T8@ 200 c/c 1-T16</div>		TERMINATE AT GROUND LVL

GENERAL NOTES

NOTES-

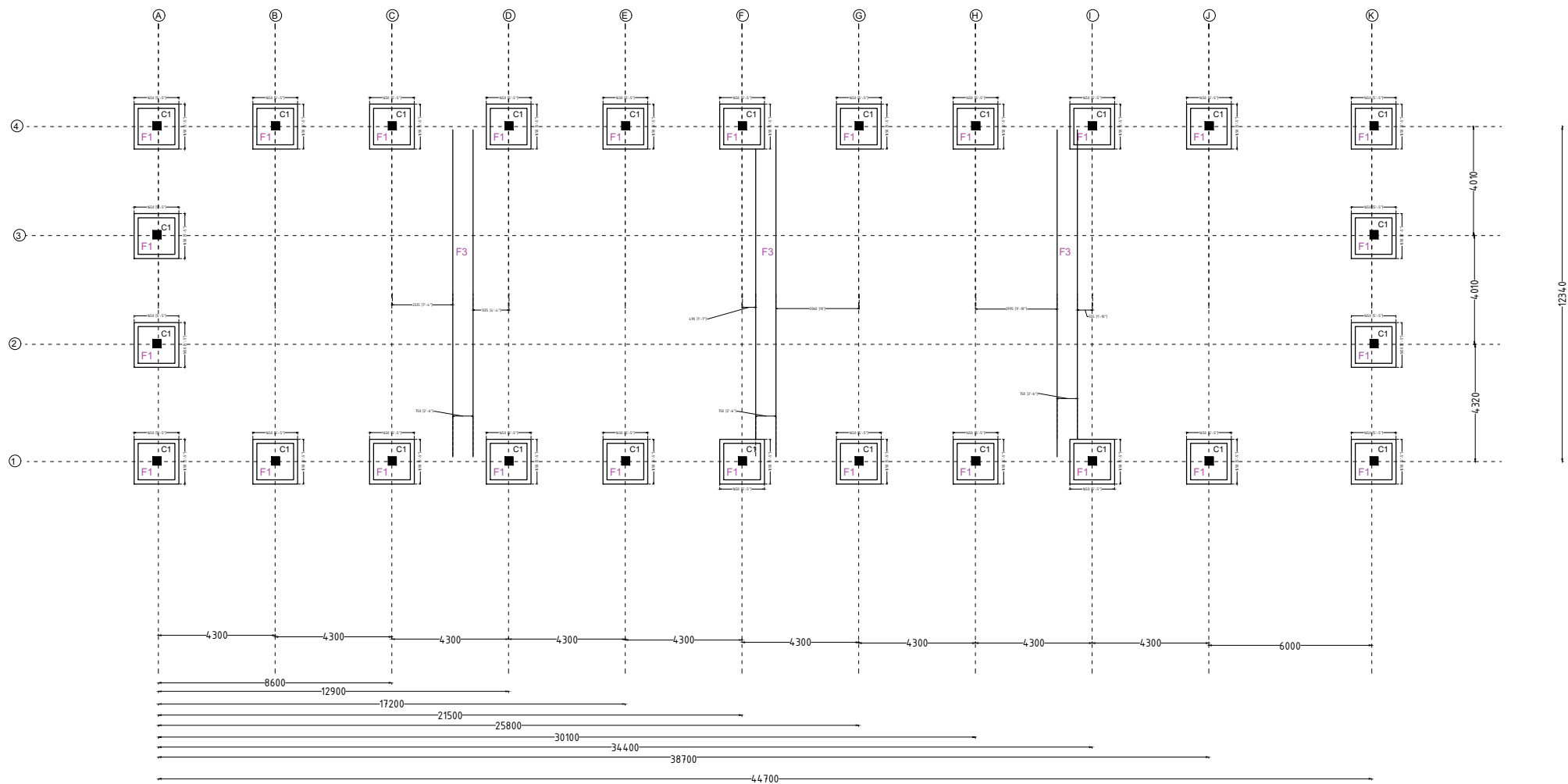
- USE - M 20 GRADE OF CONC. AS/IS 426-5000
 - USE - FE 500 GRADE OF REINF. BY CLIENT
 - PROVIDE CLEAR COVER TO MAIN REINF.
- FOUNDATION- 50MM
COLUMN - 40MM
BEAM - 25MM
SLAB - 20MM OR DIA OF BAR, WHICHEVER IS MORE,
R.C.C. WALL - 25MM
- 4.TIES SHOULD BE BEND INSIDE WITH 10# LENGTH IN BEAM & COLUMN



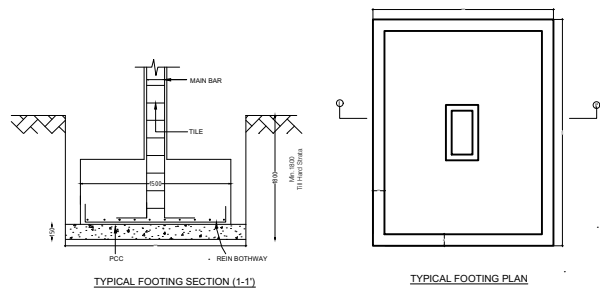
- FOLLOW - IS-456-2000 FOR R.C.C. WORK
- STRIPPING TIME FOR SHUTTERING / FORMWORK UNDER NORMAL CONDITION.

TYPE OF WORK	MINIMUM PERIOD BEFORE STRIKING FORM WORK
a) VERTICAL FORMWORK TO COLUMN, WALLS, BEAM	16-24 HOUR
b) SOFFITS FORMWORK TO SLABS (PROPS TO BE REFIXED- IMMEDIATELY AFTER REMOVAL OF FORMWORK)	3 DAYS
c) SOFFIT FORMWORK TO BEAMS (PROPS TO BE REFIXED IMMEDIATELY AFTER REMOVAL OF FORMWORK)	7DAYS
d) PROPS TO SLABS:	
1) SPANNING UP TO 4.5M	7DAYS
2) SPANNING OVER 4.5M	14 DAYS
e) PROPS TO BEAMS & ARCHES:	
1) SPANNING UP TO 6M	14DAYS
2) SPANNING OVER 6M	21DAYS
7. CURING FOR R.C.C. MEMBER MINIMUM 14 DAYS CONTINOUSELY PREFERABLE - 28 DAYS.	
8. START EARLY CURING TO AVOID SRINKAGE CRACKS, WHEN CONCRETE APPEARS TO HARDEN.	
9) PROVIDE FOLLOWING SLUMP IN CONCRETE GEN-ERALLY.	
a) SHALLOW SECTIONS, PAYMENTS, MASS CONC. LIGTH REINFORCEMENT	
SECTION IN SLAB, BEAM, WALL, COLUMN	25-75
b) HEAVILY REINFORCEMENT SECTION IN SLAB	50-100
c) HEAVILY REINFORCEMENT SECTION IN BEAMS, WALLS, COLUMNS SLIPFORM, OR PUMPED CONC.	75-100
d) TRENCH FILL, PILLING, PUMPED CONC.	100-150
10) PROVIDE LAP/ DEVELOPEMENT LENGTH IN REINFORCEMENT BARS GRADE OF CONC.	
	M20- 47Ø
	M25-41Ø
	M30-38Ø
11) REFER RELEVANT DRG. WITH THIS DRG.	
12) AVOID CORE CUTING.	

DRG NO:		SHEET NO:	REV.	SCALE:	<div>SWATI Architecture landscape interior</div> <div>ARCHITECTS PLANERS ENGINEERING INTERIOR DESIGN</div> <div>282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com</div>	
DP0001	DRG CL 01 108	3 OF 9	R0	NTS		
DESIGNED:	DRAWN:	CHECKED:	VERIFIED:	APPROVED:	CLIENT:	CHHATTISGARH STATE MINOR FOREST PRODUSE
UPENDRA SINGH	SIMRAN SONI	UPENDRA SINGH	ADMIN	ADMIN		
ISSUED FOR:		UNIT:		DATE:	PROJECT:	INCUBATION CENTER AT DEOBHOG GARIYABAND
TENDOR PURPOSE		MILIMETER		12.05.2022		
<div>176</div> <div>This drawing is the property of HUP DESIGN and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand</div>					TITLE:	<div>WAREHOUSE UNIT</div> <div>COLUMN LAYOUT</div> <div>61</div>



FOOTING LAYOUT

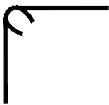


FOOTING SCHEDULE						
FE500 AND M20						
Footings	Column	PCC Size	Footings Size	Total	Steel	Steel
	Nos	X - Y mm	X - Y mm	Depth mm	to X mm	to Y mm
F1	C1	1650 X 1650	1350 X 1350	400	T10@ 175C/C	T10@ 175 C/C
F2	C2	1200 X 1200	900 X 900	230	T8@200C/C	T8@ 200 C/C
						Bottom bars only

GENERAL NOTES

NOTES-

- USE - M 20 GRADE OF CONC. AS/IS 426-5000
 - USE - FE 500 GRADE OF REINF. BY CLIENT
 - PROVIDE CLEAR COVER TO MAIN REINF.
- FOUNDATION- 50MM
COLUMN - 40MM
BEAM - 25MM
SLAB - 20MM OR DIA OF BAR, WHICHEVER IS MORE,
R.C.C. WALL - 25MM
- 4.TIES SHOULD BE BEND INSIDE WITH 10# LENGTH IN BEAM & COLUMN

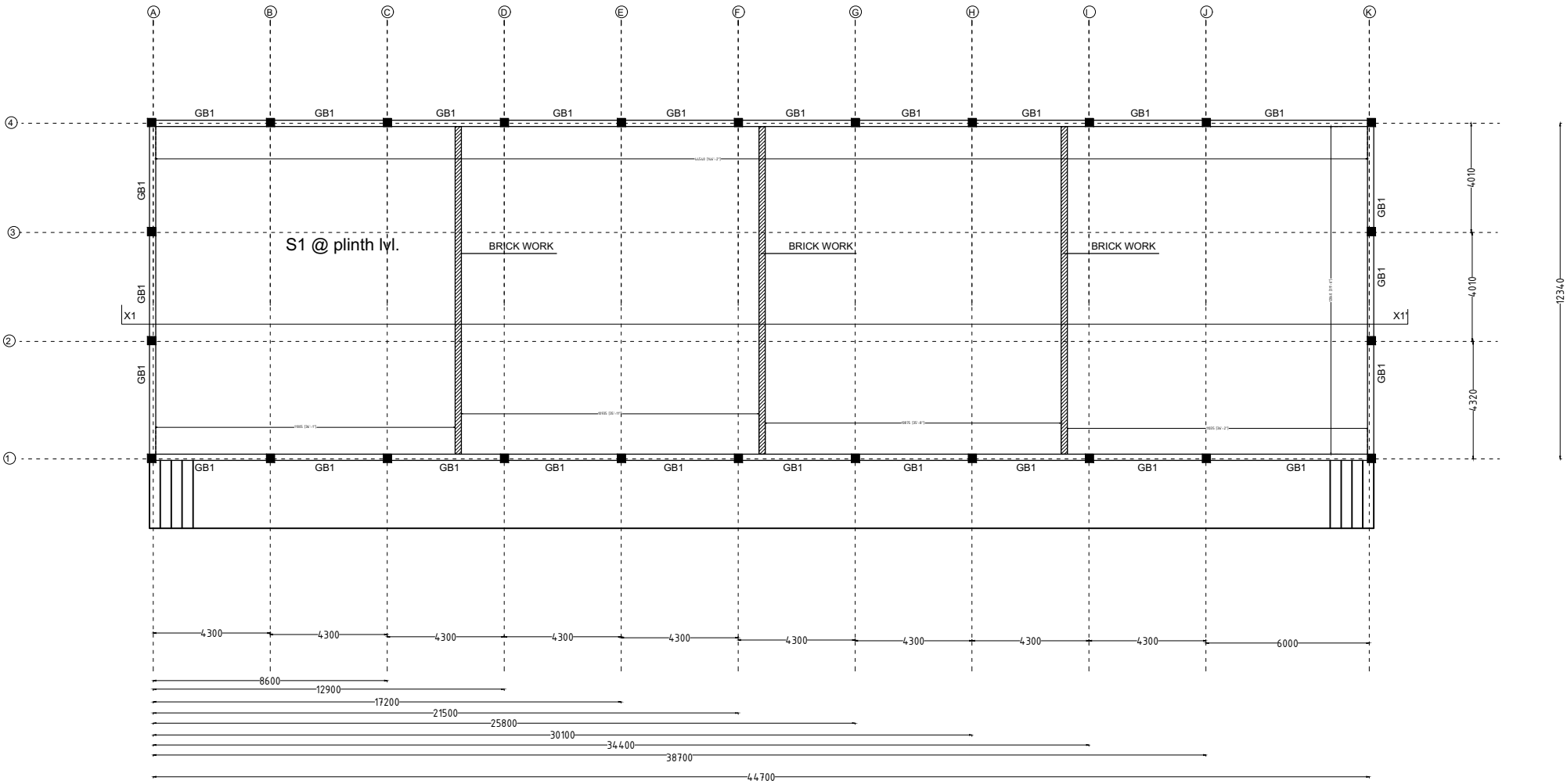


- FOLLOW - IS-456-2000 FOR R.C.C. WORK
- STRIPPING TIME FOR SHUTTERING / FORMWORK UNDER NORMAL CONDITION.

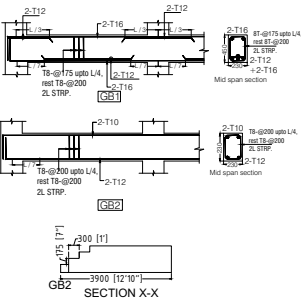
TYPE OF WORK	MINIMUM PERIOD BEFORE STRIKING FORM WORK
a) VERTICAL FORMWORK TO COLUMN, WALLS, BEAM	16-24 HOUR
b) SOFFITS FORMWORK TO SLABS (PROPS TO BE REFIXED- IMMEDIATELY AFTER REMOVAL OF FORMWORK)	3 DAYS
c) SOFFIT FORMWORK TO BEAMS (PROPS TO BE REFIXED IMMEDIATELY AFTER REMOVAL OF FORMWORK)	7DAYS
d) PROPS TO SLABS:	
1) SPANNING UP TO 4.5M	7DAYS
2) SPANNING OVER 4.5M	14 DAYS
e) PROPS TO BEAMS & ARCHES:	
1) SPANNING UP TO 6M	14DAYS
2) SPANNING OVER 6M	21DAYS

- CURING FOR R.C.C. MEMBER MINIMUM 14 DAYS CONTINUOUSLY PREFERABLE - 28 DAYS.
 - START EARLY CURING TO AVOID SRINKAGE CRACKS, WHEN CONCRETE APPEARS TO HARDEN.
 - PROVIDE FOLLOWING SLUMP IN CONCRETE GENERALLY.
 - SHALLOW SECTIONS, PAYMENTS, MASS CONC. LIGHT REINFORCEMENT SECTION IN SLAB, BEAM, WALL, COLUMN
 - HEAVILY REINFORCEMENT SECTION IN SLAB
 - HEAVILY REINFORCEMENT SECTION IN BEAMS, WALLS, COLUMNS SLIPFORM, OR PUMPED CONC.
 - TRENCH FILL, PILLING, PUMPED CONC.
 - PROVIDE LAP/ DEVELOPEMENT LENGTH IN REINFORCEMENT BARS GRADE OF CONC.
- M20- 47Ø
M25-41Ø
M30-38Ø
- REFER RELEVANT DRG. WITH THIS DRG.
 - AVOID CORE CUTING.

DRG NO:		SHEET NO:	REV.	SCALE:	<div>SWATI Architecture landscape interior</div> <div>ARCHITECTS PLANERS ENGINEERING INTERIOR DESIGN</div> <div>282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com</div>
DP0001 DRG CL 01 108		4 OF 9	R0	NTS	
DESIGNED:	DRAWN:	CHECKED:	VERIFIED:	APPROVED:	CLIENT:
UPENDRA SINGH	SIMRAN SONI	UPENDRA SINGH	ADMIN	ADMIN	CHHATTISGARH STATE MINOR FOREST PRODUCE
ISSUED FOR:			UNIT:	DATE:	PROJECT:
TENDOR PURPOSE			MILIMETER	12.05.2022	INCUBATION CENTER AT DEOBHOG GARIYABAND
<div>177</div> <div>This drawing is the property of HUP DESIGN and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand</div>					TITLE:
					<div>WAREHOUSE UNIT</div> <div>FOOTING LAYOUT</div> <div>62</div>



GROUND BEAM PLAN



GROUND BEAM SECTIONAL DETAIL

BEAM SCHEDULE FOR GROUND/ PLINTH LVL.

Beam No.	Beam Size	Top Bar	Bottom Bar	Top Bar	Bottom Bar	Top Bar	Top Bar	Top Bar	Remarks
GB1	230x375	2-T16	2-T12	2-T16	2-T12	2-T12	T8 @200C/C	T8 @175C/C	T8 @175C/C
GB2	230x230	2-T12	-	2-T10	-	-	T8 @200C/C	T8 @200C/C	T8 @200C/C

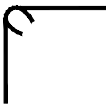
SLAB SCHEDULE FOR GROUND FLOOR LVL.

Slab Name	Thickness (mm)	Main Steel	Other Steel	Remarks
S1	150 (MESH)	T8 @ 200 c/c	T8 @ 200 c/c	All straight

GENERAL NOTES

NOTES-

- USE - M 20 GRADE OF CONC. AS/IS 426-5000
 - USE - FE 500 GRADE OF REINF. BY CLIENT
 - PROVIDE CLEAR COVER TO MAIN REINF.
- FOUNDATION- 50MM
COLUMN - 40MM
BEAM - 25MM
SLAB - 20MM OR DIA OF BAR, WHICHEVER IS MORE,
R.C.C. WALL - 25MM
- 4.TIES SHOULD BE BEND INSIDE WITH 10# LENGTH IN BEAM & COLUMN



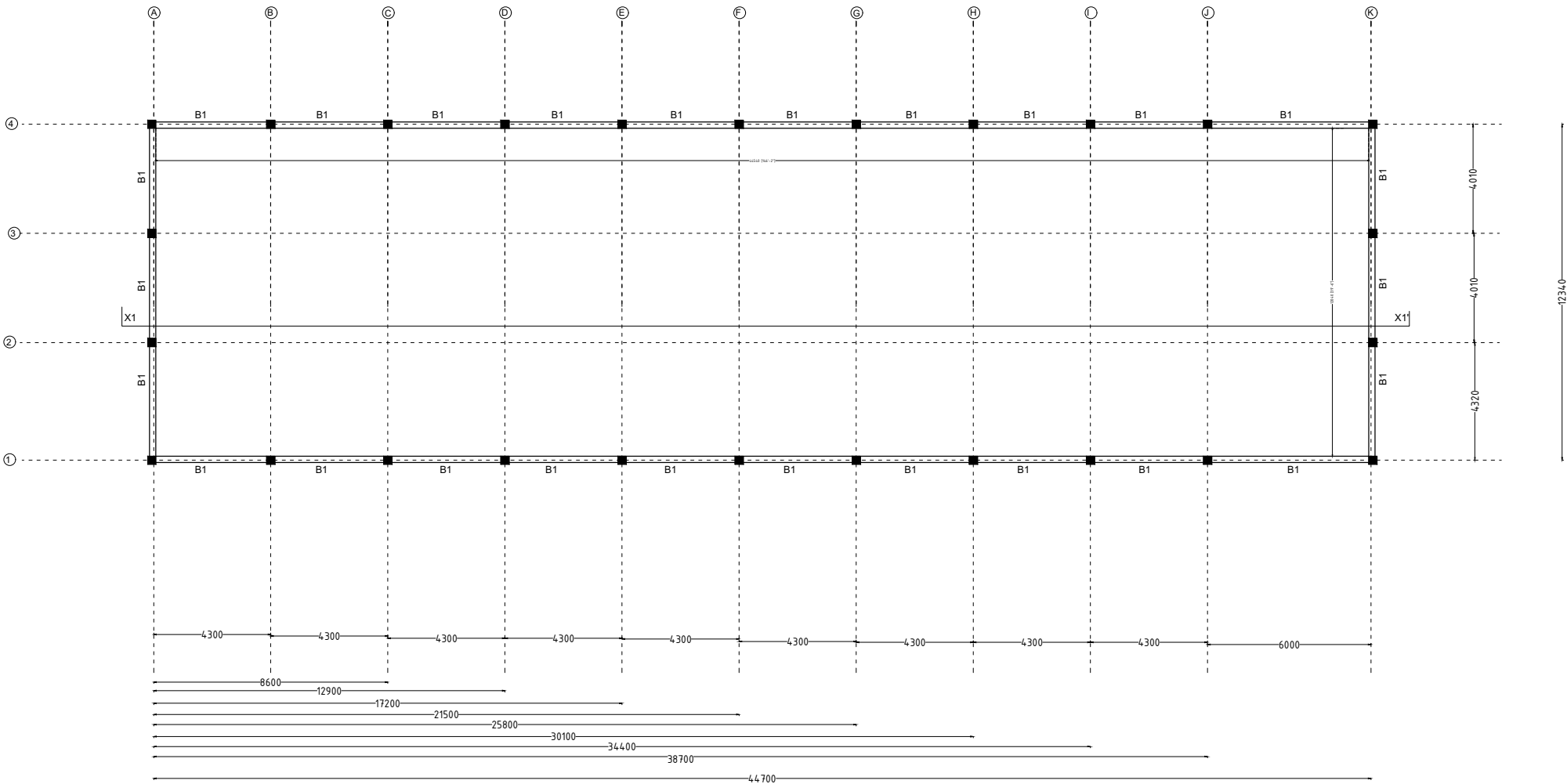
- FOLLOW - IS-456-2000 FOR R.C.C. WORK
- STRIPPING TIME FOR SHUTTERING / FORMWORK UNDER NORMAL CONDITION.

TYPE OF WORK	MINIMUM PERIOD BEFORE STRIKING FORM WORK
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- VERTICAL FORMWORK TO COLUMN, WALLS, BEAM 16-24 HOUR
- SOFFITS FORMWORK TO SLABS (PROPS TO BE REFIXED- IMMEDIATELY AFTER REMOVAL OF FORMWORK) 3 DAYS
- SOFFIT FORMWORK TO BEAMS (PROPS TO BE REFIXED IMMEDIATELY AFTER REMOVAL OF FORMWORK) 7DAYS
- PROPS TO SLABS:
 - 1) SPANNING UP TO 4.5M 7DAYS
 - 2) SPANNING OVER 4.5M 14 DAYS
- PROPS TO BEAMS & ARCHES:
 - 1) SPANNING UP TO 6M 14DAYS
 - 2) SPANNING OVER 6M 21DAYS

- CURING FOR R.C.C. MEMBER MINIMUM 14 DAYS CONTINUOUSLY PREFERABLE - 28 DAYS.
- START EARLY CURING TO AVOID SRINKAGE CRACKS, WHEN CONCRETE APPEARS TO HARDEN.
- PROVIDE FOLLOWING SLUMP IN CONCRETE GENERALLY.
 - SHALLOW SECTIONS, PAYMENTS, MASS CONC. LIGTH REINFORCEMENT SECTION IN SLAB, BEAM, WALL, COLUMN 25-75
 - HEAVILY REINFORCEMENT SECTION IN SLAB 50-100
 - HEAVILY REINFORCEMENT SECTION IN BEAMS, WALLS, COLUMNS SLIPFORM, OR PUMPED CONC. 75-100
 - TRENCH FILL, PILLING, PUMPED CONC. 100-150
- PROVIDE LAP/ DEVELOPEMENT LENGTH IN REINFORCEMENT BARS GRADE OF CONC.
 - M20- 47Ø
 - M25-41Ø
 - M30-38Ø
- REFER RELEVANT DRG. WITH THIS DRG.
- AVOID CORE CUTING.

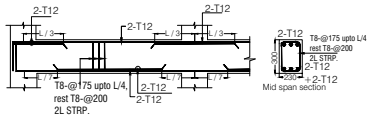
DRG NO:		SHEET NO:	REV.	SCALE:	<div>SWATI Architecture landscape interior</div> <div>ARCHITECTS PLANERS ENGINEERING INTERIOR DESIGN</div> <div>282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com</div>	
DP0001 DRG CL 01 108		5 OF 9	R0	NTS		
DESIGNED:	DRAWN:	CHECKED:	VERIFIED:	APPROVED:	CLIENT:	CHHATTISGARH STATE MINOR FOREST PRODUCE
UPENDRA SINGH	SIMRAN SONI	UPENDRA SINGH	ADMIN	ADMIN		
ISSUED FOR:			UNIT:	DATE:	PROJECT:	INCUBATION CENTER AT DEOBHOG GARIYABAND
TENDOR PURPOSE			MILIMETER	12.05.2022		
<div>178</div> <div>This drawing is the property of HUP DESIGN and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand</div>					TITLE:	<div>WAREHOUSE UNIT</div> <div>BEAM LAYOUT</div> <div>63</div>



BEAM PLAN(2.4 m ABOVE PLINTH LVL)

BEAM SCHEDULE FOR 2.4m LVL. ABOVE PLINTH

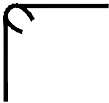
Beam	Size	Reinforcement					Other			Remarks
		Top	Bottom	Left	Right	Diagonal	Stirrups	Links	Other	
B1	230x300	2-T12	2-T12	2-T12	2-T12	2-T12	T8 @200C/C	T8 @175C/C	T8 @175C/C	SLAB THK. INCLUDED



GENERAL NOTES

NOTES-

- USE - M 20 GRADE OF CONC. AS/IS 426-5000
 - USE - FE 500 GRADE OF REINF. BY CLIENT
 - PROVIDE CLEAR COVER TO MAIN REINF.
- FOUNDATION- 50MM
COLUMN - 40MM
BEAM - 25MM
SLAB - 20MM OR DIA OF BAR, WHICHEVER IS MORE,
R.C.C. WALL - 25MM
- 4.TIES SHOULD BE BEND INSIDE WITH 10# LENGTH IN BEAM & COLUMN

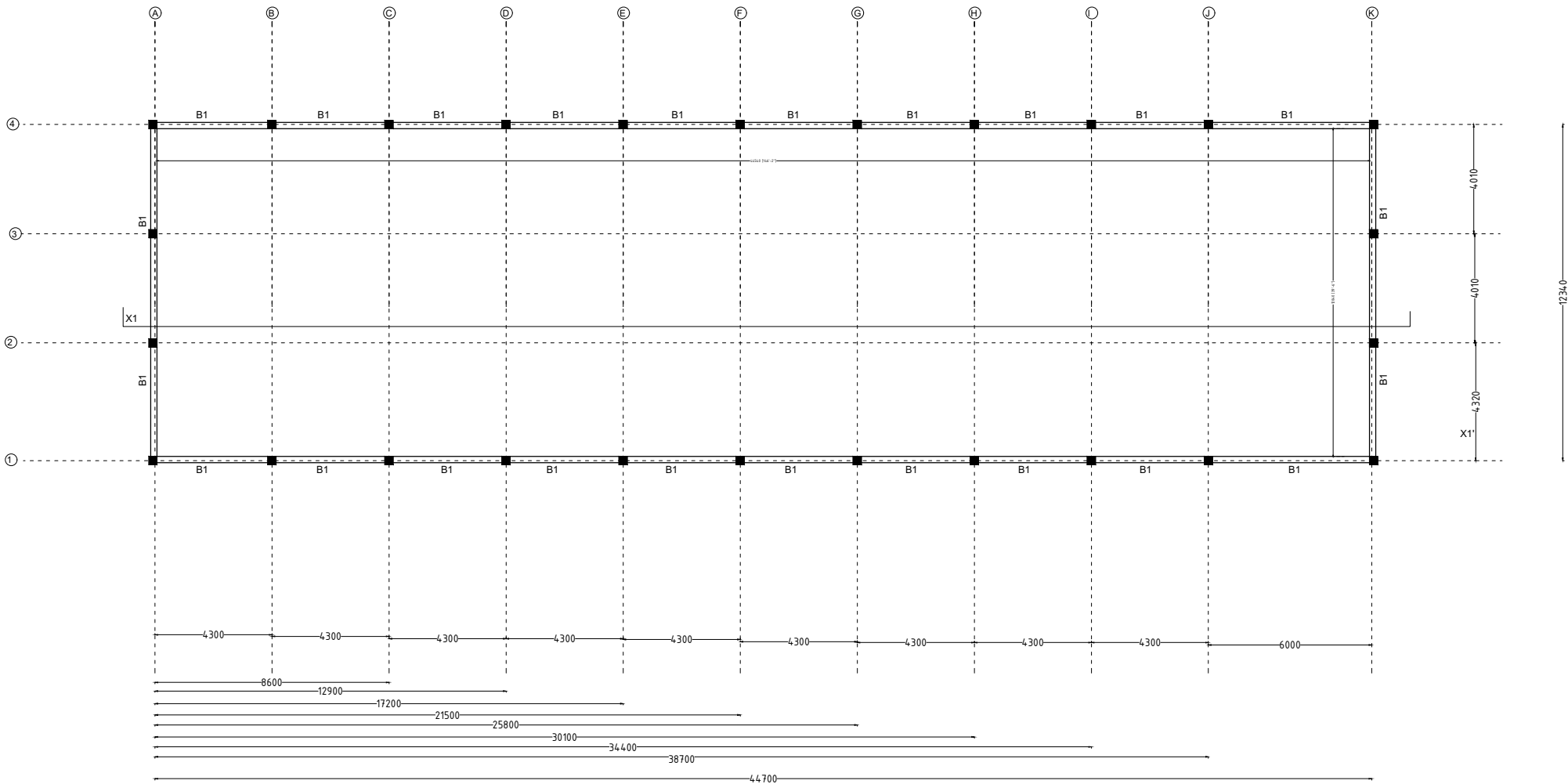


- FOLLOW - IS-456-2000 FOR R.C.C. WORK
- STRIPPING TIME FOR SHUTTERING / FORMWORK UNDER NORMAL CONDITION.

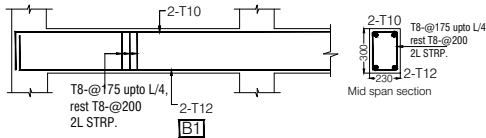
TYPE OF WORK	MINIMUM PERIOD BEFORE STRIKING FORM WORK
a) VERTICAL FORMWORK TO COLUMN, WALLS, BEAM	16-24 HOUR
b) SOFFITS FORMWORK TO SLABS (PROPS TO BE REFIXED- IMMEDIATELY AFTER REMOVAL OF FORMWORK)	3 DAYS
c) SOFFIT FORMWORK TO BEAMS (PROPS TO BE REFIXED IMMEDIATELY AFTER REMOVAL OF FORMWORK)	7DAYS
d) PROPS TO SLABS:	
1) SPANNING UP TO 4.5M	7DAYS
2) SPANNING OVER 4.5M	14 DAYS
e) PROPS TO BEAMS & ARCHES:	
1) SPANNING UP TO 6M	14DAYS
2) SPANNING OVER 6M	21DAYS

- CURING FOR R.C.C. MEMBER MINIMUM 14 DAYS CONTINOUSELY PREFERABLE - 28 DAYS.
 - START EARLY CURING TO AVOID SRINKAGE CRACKS, WHEN CONCRETE APPEARS TO HARDEN.
 - PROVIDE FOLLOWING SLUMP IN CONCRETE GEN-ERALLY.
 - a) SHALLOW SECTIONS, PAYMENTS, MASS CONC. LIGTH REINFORCEMENT SECTION IN SLAB, BEAM, WALL, COLUMN 25-75
 - b) HEAVILY REINFORCEMENT SECTION IN SLAB 50-100
 - c) HEAVILY REINFORCEMENT SECTION IN BEAMS, WALLS, COLUMNS SLIPFORM, OR PUMPED CONC. 75-100
 - d) TRENCH FILL, PILLING, PUMPED CONC. 100-150
 - 10) PROVIDE LAP/ DEVELOPEMENT LENGTH IN REINFORCEMENT BARS GRADE OF CONC.
 - M20- 47Ø
 - M25-41Ø
 - M30-38Ø
- 11) REFER RELEVANT DRG. WITH THIS DRG.
- 12) AVOID CORE CUTING.

DRG NO: DP0001 DRG CL 01 108		SHEET NO: 6 OF 9	REV. R0	SCALE: NTS	SWATI Architecture landscape interior ARCHITECTS PLANERS ENGINEERING INTERIOR DESIGN 282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com	
DESIGNED: UPENDRA SINGH		DRAWN: SIMRAN SONI	CHECKED: UPENDRA SINGH	VERIFIED: ADMIN		APPROVED: ADMIN
ISSUED FOR: TENDOR PURPOSE			UNIT: MILIMETER	DATE: 12.05.2022	PROJECT: INCUBATION CENTER AT DEOBHOG GARIYABAND	
This drawing is the property of HUP DESIGN and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand					TITLE: WAREHOUSE UNIT BEAM LAYOUT	



BEAM PLAN (4.5 ABOVE PLINTH LVL)



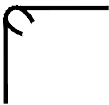
BEAM SCHEDULE FOR 4.5m LVL. ABOVE PLINTH

B1	230X300	2-T12	-	2-T10	-	-	T8 @200C/C	T8 @175C/C	T8 @175C/C

GENERAL NOTES

NOTES-

- USE - M 20 GRADE OF CONC. AS/IS 426-5000
 - USE - FE 500 GRADE OF REINF. BY CLIENT
 - PROVIDE CLEAR COVER TO MAIN REINF.
- FOUNDATION- 50MM
COLUMN - 40MM
BEAM - 25MM
SLAB - 20MM OR DIA OF BAR, WHICHEVER IS MORE,
R.C.C. WALL - 25MM
- 4.TIES SHOULD BE BEND INSIDE WITH 10# LENGTH
IN BEAM & COLUMN



- FOLLOW - IS-456-2000 FOR R.C.C. WORK
- STRIPPING TIME FOR SHUTTERING / FORMWORK UNDER NORMAL CONDITION.

TYPE OF WORK	MINIMUM PERIOD BEFORE STRIKING FORM WORK
a) VERTICAL FORMWORK TO COLUMN, WALLS, BEAM	16-24 HOUR
b) SOFFITS FORMWORK TO SLABS (PROPS TO BE REFIXED- IMMEDIATELY AFTER REMOVAL OF FORMWORK)	3 DAYS
c) SOFFIT FORMWORK TO BEAMS (PROPS TO BE REFIXED IMMEDIATELY AFTER REMOVAL OF FORMWORK)	7DAYS
d) PROPS TO SLABS:	
1) SPANNING UP TO 4.5M	7DAYS
2) SPANNING OVER 4.5M	14 DAYS
e) PROPS TO BEAMS & ARCHES:	
1) SPANNING UP TO 6M	14DAYS
2) SPANNING OVER 6M	21DAYS
7. CURING FOR R.C.C. MEMBER MINIMUM 14 DAYS CONTINOUSELY PREFERABLE - 28 DAYS.	
8. START EARLY CURING TO AVOID SRINKAGE CRACKS, WHEN CONCRETE APPEARS TO HARDEN.	
9) PROVIDE FOLLOWING SLUMP IN CONCRETE GEN-ERALLY.	
a) SHALLOW SECTIONS, PAYMENTS, MASS CONC. LIGTH REINFORCEMENT	25-75
b) HEAVILY REINFORCEMENT SECTION IN SLAB	50-100
c) HEAVILY REINFORCEMENT SECTION IN BEAMS, WALLS, COLUMNS SLIPFORM, OR PUMPED CONC.	75-100
d) TRENCH FILL, PILLING, PUMPED CONC.	100-150
10) PROVIDE LAP/ DEVELOPEMENT LENGTH IN REINFORCEMENT BARS GRADE OF CONC.	
	M20- 47Ø
	M25-41Ø
	M30-38Ø
11) REFER RELEVANT DRG. WITH THIS DRG.	
12) AVOID CORE CUTING.	

DRG NO:
DP0001 DRG CL 01 108

SHEET NO:
7 OF 9

REV.
R0

SCALE:
NTS

DESIGNED:
UPENDRA SINGH

DRAWN:
SIMRAN SONI

CHECKED:
UPENDRA SINGH

VERIFIED:
ADMIN

APPROVED:
ADMIN

ISSUED FOR:
TENDOR PURPOSE

UNIT:
MILIMETER

DATE:
12.05.2022

CLIENT:
CHHATTISGARH STATE MINOR FOREST PRODUSE

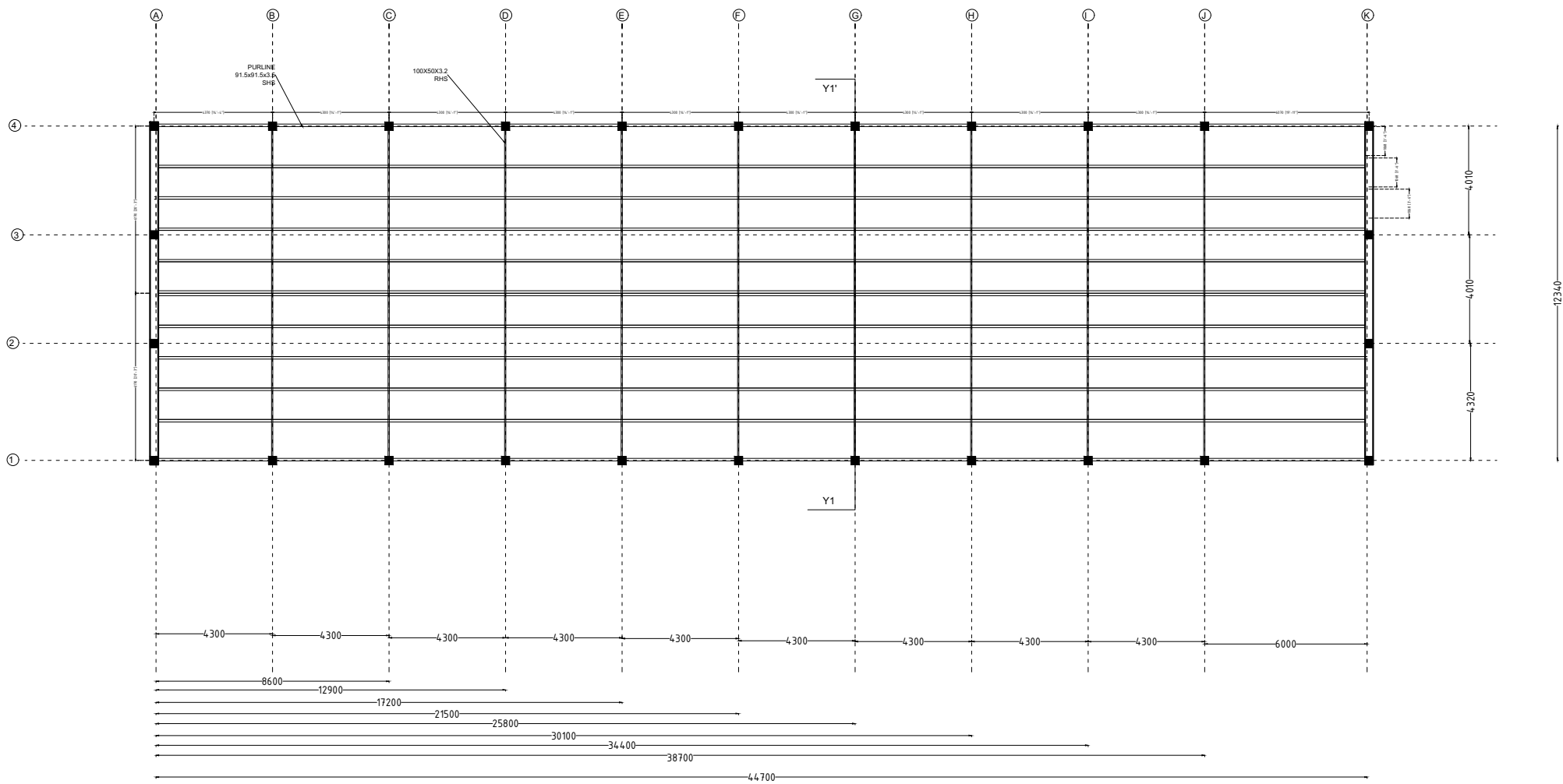
PROJECT:
INCUBATION CENTER AT DEOBHOG GARIYABAND

TITLE:
**WAREHOUSE UNIT
BEAM LAYOUT**

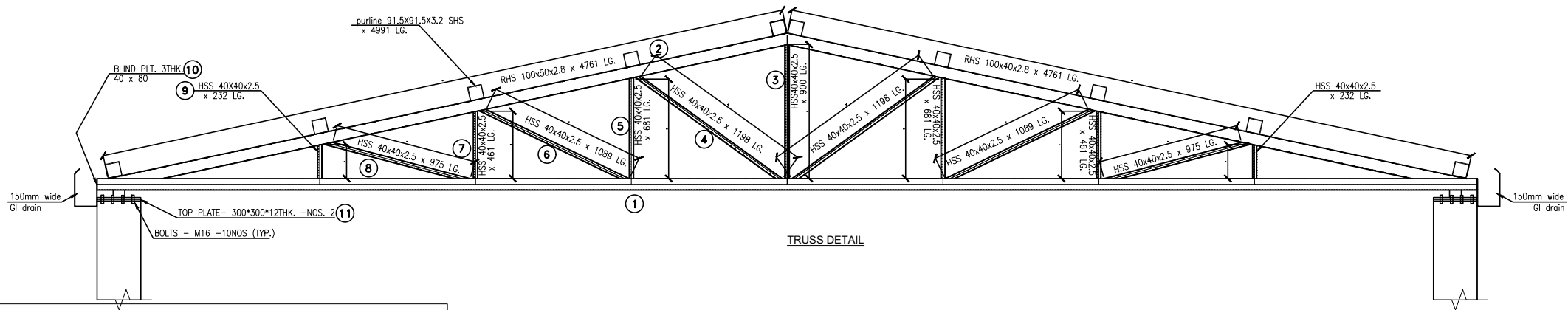
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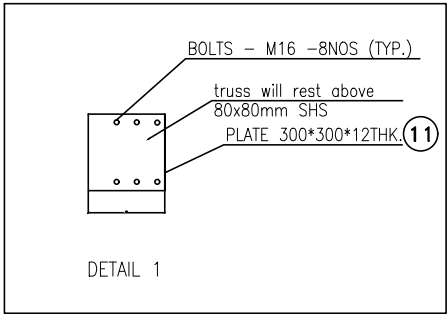
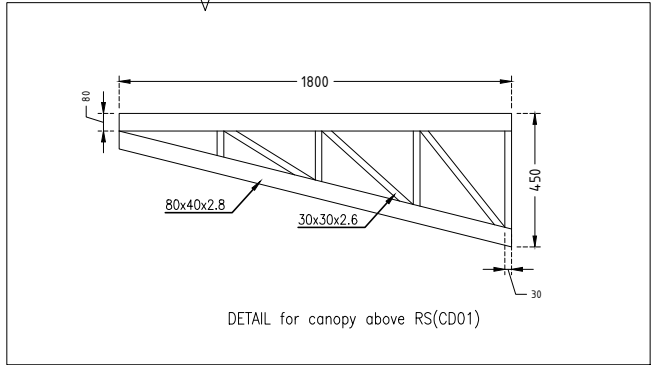
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PLAN OF ROOF LVL.



TRUSS DETAIL



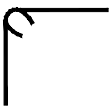
DRG NO:	SHEET NO:	REV.	SCALE:
DP0001 DRG CL 01 108	8 OF 9	R0	NTS
DESIGNED:	DRAWN:	CHECKED:	VERIFIED:
UPENDRA SINGH	SIMRAN SONI	UPENDRA SINGH	ADMIN
ISSUED FOR:	UNIT:	DATE:	ADMIN
TENDOR PURPOSE	MILIMETER	12.05.2022	

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GENERAL NOTES

NOTES-

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 2. USE - FE 500 GRADE OF REINF. BY CLIENT
 3. PROVIDE CLEAR COVER TO MAIN REINF.
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COLUMN - 40MM
BEAM - 25MM
SLAB - 20MM OR DIA OF BAR, WHICHEVER IS MORE,
R.C.C. WALL - 25MM
- 4.TIES SHOULD BE BEND INSIDE WITH 10# LENGTH IN BEAM & COLUMN



- 5.FOLLOW - IS-456-2000 FOR R.C.C. WORK
- 6.STRIPPING TIME FOR SHUTTERING / FORMWORK UNDER NORMAL CONDITION.

TYPE OF WORK	MINIMUM PERIOD BEFORE STRIKING FORM WORK
a) VERTICAL FORMWORK TO COLUMN, WALLS, BEAM	16-24 HOUR
b) SOFFITS FORMWORK TO SLABS (PROPS TO BE REFIXED- IMMEDIATELY AFTER REMOVAL OF FORMWORK)	3 DAYS
c) SOFFIT FORMWORK TO BEAMS (PROPS TO BE REFIXED IMMEDIATELY AFTER REMOVAL OF FORMWORK)	7DAYS
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2) SPANNING OVER 4.5M	14 DAYS
e) PROPS TO BEAMS & ARCHES:	
1) SPANNING UP TO 6M	14DAYS
2) SPANNING OVER 6M	21DAYS

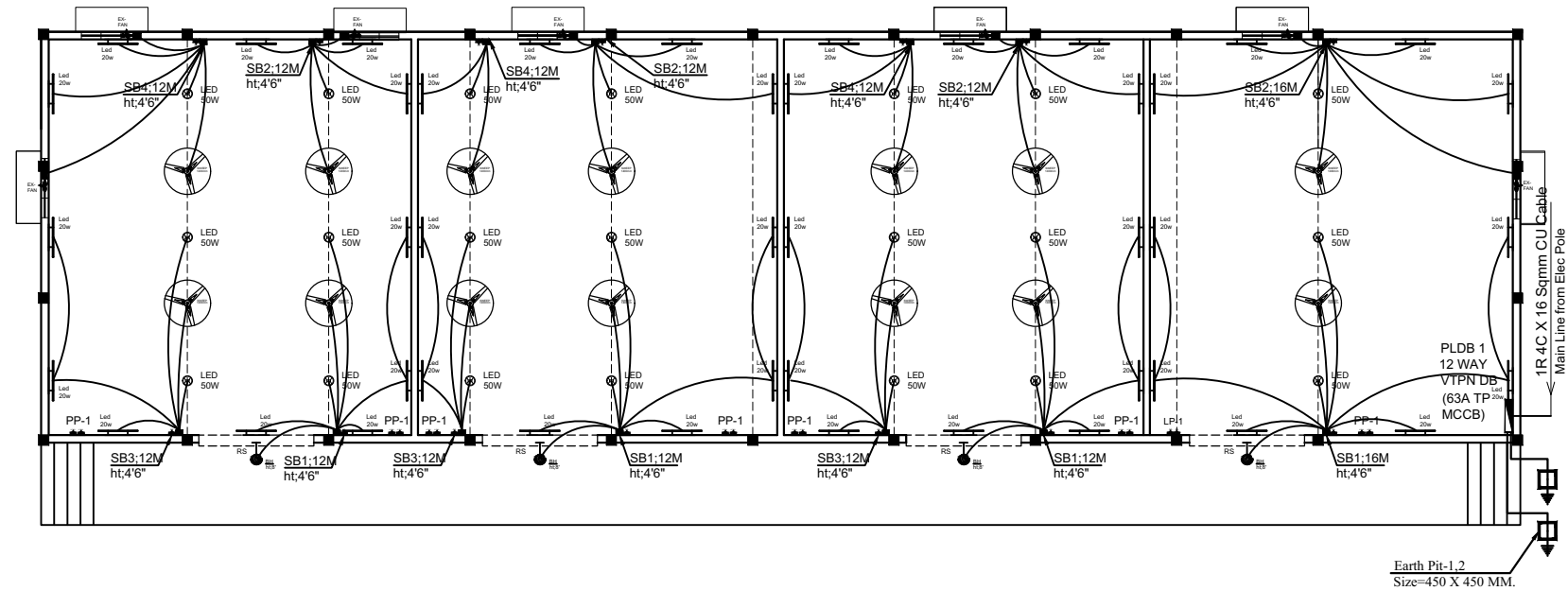
7. CURING FOR R.C.C. MEMBER MINIMUM 14 DAYS CONTINUOUSLY PREFERABLE - 28 DAYS.
8. START EARLY CURING TO AVOID SRINKAGE CRACKS, WHEN CONCRETE APPEARS TO HARDEN.
- 9) PROVIDE FOLLOWING SLUMP IN CONCRETE GENERALLY.
- a) SHALLOW SECTIONS, PAYMENTS, MASS CONC. LIGTH REINFORCEMENT SECTION IN SLAB, BEAM, WALL, COLUMN
- b) HEAVILY REINFORCEMENT SECTION IN SLAB
- c) HEAVILY REINFORCEMENT SECTION IN BEAMS, WALLS, COLUMNS SLIPFORM, OR PUMPED CONC.
- d) TRENCH FILL, PILLING, PUMPED CONC.
- 10) PROVIDE LAP/ DEVELOPEMENT LENGTH IN REINFORCEMENT BARS GRADE OF CONC.
- 11) REFER RELEVANT DRG. WITH THIS DRG.
- 12) AVOID CORE CUTING.

SWATI Architecture landscape interior
ARCHITECTS | PLANERS | ENGINEERING | INTERIOR DESIGN
282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com

CHHATTISGARH STATE MINOR FOREST PRODUSE

INCUBATION CENTER AT DEOBHOG GARIYABAND

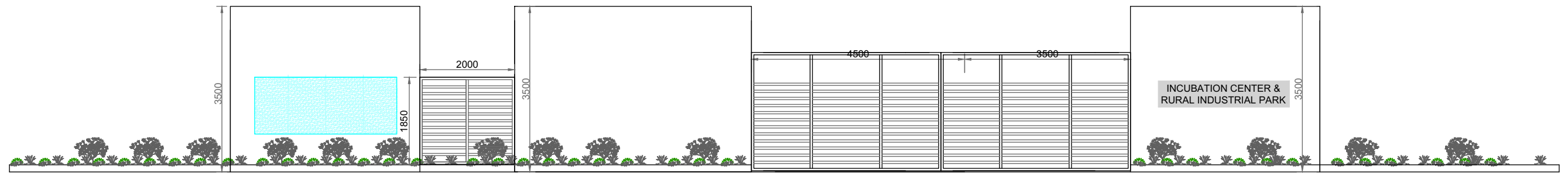
WAREHOUSE UNIT
TRUSS DETAIL



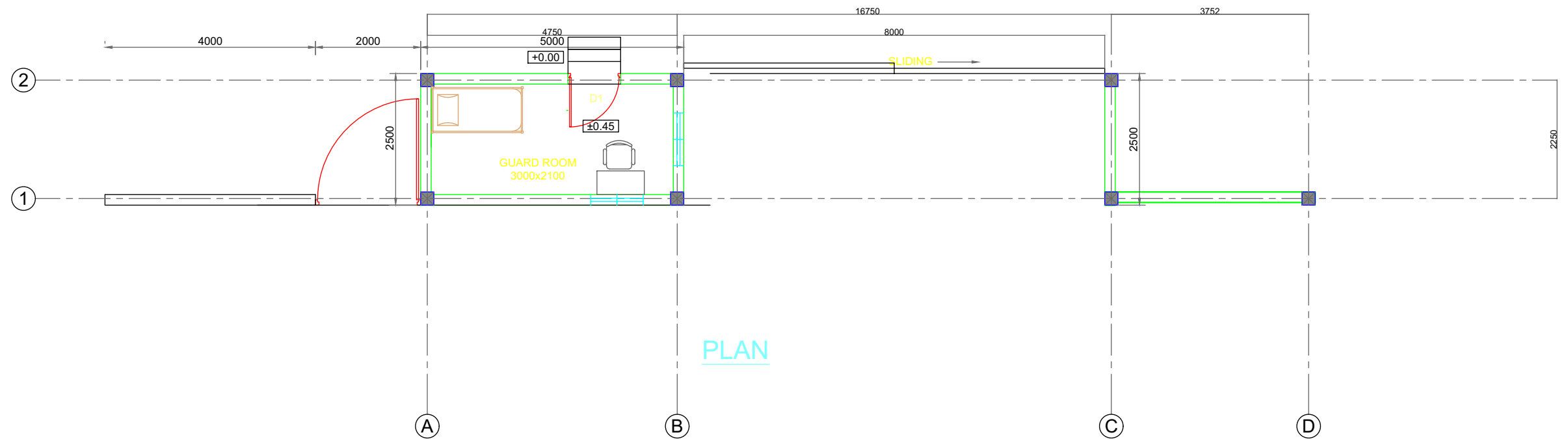
ELECTRICAL LAYOUT OF WAREHOUSE

01	LED 50W	50W FLOOD LIGHT (HIGH BAY)	21 No.
02	LED 20w	WALL LIGHT	04 No.
03	PP-1	16A SWITCH SOCKET	14 No.
04	LP-1	6A SWITCH SOCKET	02 No.
05	4WAY SPN DB	4WAY SPN DB	00 No.
06	PLDB 1	12 WAY VTPN DB	01 No.
07	1400 mm	Ceiling Fan	14 No.
08	LED 20w	20w Led Tube Light	44 No.
09	450 mm	Ex Fan	08 No.
10	LP-1	6A SWITCH SOCKET	14 No.
11	SB1	SWITCH BOARD	14 No.
12	6 X 6 SQMM	CU WIRE	
13	3 X 1.5 SQMM	CU WIRE	
14	Earth Pit-1	Size=450 X 450 MM.	2 SET

DRG NO:		SHEET NO:		REV.	SCALE:	<div>SWATI Architecture landscape interior</div> <div>ARCHITECTS PLANERS ENGINEERING INTERIOR DESIGN</div> <div>282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com</div>
DP0001 DRG CL 01 108		9 OF 9		R0	NTS	
DESIGNED:	DRAWN:	CHECKED:	VERIFIED:	APPROVED:	CLIENT:	CHHATTISGARH STATE MINOR FOREST PRODUCE
UPENDRA SINGH	SIMRAN SONI	UPENDRA SINGH	ADMIN	ADMIN		
ISSUED FOR:			UNIT:	DATE:	PROJECT:	INCUBATION CENTER AT DEOBHOG GARIYABAND
TENDOR PURPOSE			MILIMETER	12.05.2022		
<div>This drawing is the property of HUP DESIGN and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand</div>						<div>TITLE:</div> <div>WAREHOUSE UNIT ELECTRICAL LAYOUT</div> <div>67</div>

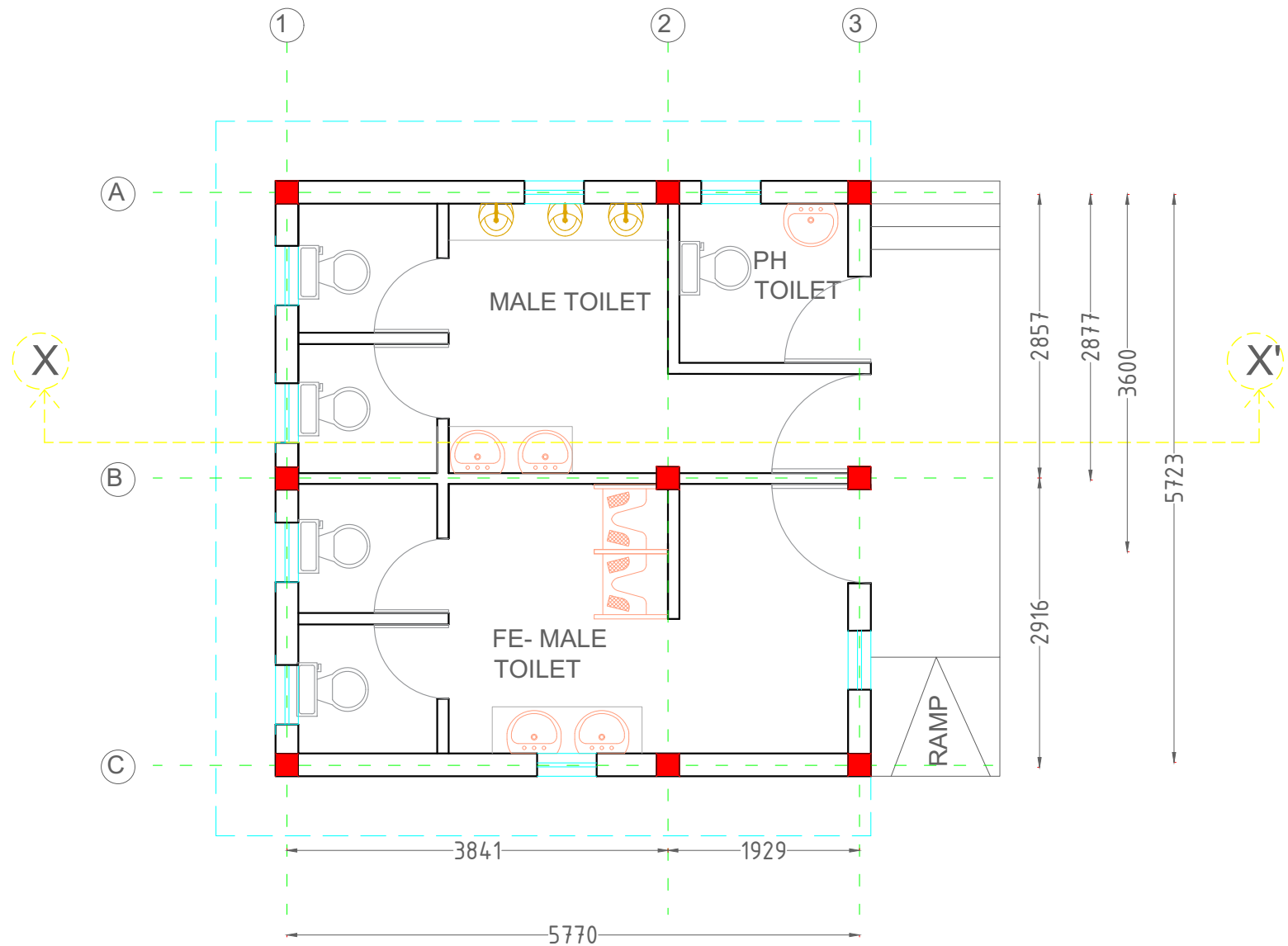


ELEVATION



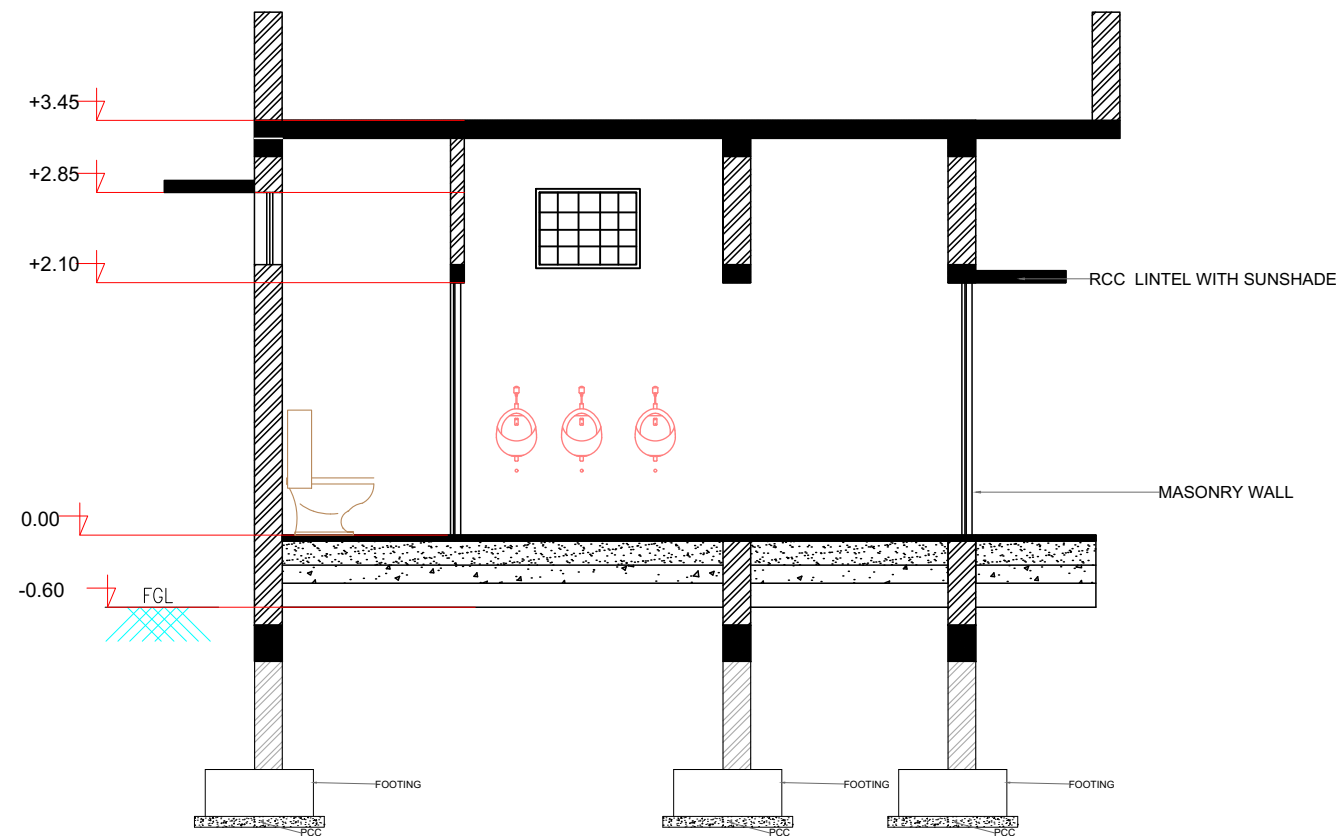
PLAN

DRG NO: SHEET NO: REV. SCALE:					<div>SWATI Architecture landscape interior</div> <div>ARCHITECTS PLANERS ENGINEERING INTERIOR DESIGN</div> <div>282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com</div>	
DP0001 DRG CL 03 101 1 OF1 R0 NTS						
DESIGNED:		DRAWN:	CHECKED:	VERIFIED:	APPROVED:	CLIENT: CHHATTISGARH STATE MINOR FOREST PRODUSE
UPENDRA SINGH SIMRAN SONI		UPENDRA SINGH	ADMIN	ADMIN	ADMIN	
ISSUED FOR:			UNIT:		DATE:	PROJECT: INCUBATION CENTER AT DEOBHOG GARIYABAND
TENDOR PURPOSE			MILIMETER		12.05.2022	
<div>This drawing is the property of HUP DESIGN and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand</div>						TITLE:
						ENTRY GATE UNIT PLAN

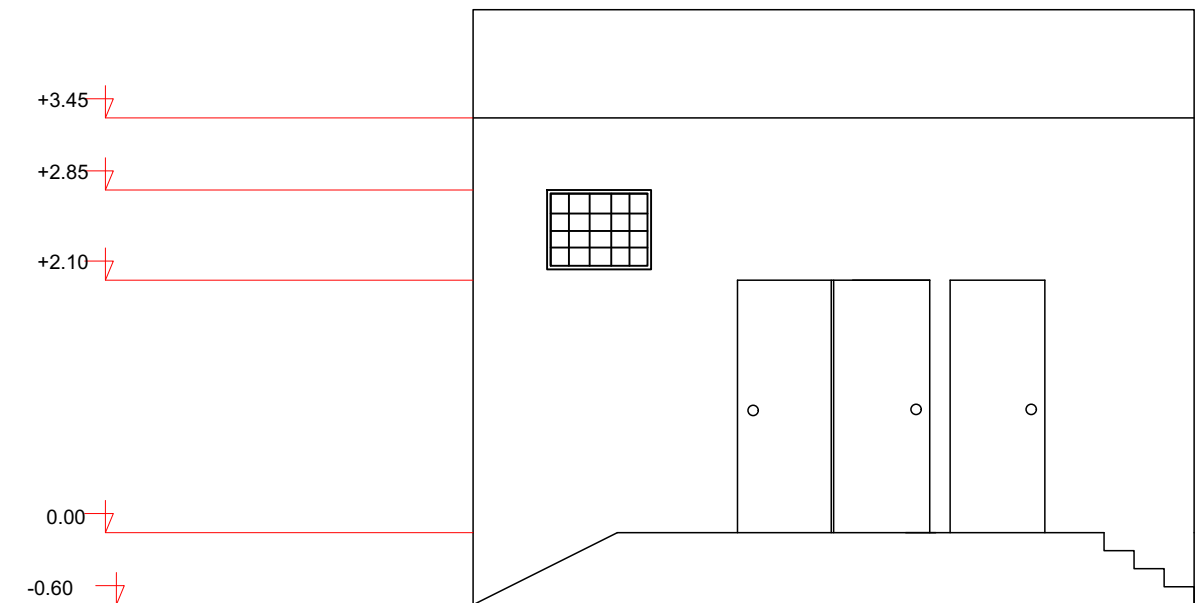


TOILET BLOCK

DRG NO: DP0001 DRG CL 02 202					SHEET NO: 1 OF7	REV. R0	SCALE: NTS	SWATI Architecture landscape interior ARCHITECTS PLANERS ENGINEERING INTERIOR DESIGN 282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com	
DESIGNED:		DRAWN:		CHECKED:	VERIFIED:	APPROVED:		CLIENT:	CHHATTISGARH STATE MINOR FOREST PRODUCE
UPENDRA SINGH		SIMRAN SONI		UPENDRA SINGH	ADMIN	ADMIN			
ISSUED FOR: TENDOR PURPOSE					UNIT: MILIMETER	DATE: 12.05.2022		PROJECT:	INCUBATION CENTER AT DEOBHOG GARIYABAND
This drawing is the property of HUP DESIGN and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand								TITLE:	TOILET UNIT PLAN LAYOUT

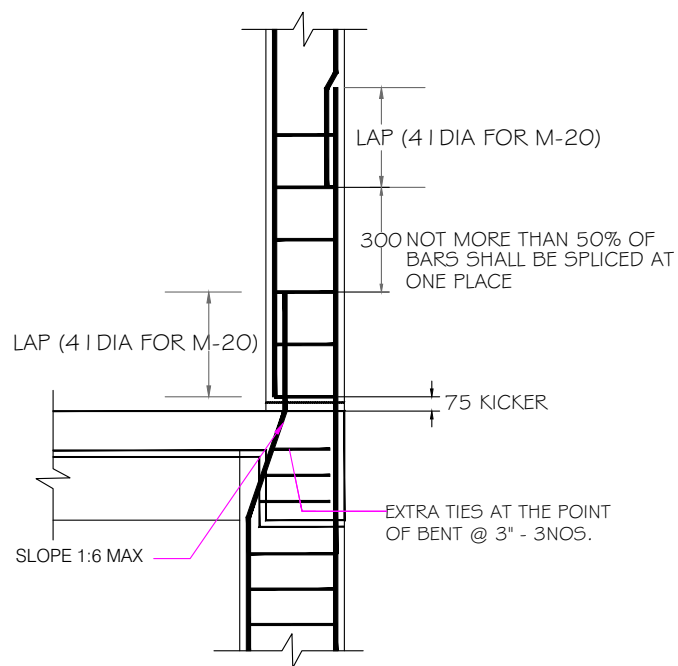


SECTION - XX'

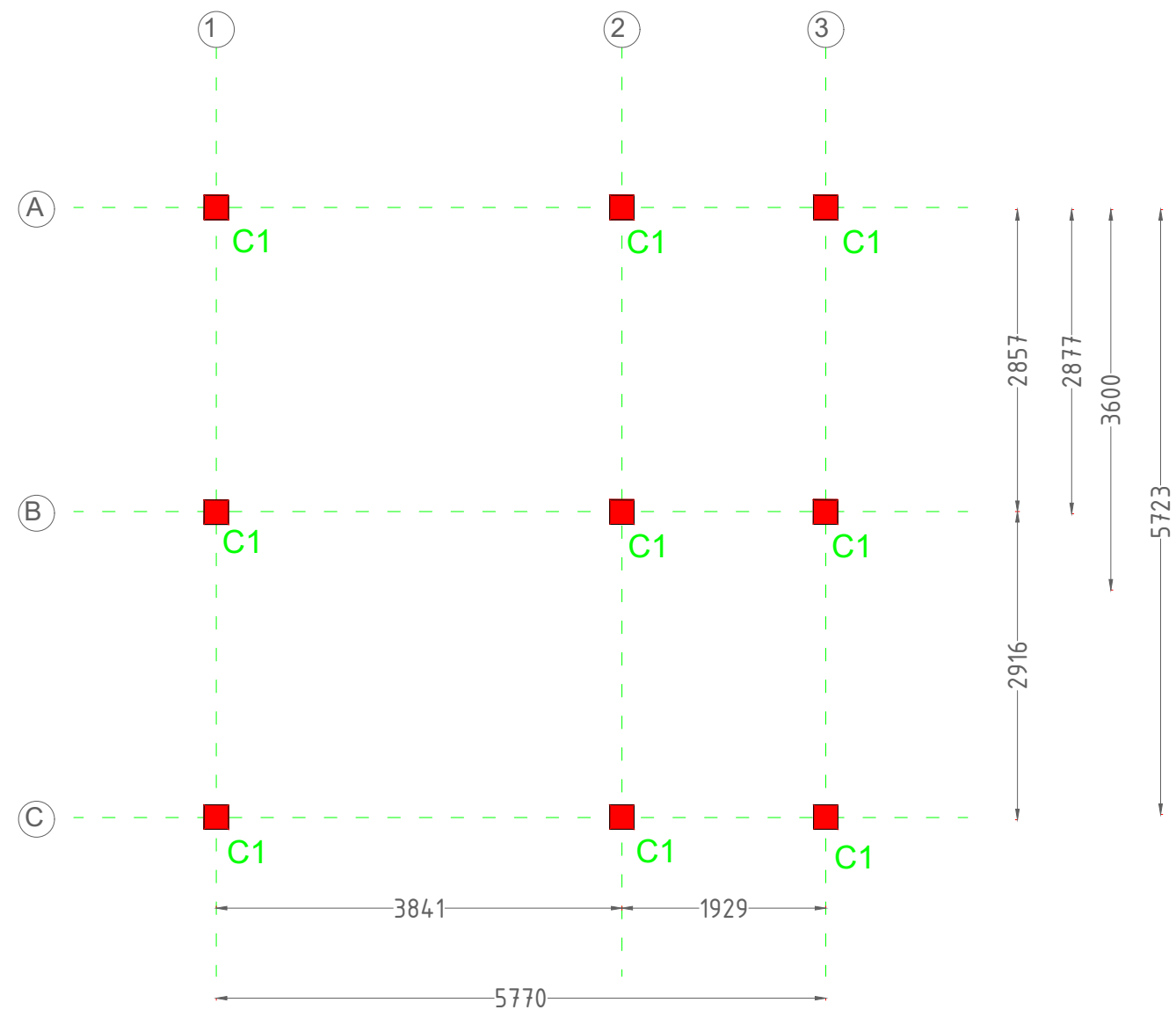


ELEVATION

DRG NO: DP0001 DRG CL 02 202	SHEET NO: 2 OF 7	REV. R0	SCALE: NTS	SWATI Architecture landscape interior ARCHITECTS PLANERS ENGINEERING INTERIOR DESIGN <small>282 , tulip , A block , Talpuri International colony , Bhubai , C.G. Email - swati.arch@outlook.com</small>	
DESIGNED: UPENDRA SINGH	DRAWN: SIMRAN SONI	CHECKED: UPENDRA SINGH	VERIFIED: ADMIN	APPROVED: ADMIN	CLIENT: CHHATTISGARH STATE MINOR FOREST PRODUCE
ISSUED FOR: TENDOR PURPOSE		UNIT: MILIMETER	DATE: 12.05.2022	PROJECT: INCUBATION CENTER AT DEOBHOG GARIYABAND	
This drawing is the property of HUP DESIGN and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand				TITLE: TOILET UNIT SECTION / ELEVATION	

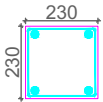



COLUMN DETAIL

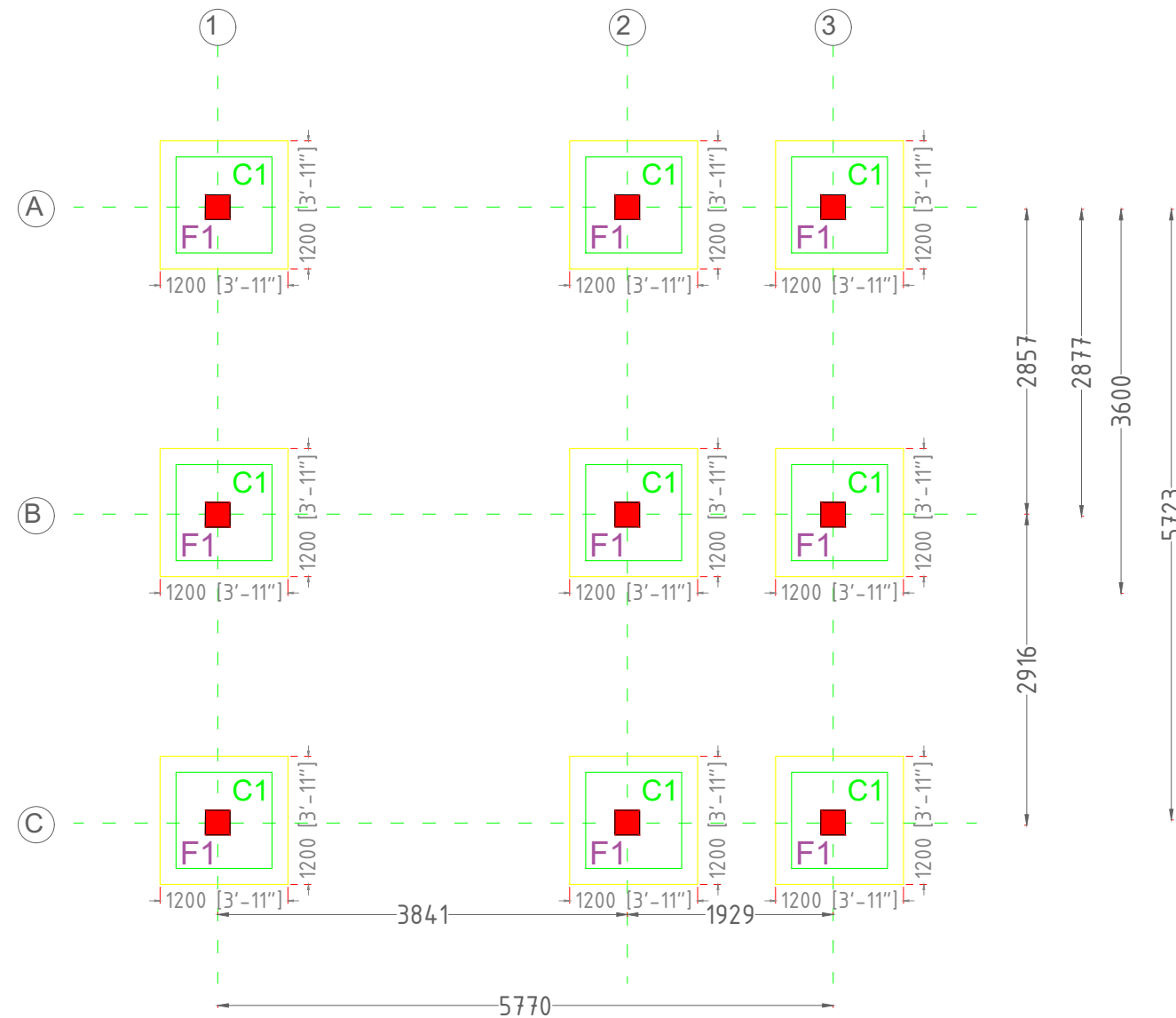


COLUMN LAYOUT

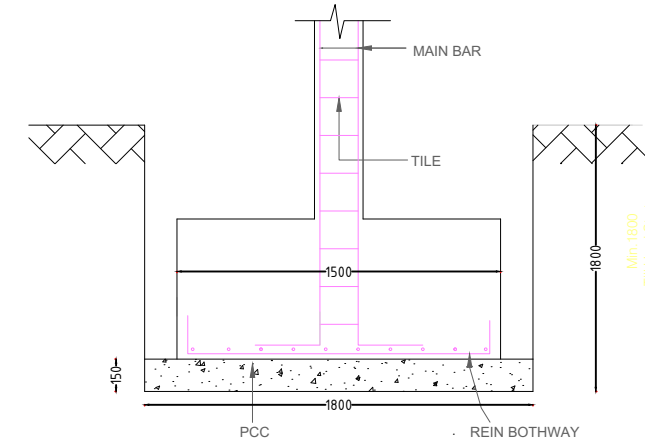
TYPICAL COLUMN DETAIL'S

COLUMN NAME	Pile/col detail	STIRRUPS	REMARKS
C1	 <div> 4-T12 T8@ 200 c/c 1-Tie </div>		TERMINATE AT GROUND LVL

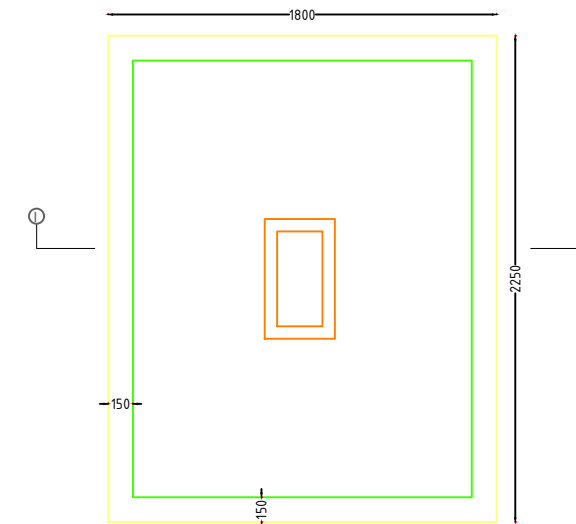
DRG NO: DP0001 DRG CL 02 202	SHEET NO: 3 OF 7	REV. R0	SCALE: NTS	SWATI Architecture landscape interior ARCHITECTS PLANERS ENGINEERING INTERIOR DESIGN 282 , tulip , A block , Talpuri International colony , Bhubai , C.G. Email - swati.arch@outlook.com	
DESIGNED: UPENDRA SINGH	DRAWN: SIMRAN SONI	CHECKED: UPENDRA SINGH	VERIFIED: ADMIN	APPROVED: ADMIN	CLIENT: CHHATTISGARH STATE MINOR FOREST PRODUSE
ISSUED FOR: TENDOR PURPOSE		UNIT: MILIMETER	DATE: 12.05.2022	PROJECT: INCUBATION CENTER AT DEOBHOG GARIYABAND	
This drawing is the property of HUP DESIGN and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand				TITLE: TOILET UNIT COLUMN LAYOUT	



FOOTING LAYOUT



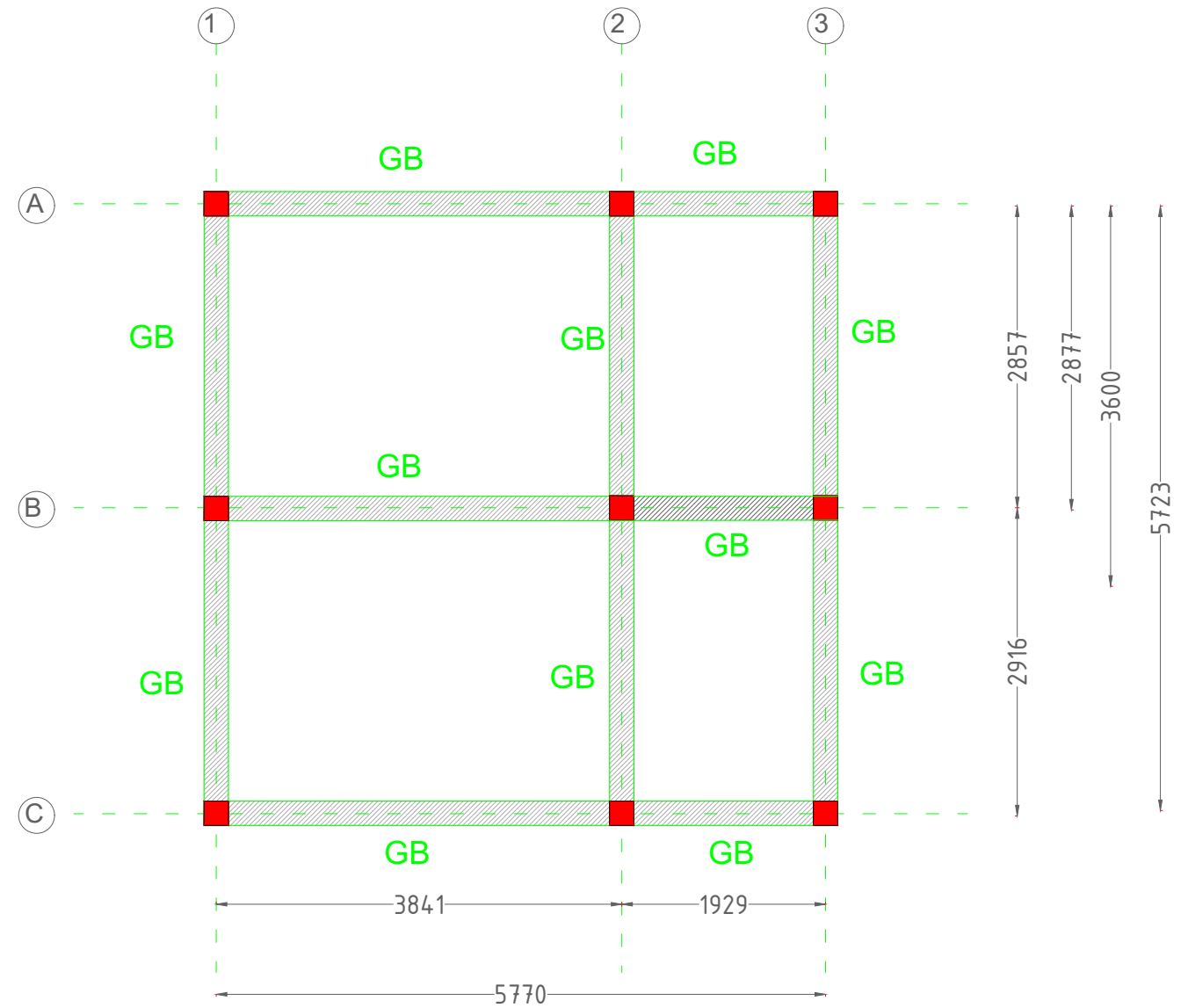
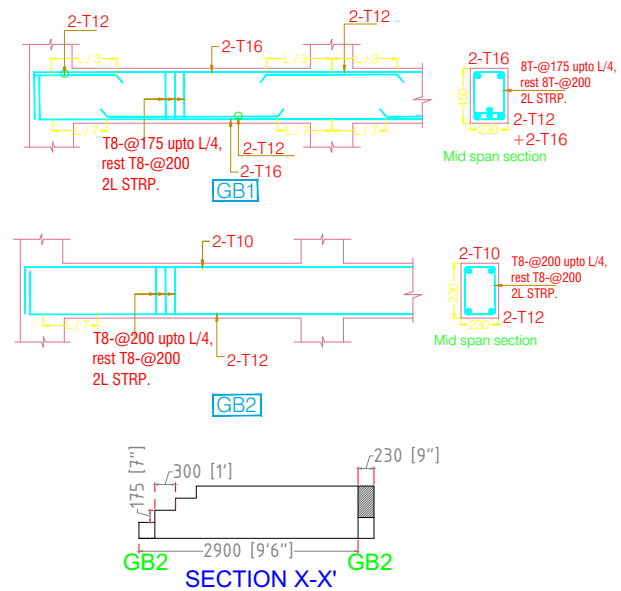
TYPICAL FOOTING SECTION (1-1')



TYPICAL FOOTING PLAN

FOOTING SCHEDULE FE500 AND M20							
Footings	Column	PCC Size	Footing Size	Total	Steel	Steel	Remarks
	Nos	X - Y mm	X - Y mm	Depth mm	to X mm	to Y mm	
F1	C1	1200 X 1200	900 X 900	230	T8@200C/C	T8@ 200 C/C	Bottom bars only

DRG NO: DP0001 DRG CL 02 202		SHEET NO: 4 OF7		REV. R0	SCALE: NTS	SWATI Architecture landscape interior ARCHITECTS PLANERS ENGINEERING INTERIOR DESIGN 282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com	
DESIGNED:	DRAWN:	CHECKED:	VERIFIED:	APPROVED:	CLIENT: CHHATTISGARH STATE MINOR FOREST PRODUSE		
UPENDRA SINGH SIMRAN SONI		UPENDRA SINGH		ADMIN	ADMIN		
ISSUED FOR: TENDOR PURPOSE		UNIT: MILIMETER		DATE: 12.05.2022	PROJECT: INCUBATION CENTER AT DEOBHOG GARIYABAND		
This drawing is the property of HUP DESIGN and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand					TITLE: TOILET UNIT FOOTING LAYOUT		



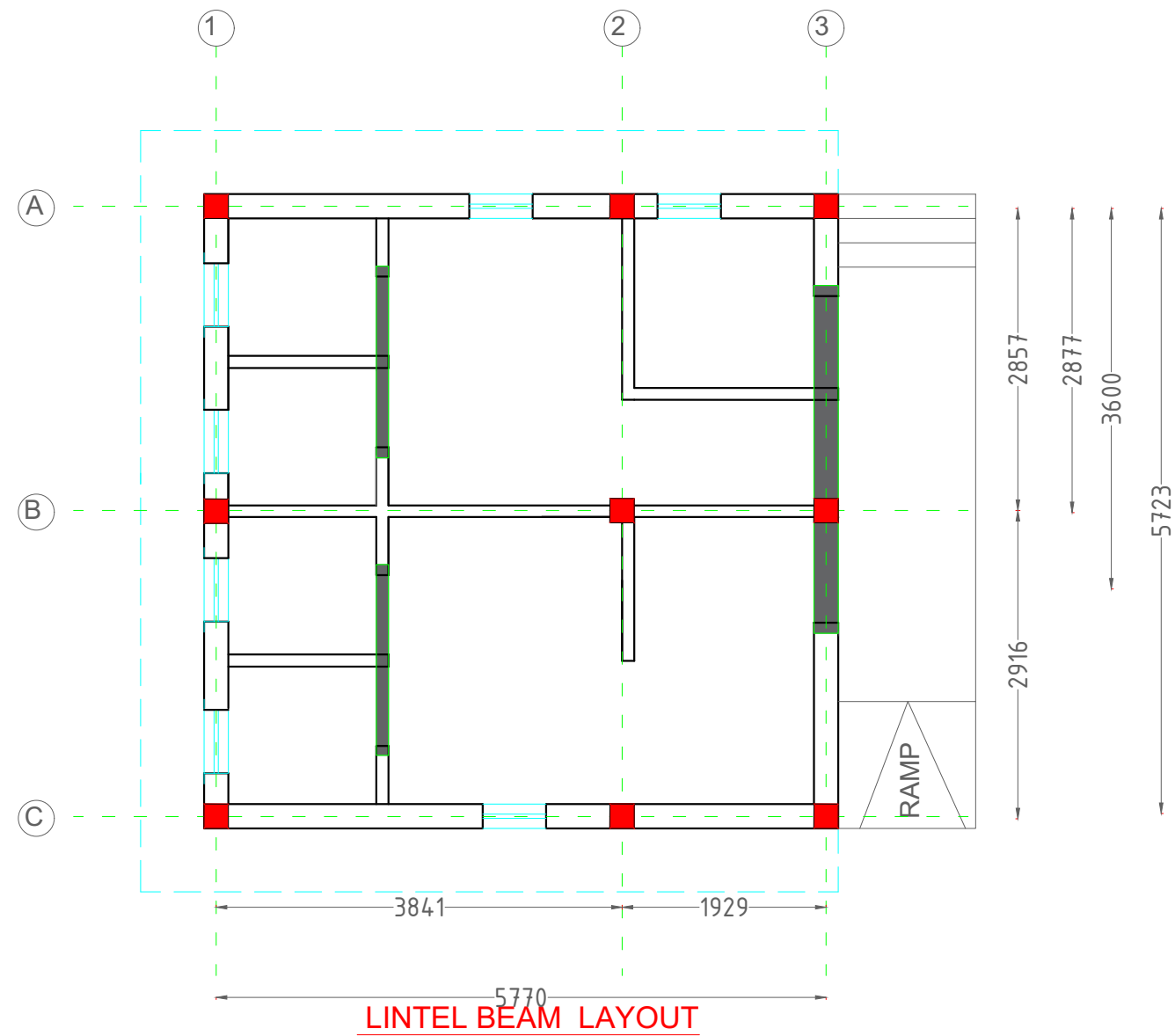
BEAM SCHEDULE FOR GROUND/ PLINTH LVL.

Beam ID	Beam Size	Top Reinforcement	Bottom Reinforcement	Notes
GB1	230X230	2-T12	2-T10	T8 @200C/C T8 @200C/C T8 @200C/C SLAB THK. INCLUDED

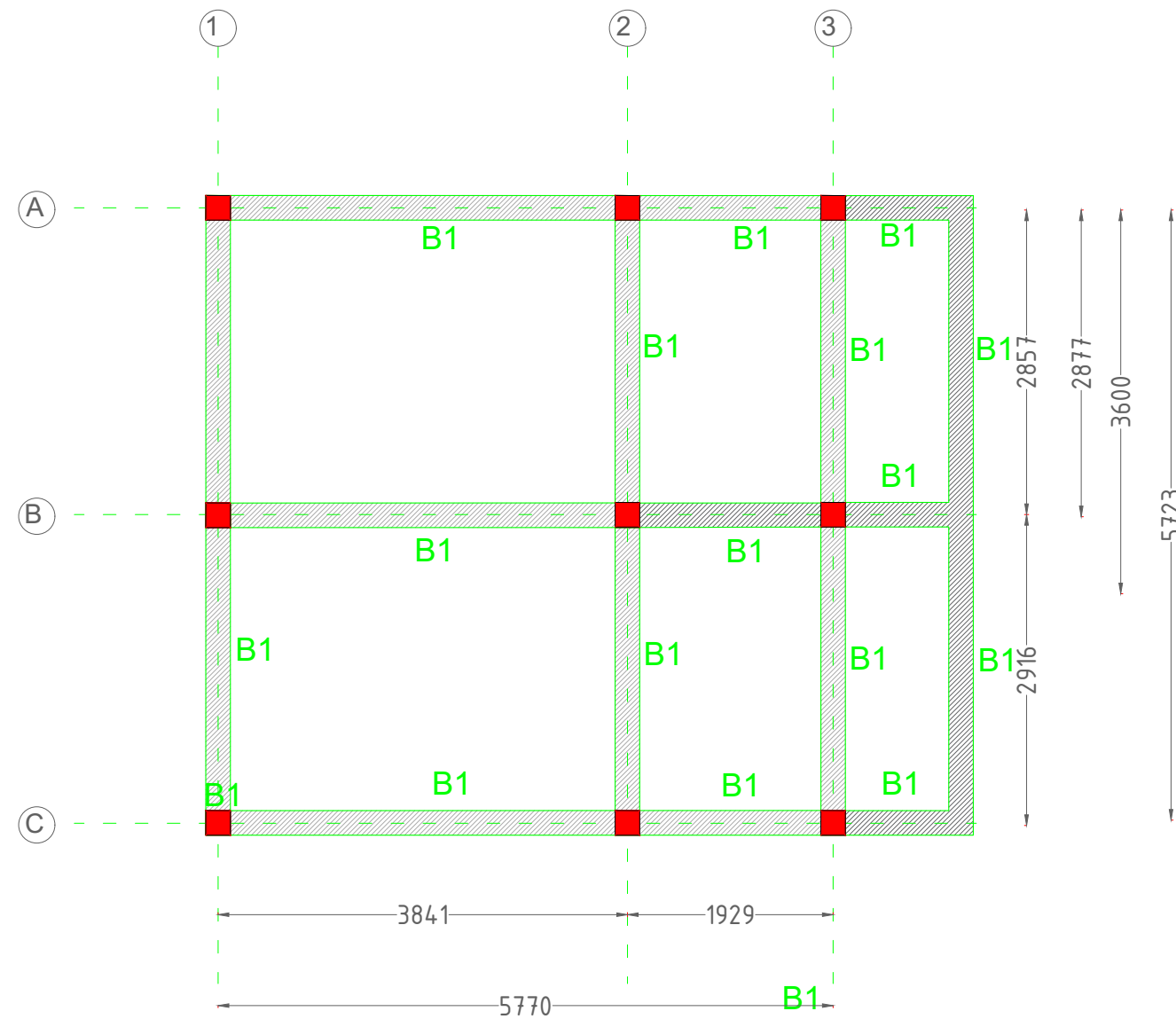
SLAB SCHEDULE FOR GROUND FLOOR LVL.

SLAB NAME	THICKNESS (mm)	Main Steel	Other Steel	remarks
S1	150 (MESH)	T8 @ 200 c/c	T8 @ 200 c/c	All straight

DRG NO: DP0001 DRG CL 02 202	SHEET NO: 4 OF 7	REV. R0	SCALE: NTS	SWATI Architecture landscape interior ARCHITECTS PLANERS ENGINEERING INTERIOR DESIGN 282, tulip, A block, Talpuri International colony, Bhubaneswar, C.G. Email - swati.arch@outlook.com	
DESIGNED: UPENDRA SINGH	DRAWN: SIMRAN SONI	CHECKED: UPENDRA SINGH	VERIFIED: ADMIN	APPROVED: ADMIN	CLIENT: CHHATTISGARH STATE MINOR FOREST PRODUCE
ISSUED FOR: TENDOR PURPOSE		UNIT: MILIMETER	DATE: 12.05.2022	PROJECT: INCUBATION CENTER AT DEOBHOG GARIYABAND	
This drawing is the property of HUP DESIGN and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand				TITLE: TOILET UNIT GROUND BEAM LAYOUT	

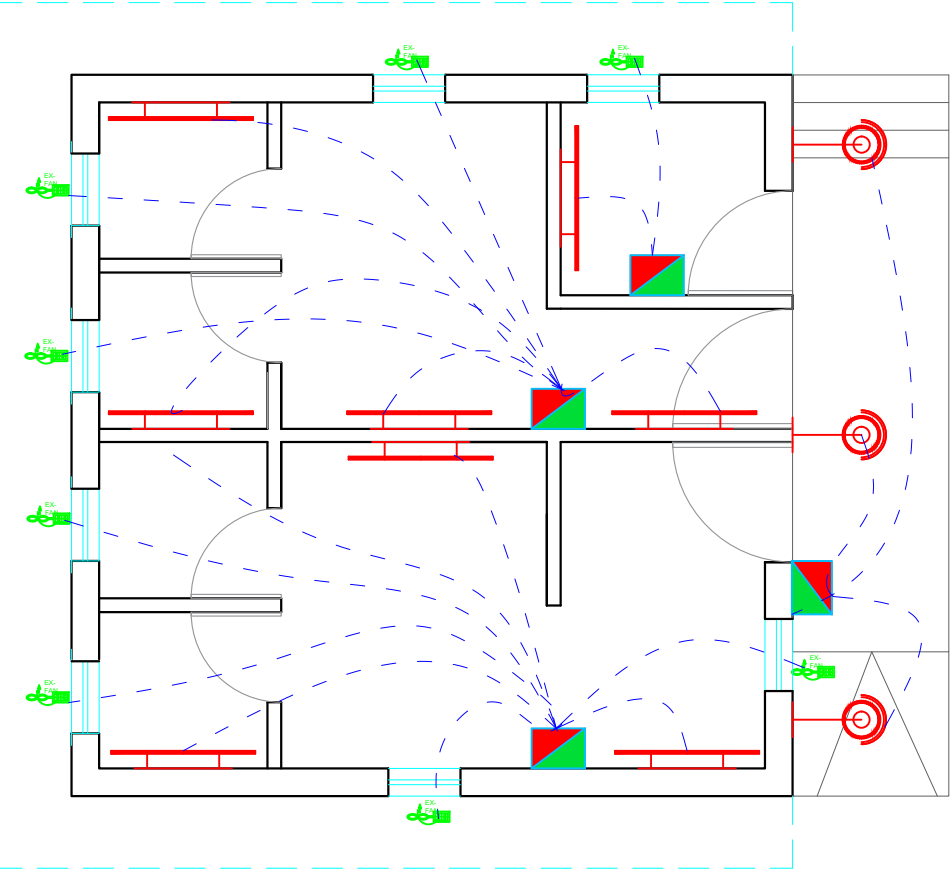






DRG NO: SHEET NO: REV. SCALE:					<div>SWATI Architecture landscape interior</div> <div>ARCHITECTS PLANERS ENGINEERING INTERIOR DESIGN</div> <div>282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com</div>			
DP0001 DRG CL 02 202 6 OF7 R0 NTS								
DESIGNED:		DRAWN:		CHECKED:	VERIFIED:	APPROVED:	CLIENT:	
UPENDRA SINGH		SIMRAN SONI		UPENDRA SINGH		ADMIN	ADMIN	CHHATTISGARH STATE MINOR FOREST PRODUSE
ISSUED FOR:				UNIT:		DATE:	PROJECT:	
TENDOR PURPOSE				MILIMETER		12.05.2022	INCUBATION CENTER AT DEOBHOG GARIYABAND	
<div>This drawing is the property of HUP DESIGN and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand</div>							TITLE:	
							<div>TOILET UNIT</div> <div>LINTEL BEAM</div>	



BEAM LAYOUT(TOP LEVEL)

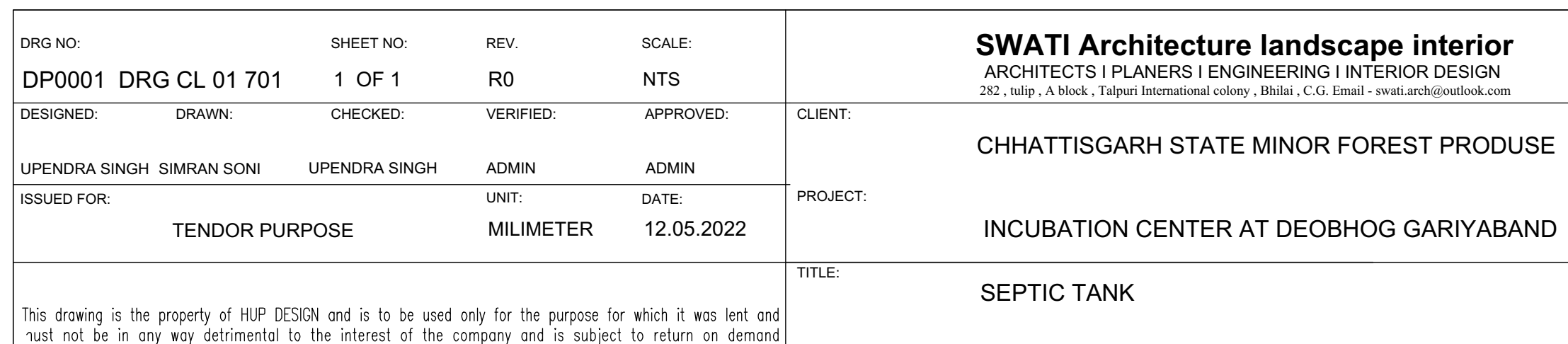
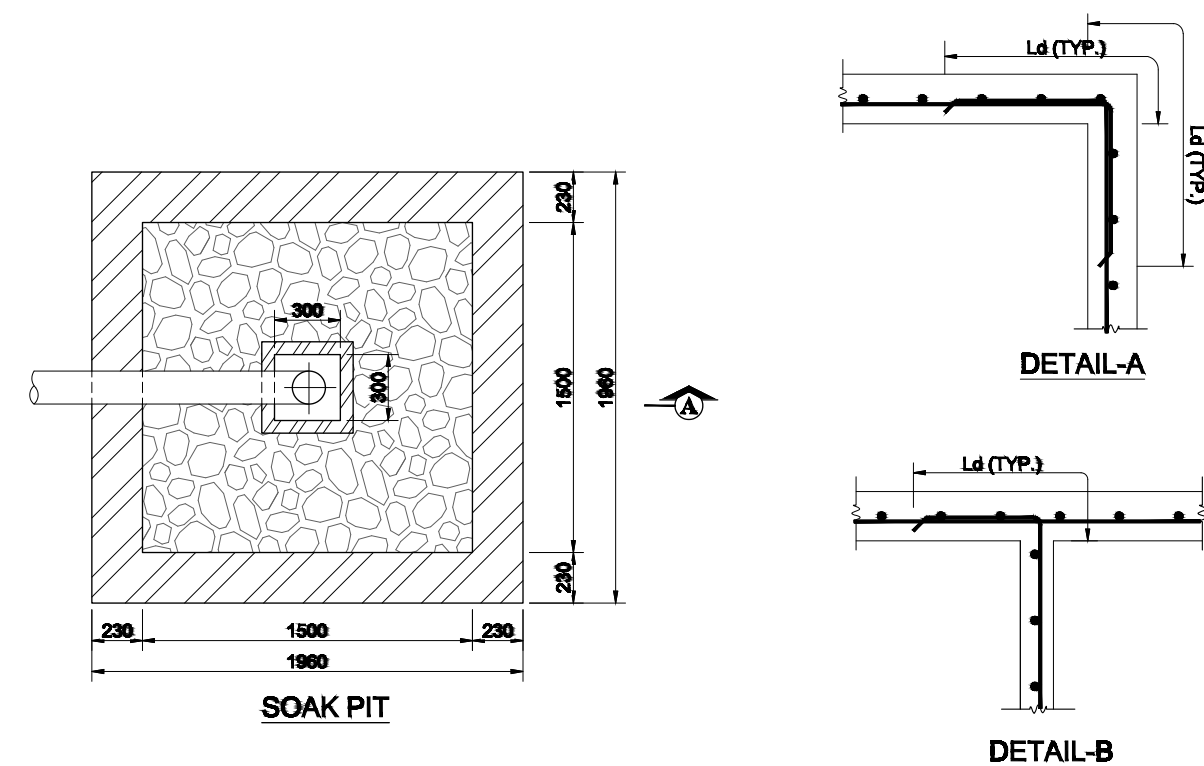
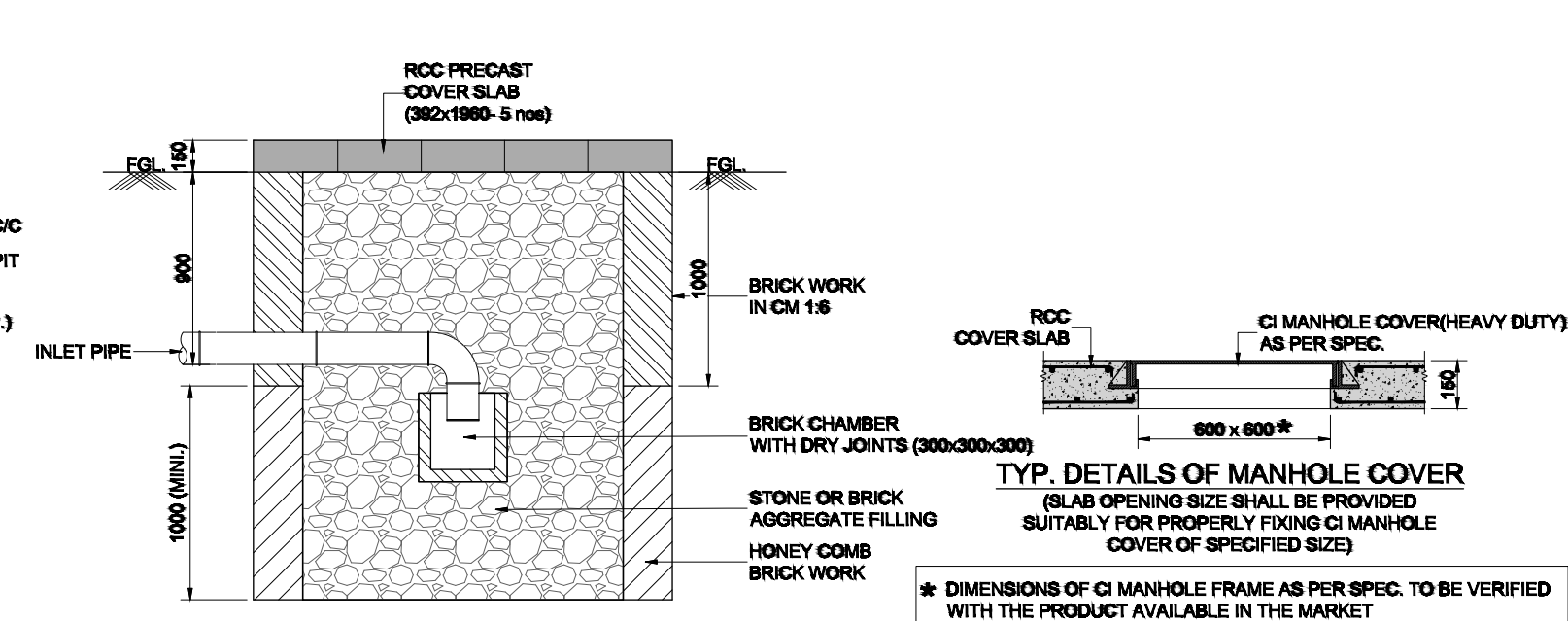
DRG NO: DP0001 DRG CL 02 202	SHEET NO: 7 OF 7	REV. R0	SCALE: NTS	SWATI Architecture landscape interior ARCHITECTS PLANERS ENGINEERING INTERIOR DESIGN <small>282 , tulip , A block , Talpuri International colony , Bhilai , C.G. Email - swati.arch@outlook.com</small>	
DESIGNED: UPENDRA SINGH	DRAWN: SIMRAN SONI	CHECKED: UPENDRA SINGH	VERIFIED: ADMIN	APPROVED: ADMIN	CLIENT: CHHATTISGARH STATE MINOR FOREST PRODUCE
ISSUED FOR: TENDOR PURPOSE		UNIT: MILIMETER	DATE: 12.05.2022	PROJECT: INCUBATION CENTER AT DEOBHOG GARIYABAND	
<small>This drawing is the property of HUP DESIGN and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand</small>				TITLE: TOILET UNIT BEAM TOP LEVEL LAYOUT	



	WALL LIGHT
	20w Led Tube Light
	450 mm Ex Fan
	SWITCH BOARD

ELECTRICAL LAYOUT

DRG NO: DP0001 DRG CL 02 202	SHEET NO: 7 OF 7	REV. R0	SCALE: NTS	SWATI Architecture landscape interior ARCHITECTS PLANERS ENGINEERING INTERIOR DESIGN 282 , tulip , A block , Talpuri International colony , Bhubai , C.G. Email - swati.arch@outlook.com	
DESIGNED: UPENDRA SINGH	DRAWN: SIMRAN SONI	CHECKED: UPENDRA SINGH	VERIFIED: ADMIN	APPROVED: ADMIN	CLIENT: CHHATTISGARH STATE MINOR FOREST PRODUCE
ISSUED FOR: TENDOR PURPOSE		UNIT: MILIMETER	DATE: 12.05.2022	PROJECT: INCUBATION CENTER AT DEOBHOG GARIYABAND	
This drawing is the property of HUP DESIGN and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand				TITLE: TOILET UNIT ELECTRICAL LAYOUT	



SCHEDULE– E

Reference to General Conditions of contract.

Signature of Contractor.....

Signature of CGMFP.....

SCHEDULE-E

Reference to General Conditions of contract

Name of Work: **Construction of MFP Based Common Incubation Facility at Deobhog, District-Gariyaband (C.G.) in the following packages.**

- 1. PACKAGE- A : Building for Processing Units**
- 2. PACKAGE- B : Buildings for Processing Units,
Water Supply and Electrification**
- 3. PACKAGE- C : Warehouse and Amenities**

Estimated cost of work	for PACKAGE-A: RS. 141.87 Lakh for PACKAGE-B: RS. 128.48 Lakh for PACKAGE-C: RS. 71.78 Lakh for TOTAL PACKAGE (A+B+C): RS. 342.13 Lakh
(i) Earnest Money	for PACKAGE-A: RS. 110000.00 for PACKAGE-B: RS. 110000.00 for PACKAGE-C: RS. 75000.00 for TOTAL PACKAGE (A+B+C): RS. 295000.00
(ii) Performance Guarantee	: 5% of tendered value
(iii) Security Deposit	: 5% of tendered value

Signature of Contractor.....

Signature of CGMFP.....

SCHEDULE– F

General Rules & Directions

Signature of Contractor.....

Signature of CGMFP.....

SCHEDULE-F**GENERAL RULES & DIRECTIONS:** Officer inviting tender.

Maximum percentage for quantity of items of
work to be executed beyond which rates are to
be determined in accordance with Clauses 12.2
& 12.3:

See below

Definitions:

2(v)	Engineer-in-Charge	MD, CGMFP or Any Officer Appointed by Managing Director, CGMFP
2(viii)	Accepting Authority	Managing Director, CGMFP
2(x)	Percentage on cost of materials and Labour to cover all overheads and profits:	15 %
2(xi)	Standard Schedule of Rates	Relevant CG PWD SOR With Updated Amendments
2(xii)	Department	Chhattisgarh State Minor Forest Produce (Trade & Development) Cooperative Federation Ltd.

Clause 1

- | | | |
|------|--|---------------|
| (i) | Time allowed for submission of Performance Bank Guarantee from the date of issue of letter of acceptance | 7 days |
| (ii) | Maximum allowable extension beyond the period provided in (i) above | 7 days |

Clause 2

Authority for fixing compensation under clause 2	Managing Director, CGMFP
--	---------------------------------

Clause 2A

Whether Clause 2A shall be applicable	Applicable
---------------------------------------	-------------------

Clause 5

Number of days from the date of issue of letter of acceptance for reckoning date of start	15 days
---	----------------

Signature of Contractor.....

Signature of CGMFP.....

Mile stone(s) as per table given below:-

Milestone will be governed as per work schedule submitted by the tenderer on award of work and approved by MD, Chhattisgarh State Minor Forest Produce (Trading & Development) Cooperative Federation Ltd. Or Officer Appointed/Authorized by MD, CGMFP

Sl. No.	Description of Milestone (Physical)	Time allowed in days(from date of start)	Amount to be with-held in case of non achievement of mile stone
As per Accepted Work Plan			

Time allowed for execution of work **06 months including Rainy Season**

Authority to decide:

- (i) Extension of time **Managing Director, CGMFP**
- (ii) Rescheduling of milestones MD, **CGMFP**

Clause 6, 6A

Clause applicable - (6 or 6A) **6**

Clause 7

Gross work to be done together with net **Rs 10 Lacs**
payment /adjustment of advances for material
collected, if any, since the last such payment for
being eligible to interim payment (Excluding first
and last bill)

Clause 10A **Applicable subjected to Clause as per Special conditions of contract.**

Clause 10B(ii)

Whether Clause 10B (ii) shall be applicable **Applicable subjected to Clause as per Special conditions of contract**

Clause 10C

Component of labour expressed as percent of **Applicable**
value of work

Clause 10CA **Applicable**

Signature of Contractor.....

Signature of CGMFP.....

Clause 11

Specifications to be followed for execution of work **Tender specification attached with Tender document, CPWD, and relevant IS Specifications.**

Clause 12

12.2. & 12.3	Deviation Limit beyond which clauses 12.2 & 12.3 shall apply for road, drain, building and allied infrastructure work	50%
12.5	Deviation Limit beyond which clauses 12.2 & 12.3 shall apply for foundation work	50%

Clause 16

Competent Authority for deciding reduced rates. **Managing Director, CGMFP**

Clause 17

The defect liability period for work shall be 24 month from date of completion of work.

Security deposits will be released only after successful completion of defect liability period as clause 6 of Special conditions of contract.

Signature of Contractor.....

Signature of CGMFP.....

Clause 18

List of mandatory machinery, tools & plants to be deployed by the contractor at site: -

As per relevant Clause of Special Conditions of Contract

Clause 36 (i): Minimum Technical Representative(s) and recovery Rate

The Contractor shall employ the following technical staff during the execution of work (mandatory).

Sl. No.	Designation (Principal Technical/ Technical Representative)	Number	Educational and Relevant Experience	Rate at which recovery shall be made from the contractor in the event of not fulfilling provision of clause 36(i)
1	Senior Engineer	1	Graduate in Civil Engg. With Minimum 10 yrs of experience in the construction management, and supervision of Infrastructure project with minimum 8 years' experience in the similar capacity.	1500/day/head
2	Site Engineer (Civil Eng)	1	Degree/Diploma in Civil Engg with Minimum 5 yrs of experience as at Site Execution Engineer and Quality Control Engineer.	900/day/head

- I. The above Technical Representative shall be got approved from Officer-in-Charge prior to deployment. The monthly attendance of Technical Representative shall be monitored by OIC, and any recovery shall be levied in the none fulfilling the designated technical manpower.
- II. Senior Engineer and site engineer (Civil) /Authorised by the CGMDP will be present full time at site.

Signature of Contractor.....

Signature of CGMFP.....

Tender Document (Part Two)

General Condition of Contract

(Percentage/Item Rate Tender)



Chhattisgarh State Minor Forest Produce (T&D) Cooperative Fed. Ltd.

“Van Dhan Bhavan”, Sector-24 Nava Raipur Atal Nagar (Chhattisgarh)

Phone: 0771-25131 to 25131100

Email: mfpfed.cg@nic.in, Website: <http://www.cgmfpfed.org>

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GENERAL GUIDELINES

1. This book of "General Conditions of Contract" is applicable to both types of tenders i.e., "Percentage rate tenders and Item rate tenders". Accordingly, alternative provisions for conditions Nos. 4, 10 & 12 of the General Rules and Directions are given in this book. The appropriate alternatives will be applicable in specific cases depending on whether this is used for percentage rate tender (CGMFP-F 2) or item rate tender (CGMFP-F 3).
2. CGMFP-F 1, Schedules A to F, special conditions/specifications and drawings only will be issued to intending bidders. The standard form will not be issued along with the Tender Documents but the same shall form part of the agreement to be drawn and signed by both parties after acceptance of tender.
3. All blanks are confined to Notice Inviting Tender (CGMFP-F1) and Schedules A to F.
4. The competent authority issuing the Notice Inviting Tenders (NIT) shall fill up all the blanks in CGMFP-F1 and in Schedules B, C, E&F before issue of Tender Papers, as required.
5. The intending bidders will quote their rates in Schedule A and shall fill up the declarations/forms provided in Schedule 'D'.
6. The proforma for registers and Schedules A to F are only for information and guidance. These are not to be filled in the Standard Form. The Schedules with all blanks, duly filled, shall be submitted separately by all intending tenderers.

TENDER

I/We have read and examined the notice inviting tender, schedule, A, B, C, D, E & F Specifications applicable, Drawings & Designs, General Rules and Directions, Conditions of Contract, clauses of contract, Special conditions, Schedule of Rate & other documents and Rules referred to in the conditions of contract and all other contents in the tender document for the work. Chhattisgarh State Minor Forest Produce (T&D) Cooperative Fed. Ltd. (CGMFP) within the time specified in Schedule 'F' viz., schedule of quantities and in accordance in all respect with the specifications, designs, drawing and instructions in writing referred to in Rule-1 of General Rules and Directions and in Clause 11 of the Conditions of contract and with such materials as are provided for, by, and in respect of accordance with, such conditions so far as applicable.

We agree to keep the tender open for ninety (90) days from the last date of submission of tender and not to make any modification in its terms and conditions.

A sum of Rs.is hereby forwarded in a scheduled bank receipt of scheduled bank/demand draft of a scheduled bank/bank guarantee issued by a scheduled bank as earnest money. If I/We, fail to furnish the prescribed performance guarantee within prescribed period. I/We agree that the said Chhattisgarh State Minor Forest Produce (T&D) Cooperative Fed. Ltd. (CGMFP) or its successors, in office shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely. Further, if I/We fail to commence work as specified, I/We agree that Chhattisgarh State Minor Forest Produce (T&D) Cooperative Fed. Ltd. (CGMFP) or its successors in office shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said earnest money and the performance guarantee absolutely, otherwise the said earnest money shall be retained by him towards security deposit to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to those in excess of that limit at the rates to be determined in accordance with the provision contained in Clause 12.2 and 12.3 of the tender form. Further, I/We agree that in case of forfeiture of Earnest Money & Performance Guarantee as aforesaid. I/We shall be debarred for participation in the re-tendering process of the work.

I/We undertake and confirm that eligible similar work(s) has/have not been got executed through another contractor on back-to-back basis. Further that, if such a violation

comes to the notice of Department, then I/We shall be debarred for tendering in CGMFP in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Officer-in-Charge shall be free to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee.

I/We hereby declare that I/We shall treat the tender documents drawings and other records connected with the work as secret/confidential documents and shall not communicate information/derived there from to any person other than a person to whom I/We am/are authorized to communicate the same or use the information in any manner prejudicial to the safety of the State.

Dated:

Signature of Contractor

Witness:

Postal Address

Address:

Occupation:



**Chhattisgarh State Minor Forest Produce (Trading & Development)
Cooperative Federation Ltd. (CGMFP)**

GENERAL RULES AND DIRECTIONS

**General
Rules and
Directions**

1. All work proposed for execution by contract will be notified in a form of invitation to online tender pasted in public places and signed by the officer inviting tender or by publication in Newspapers/website, as the case may be.

This form will state the work to be carried out, as well as the date for submitting and opening tenders and the time allowed for carrying out the work, also the amount of earnest money to be deposited with the tender, and the amount of the security deposit and Performance guarantee to be deposited by the successful tenderer and the percentage, if any, to be deducted from bills. Copies of the specifications, designs and drawings and any other documents required in connection with the work signed for the purpose of identification by the officer inviting tender shall also be open for inspection by the contractor at the office of officer inviting tender during office hours.

2. In the event of the tender being submitted by a firm, it must be signed separately by each partner thereof or in the event of the absence of any partner, it must be signed on his behalf by a person holding a power-of attorney authorizing him to do so, such power of attorney to be produced with the tender, and it must disclose that the firm is duly registered under the Indian Partnership Act, 1952.
3. Receipts for payment made on account of work, when executed by a firm, must also be signed by all the partners, except where contractors are described in their tender as a firm, in which case the receipts must be signed in the name of the firm by one of the partners, or by some other person having due authority to give

effectual receipts for the firm.

**Applicable
for Item
Rate Tender
only
(CGMFP
-F3)**

4. Any person who submits a tender shall fill up in the prescribed form's/schedules, stating at what rate he is willing to undertake each item of the work. Tenders, which propose any alteration in the work specified in the said form of invitation to tender, or in the time allowed for carrying out the work, or which contain any other conditions of any sort, including conditional rebates, will be summarily rejected. No single tender shall include more than one work, but contractors who wish to tender for two or more works shall submit separate tender for each. Tender shall have the name and number of the works to which they refer, written on the envelopes.

The rate(s) must be quoted in decimal coinage. Amounts must be quoted in full rupees by ignoring fifty paisa and considering more than fifty paisa as rupee one.

**Applicable
For
Percentage
Rate Tender
only
(CGMFP
-F2)**

- 4A. In case of Percentage Rate Tenders, tenderer shall fill up in prescribed form/schedule, stating at what percentage below/above (in figures as well as in words) the total estimated cost given in Schedule of Quantities at Schedule-A, he will be willing to execute the work. The tender submitted shall be treated as invalid if:-

- (i) The contractor does not quote percentage above/below on the total amount of tender or any section/sub head of the tender.
- (ii) The percentage above/below is not quoted in figures & words both on the total amount of tender or any section/sub head of the tender.
- (iii) The percentage quoted above/below is different in figures & words on the total amount of tender or any section/sub head of the tender:

Tenders, which propose any alteration in the work specified in the said form of invitation to tender, or in the time allowed for carrying

out the work, or which contain any other conditions of any sort including conditional rebates, will be summarily rejected. No single tender shall include more than one work, but contractors who wish to tender for two or more works shall submit separate tender for each. Tender shall have the name and number of the works to which they refer, written on the envelopes.

- 4B. In case the lowest tendered amount (estimated cost + amount worked on the basis of percentage above/below) of two or more contractors is same, such lowest contractors will be asked to submit sealed revised offer in the form of letter mentioning percentage above/below on estimated cost of tender including all sub sections/sub heads as the case may be, but the revised percentage quoted above/below on tendered cost or on each sub section/sub head should not be higher than the percentage quoted at the time of submission of tender. The lowest tender shall be decided on the basis of revised offers.

In case any of such contractor refuses to submit revised offer, then it shall be treated as withdrawal of his tender before acceptance and 50% of earnest money shall be forfeited.

If the revised tendered amount of two more contractors received in revised offer is again found to be equal, the lowest tender, among such contractors, shall be decided by draw of lots in the presence of & the lowest contractors those have quoted equal amount of their tenders.

In case all the lowest contractors those have quoted same tendered amount, refuse to submit revised offers, then tenders are to be recalled after forfeiting 50% of EMD of each contractor.

Contractor(s), whose earnest money is forfeited because of non-submission of revised offer, shall not be allowed to participate in the re-tendering process of the work.

5. The officer inviting tender, or his duly authorized assistant will open tenders in the presence of any intending contractors who may be present at the time, and will enter the amounts of the several tenders in a comparative statement in a suitable form. In the event of a tender being accepted, a receipt for the earnest money shall thereupon be given to the contractor who shall thereupon for the purpose of identification sign copies of the specifications and other documents mentioned in Rule-I. In the event of a tender being rejected, the earnest money shall thereupon be returned to the contractor remitting the same, without any interest.
6. The officer inviting tenders shall have the right of rejecting all or any of the tenders and will not be bound to accept the lowest or any other tender.
7. The receipt of an accountant or clerk for any money paid by the contractor will not be considered as any acknowledgment or payment to the officer inviting tender and the contractor shall be responsible for seeing that he procures a receipt signed by the officer inviting tender or a duly authorized person.
8. The memorandum of work tendered for and the schedule of materials to be supplied by the department and their issue-rates, shall be filled and completed in the office of the officer inviting tender before the tender form is issued. If a form is issued to an intending tenderer without having been so filled in and incomplete, he shall request the officer to have this done before he completes and delivers his tender.
9. The tenderers shall sign a declaration under the official Secret Act 1923, for maintaining secrecy of the tender documents drawings or other records connected with the work given to them. The unsuccessful tenderers shall return all the drawings given to them.

- 9A. Use of correcting fluid, anywhere in tender document is not permitted. Such tender is liable for rejection.

**Applicable
for Item
Rate Tender
only
(CGMFP
-F3)**

10. In the case of Item Rate Tenders, only rates quoted shall be considered. Any tender containing percentage below/above the rates quoted is liable to be rejected. Rates quoted by the contractor in item rate tender in figures and words shall be accurately filled in so that there is no discrepancy in the rates written in figures and words. However, if a discrepancy is found, the rates which correspond with the amount worked out by the contractor shall unless otherwise proved be taken as correct. If the amount of an item is not worked out by the contractor or it does not correspond with the rates written either in figures or in words, then the rates quoted by the contractor in words shall be taken as correct. Where the rates quoted by the contractor in figures and in words tally, but the amount is not worked out correctly, the rates quoted by the contractor will unless otherwise proved be taken as correct and not the amount. In event no rate has been quoted for any item(s), leaving space both in figure(s), word(s), and amount blank, it will be presumed that the contractor has included the cost of this/these item(s) in other items and rate for such item(s) will be considered as zero and work will be required to be executed accordingly.
- 10A. In case of Percentage Rate Tenders only percentage quoted shall be considered. Any tender containing item rates is liable to be rejected. Percentage quoted by the contractor in percentage rate tender shall be accurately filled in figures and words, so that there is no discrepancy.
11. In the case of any tender where unit rate of any item/items appear unrealistic, such tender will be considered as unbalanced and in case the tenderer is unable to provide satisfactory explanation, such a tender is liable to be disqualified and rejected.

Applicable for Item Rate Tender only (CGMFP - F3)	<p>12. All rates shall be quoted on the tender form. The amount for each item should be worked out and requisite totals given. Special care should be taken to write the rates in figures as well as in words and the amount in figures only, in such a way that interpolation is not possible. The total amount should be written both in figures and in words. In case of figures, the word 'Rs.' should be written before the figure of rupees and word 'P' after the decimal figures, e.g. 'Rs. 2.15 P' and in case of words, the word, 'Rupees' should precede and the word 'Paise' should be written at the end. Unless the rate is in whole rupees and followed by the word 'only' it should invariably be upto two decimal places. While quoting the rate in schedule of quantities, the word 'only' should be written closely following the amount and it should not be written in the next line.</p>
Applicable for Percentage Rate Tender only (CGMFP – F2)	<p>12A. In Percentage Rate Tender, the tenderer shall quote percentage below/above (in figures as well as in words) at which he will be willing to execute the work. He shall also work out the total amount of his offer and the same should be written in figures as well as in words in such a way that no interpolation is possible. In case of figures, the word 'Rs.' should be written before the figure of rupees and word 'P' after the decimal figures, e.g. 'Rs. 2.15P and in case of words, the word 'Rupees' should precede and the word 'Paisa' should be written at the end.</p> <p>13. The Contractor whose tender is accepted, will be required to</p> <p>(i) furnish performance guarantee of 5% (Five Percent) of the tendered amount within the period specified in Schedule F. This guarantee shall be in the form of cash (in case guarantee amount is less than Rs. 10,000/-) or Deposit at call receipt of any scheduled bank/Banker's cheque of any scheduled bank/Demand Draft of any scheduled bank/Pay order of any scheduled bank (in case guarantee amount is less than Rs. 1,00,000/-) or Government Securities or Fixed Deposit Receipts or Guarantee Bonds of any Scheduled Bank or the State Bank of India in accordance with the</p>

prescribed form.

- (ii) The contractor whose tender is accepted will also be required to furnish by way of Security Deposit for the fulfillment of his contract, an amount equal to 5% of the tendered value of the work. The Security deposit will be collected by deductions from the running bills of the contractor at the rates mentioned above and the earnest money deposited at the time of tenders, will be treated as a part of the Security Deposit. The Security amount will also be accepted in cash or in the shape of Government Securities. Fixed Deposit Receipt of a Scheduled Bank or State Bank of India will also be accepted for this purpose provided confirmatory advice is enclosed.
- 14. On acceptance of the tender, the name of the accredited representative(s) of the contractor who would be responsible for taking instructions from the Officer-in-Charge shall be communicated in writing to the Officer-in-Charge.
- 15. Sales-tax/VAT/GST (except service tax), purchase tax, turnover tax or any other tax applicable in respect of this contract shall be payable by the Contractor and CGMFP will not entertain any claim whatsoever in respect of the same. However, in respect of service tax, same shall be paid by the contractor to the concerned department on demand and it will be reimbursed to him by the CGMFP after satisfying that it has been actually and genuinely paid by the contractor.
- 16. The contractor shall give a list of both CGMFP employees, and its consultants related to him.
- 17. The tender for the work shall not be witnessed by a contractor or contractors who himself/themselves has/have tendered or who may and has/have tendered for the same work. Failure to observe this condition would render, tenders of the contractors tendering, as well

as witnessing the tender, liable to summary rejection.

18. The tender for composite work includes, in addition to building work, all other works such as sanitary and water supply installations drainage installation, electrical work, horticulture work, roads and paths etc. The tenderer apart from being a registered contractor (B&R) of appropriate class, must associate himself with agencies of appropriate class which are eligible to tender for sanitary and water supply drainage, electrical and horticulture works in the composite tender.
19. The contractor shall submit list of works which are in hand (progress) in the following form:-

Name of Work	Name and particulars of Divn. Where work is being executed	Value of Work	Position of works In Progress	Remarks

20. The contractor shall comply with the provisions of the Apprentices Act 1961, and the rules and orders issued there under from time to time. If he fails to do so, his failure will be a breach of the contract and the CGMFP may in his discretion, without prejudice to any other right or remedy available in law, cancel the contract. The contractor shall also be liable for any pecuniary liability arising on account of any violation by him of the provisions of the said Act.

CONDITIONS OF CONTRACT

- Definitions**
1. The Contract means the documents forming the tender and acceptance thereof and the formal check the Contractor, together with the documents referred to therein including these conditions, the specifications, designs, drawings, and instructions issued from time to time by the Engineer-in- Charge and all these documents taken together, shall be deemed to form one contract and shall be complementary to one another.
 2. In the contract, the following expressions shall, unless the context otherwise requires, have the meanings, hereby respectively assigned to them: -
 - (i) The expression works or work shall, unless there be something either in the subject or context repugnant to such construction, be construed and taken to mean the works by or by virtue of the contract contracted to be executed whether temporary or permanent, and whether original, altered, substituted or additional.
 - (ii) The Site shall mean the land/or other places on, into or through which work is to be executed under the contract or any adjacent land, path or street through which work 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.
 - (iii) The Contractor shall mean the individual, firm or company, whether incorporated or not, undertaking the works and shall include the legal personal representative of such individual or the persons composing such firm or company, or the successors of such firm or company and the permitted assignees of such individual, firm or company.
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- (iv) The Engineer in Charge means a person, or a consultant appointed by the **Managing Director**, CGMFP for supervising the works and acting as “Engineer –in-Charge” as defined in the tender document.
- (v) CGMFP (herein of has referred to as CGMFP) & a Company incorporated under the Cooperative Act having Its Head Office at Van Dhan Bhavan Sector-24, Atal Nagar Nawa Raipur, Raipur (C.G.) 492006
- (vi) **Managing Director** (M.D.) means the **Managing Director** of CGMFP appointed by Government of Chhattisgarh
- (vii) Officer-in-Charge means the Concerned Officer Appointed/Authorised by CGMFP.
- (viii) Government of India shall mean the Union Government /State Government shall mean Government of Chhattisgarh.
- (vi) Accepting Authority shall mean the authority mentioned in Schedule 'F'.
- (vii) Excepted Risk are risks due to riots (other than those on account of contractor's employees), war (whether declared or not) invasion, act of foreign enemies, hostilities, civil war, rebellion revolution, insurrection, military or usurped power, any acts of Government, damages from aircraft, acts of God, such as earthquake, lightening and unprecedented floods, and other causes over which the contractor has no control and accepted as such by the Accepting Authority or causes solely due to use or occupation by CGMFP of the part of the works in respect of which a certificate of completion has been issued or a cause solely due to CGMFP faulty design of works.

- (viii) Schedule (s) referred to in these conditions shall mean the relevant schedule(s) annexed to the tender papers or the standard Schedule of Rates of the government mentioned in Schedule 'F' hereunder, with the amendments thereto issued upto the date of receipt of the tender.
- (ix) District Specifications means the specifications followed by the State Government in the area where the work is to be executed.
- (x) Tendered value means the value of the entire work as stipulated in the letter of award.
- (xi) Date of commencement of work: The date of commencement of work shall be the date of start as specified in schedule 'F' or the first date of handing over of the site; whichever is later, in accordance with the phasing if any, as indicated in the tender document.

**Scope and
Performance**

- 3. Where the context so requires, words imparting the singular only also include the plural and vice versa. Any reference to masculine gender shall whenever required include feminine gender and vice versa.
- 4. Headings and Marginal notes to these General Conditions of Contract shall not be deemed to form part thereof or be taken into consideration in the interpretation or construction thereof or of the contract.
- 5. The contractor shall be furnished, free of cost one certified copy of the contract documents except standard specifications, Schedule of Rates, and such other printed and published documents, together with all drawings as may be forming part of the tender papers. None of these documents shall be used for any purpose other than that of this contract.

- Works to be carried out** 6. The work to be carried out under the Contract shall, except as otherwise provided in these conditions, include all labour, materials, tools, plants, equipment, and transport which may be required in preparation of and for and in the full and entire execution and completion of the works. The descriptions given in the Schedule of Quantities (Schedule-A) shall, unless otherwise stated, be held to include wastage on materials, carriage and cartage, carrying and return of empties, hoisting, setting, fitting and fixing in position and all other labours necessary in and for the full and entire execution and completion of the work as aforesaid in accordance with good practice and recognized principles.
- Sufficiency of Tender** 7. The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the rates and prices quoted in the Schedule of Quantities, which rates and prices shall, except as otherwise provided, cover all his obligations under the Contract and all matters and things necessary for the proper completion and maintenance of the works.
- Discrepancies and Adjustment of Errors** 8. The several documents forming the Contract are to be taken as mutually explanatory of one another, detailed drawings being followed in preference to small scale drawing and figured dimensions in preference to scale and special conditions in preference to General Conditions.
- 8.1 In the case of discrepancy between the schedule of Quantities, the Specifications and/ or the Drawings, the following order of preference shall be observed:-
- (i) Description of Schedule of Quantities.
 - (ii) Particular Specification and Special Condition, if any.
 - (iii) Drawings.
 - (iv) CPWD, MORTH/CPHEEO Specifications.

(v) Indian Standard Specifications of B.I.S.

8.2 If there are varying or conflicting provisions made in any one document forming part of the contract, the Accepting Authority shall be the deciding authority with regard to the intention of the document and his decision shall be final and binding on the contractor.

8.3 Any error in description, quantity or rate in Schedule of Quantities or any omission there from shall not vitiate the Contract or release the Contractor from the execution of the whole or any part of the works comprised therein according to drawings and specifications or from any of his obligations under the contract.

**Signing of
Contract**

9. The successful tenderer/contractor, on acceptance of his tender by the Accepting Authority, shall, within 15 days from the stipulated date of start of the work, sign the contract on non judicial stamp paper of value Rs.100 consisting of :-

(i) The notice inviting tender, all the documents including drawings, if any, forming the tender as issued at the time of invitation of tender and acceptance thereof together with any correspondence leading thereto.

(ii) Standard CGMFP Form as mentioned in Schedule 'F' consisting of:

(a) Various standard clauses with corrections up to the date stipulated in Schedule 'F' along with annexure thereto.

(b) Safety Code.

(c) List of Acts and omissions for which fines can be imposed.

(iii) No payment for the work done will be made unless contract is signed by the contractor.

CLAUSES OF CONTRACT

CLAUSE 1

- Performance Guarantee**
- (i) The contractor shall submit an irrevocable Performance Guarantee of 5% (Five percent) of the tendered amount in addition to other deposits mentioned elsewhere in the contract for his proper performance of the contract agreement, (not withstanding and/or without prejudice to any other provisions in the contract) within period specified in Schedule 'F' from the date of issue of letter of acceptance. This period can be further extended by the **Managing Director** up to a maximum period as specified in schedule 'F' on written request of the contractor stating the reason for delays in procuring the Performance Guarantee, to the satisfaction of the **Managing Director**. This guarantee shall be in the form of Cash (in case guarantee amount is less than Rs. 10,000/-) or Demand Draft of any scheduled bank/Pay Order of any scheduled bank (in case guarantee amount is less than Rs. 1,00,000/-) or of any Scheduled /Nationalized Bank in accordance with the form annexed hereto.
- (ii) The Performance Guarantee shall be initially valid up to the stipulated date of completion plus 60 days beyond that. In case the time for completion of work gets enlarged, the contractor shall get the validity of Performance Guarantee extended to cover such enlarged time for completion of work. After recording of the completion certificate for the work by the competent authority, the performance guarantee shall be returned to the contractor, without any interest.
- (iii) The **Managing Director** shall not make a claim under the performance guarantee except for amounts to which the Chhattisgarh State Minor Forest Produce (T&D) Cooperative Fed. Ltd. (CGMFP) is entitled under the contract (not

withstanding and/or without prejudice to any other provisions in the contract agreement) in the event of:

- (a) Failure by the contractor to extend the validity of the Performance Guarantee as described herein above, in which event the **Managing Director** may claim the full amount of the Performance Guarantee.
- (b) Failure by the contractor to pay Chhattisgarh State Minor Forest Produce (T&D) Cooperative Fed. Ltd. (CGMFP) any amount due, either as agreed by the contractor or determined under any of the Clauses/Conditions of the agreement, within 30 days of the service of notice to this effect by **Managing Director**.
- (iv) In the event of the contract being determined or rescinded under provision of any of the Clause/Condition of the agreement, the performance guarantee shall stand forfeited in full and shall be absolutely at the disposal of the **Managing Director** Chhattisgarh State Minor Forest Produce (T&D) Cooperative Fed. Ltd. (CGMFP).

CLAUSE 1 A

**Recovery of
Security
Deposit**

The person/persons whose tender(s) may be accepted (hereinafter called the contractor) shall permit CGMFP at the time of making any payment to him for work done under the contract to deduct a sum at the rate of 5% of the gross amount of each running bill till the sum along with the sum already deposited as earnest money, will amount to security deposit of 5% of the tendered value of the work. Earnest money shall be adjusted first in the security deposit and further recovery of security deposit shall commence only when the up-to-date amount of security deposit starts exceeding the earnest money. Such deductions will be made and held by CGMFP by way of Security Deposit unless he/they has/have deposited the amount of Security at the rate mentioned above in cash or in the form of a bank guarantee issued by a Nationalized or scheduled bank having

branch at Raipur in a form approved by CGMFP.

All compensations or the other sums of money payable by the contractor under the terms of this contract may be deducted from, or paid by the encashment of a sufficient part of his security deposit or from the interest arising there from, or from any sums which may be due to or may become due to the contractor by CGMFP on any account whatsoever and in the event of his Security Deposit being reduced by reason of any such deductions or encashment as aforesaid, the contractor shall within 10 days make good in cash or bank guarantee issued tendered by Scheduled Banks in the prescribed form any sum or sums which may have been deducted from, or raised by encashment of Bank Guarantee or any part thereof. The security deposit shall be collected from the running bills of the contractor at the rates mentioned above and the Earnest money deposited at the time of tenders will be treated as part of the Security Deposit.

The security deposit as deducted above can be released against bank guarantee issued by a scheduled bank, on its accumulations to a minimum of Rs. 5 lac subject to the condition that amount of such bank guarantee, except last one, shall not be less than Rs. 5 lac. Provided further that the validity of bank guarantee including the one given against the earnest money shall be in conformity with provisions contained in clause 17 which shall be extended from time to time depending upon extension of contract granted under provisions of clause 2 and clause 5.

CLAUSE 2

Compensation for Delay	If the contractor fails to maintain the required progress in terms of clause 5 or to complete the work and clear the site on or before the contract or extended date of completion, he shall, without prejudice to any other right or remedy available under the law to the <u>CGMFP</u> on account of such breach, pay as agreed compensation the amount calculated at the rates stipulated below as the authority specified in schedule 'F' (whose decision in writing shall be final and binding) may decide on the amount
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of tendered value of the work for every completed day/month(as applicable) that the progress remains below that specified in Clause 5 or that the work remains incomplete.

This will also apply to items or group of items for which a separate period of completion has been specified.

- (i) Compensation for @ 1.5 % per month of delay of work delay to be computed on per day basis

Provided always that the total amount of compensation for delay to be paid under this Condition shall not exceed 10% of the Tendered Value of work or of the Tendered Value of the item or group of items of work for which a separate period of completion is originally given.

The amount of compensation may be adjusted or set-off against any sum payable to the Contractor under this or any other contract with the CGMFP. In case, the contractor does not achieve a particular milestone mentioned in schedule F, or the re-scheduled milestone(s) in terms of Clause 5.4, the amount shown against that milestone shall be withheld, to be adjusted against the compensation levied at the final grant of Extension of Time. With-holding of this amount on failure to achieve a milestone, shall be automatic without any notice to the contractor. However, if the contractor catches up with the progress of work on the subsequent milestone(s), the withheld amount shall be released. In case the contractor fails to make up for the delay in subsequent milestone(s), amount mentioned against each milestone missed subsequently also shall be withheld. However, no interest, whatsoever, shall be payable on such withheld amount.

CLAUSE 3

When Contract can be Determined Subject to other provisions contained in this clause, the **Managing Director** may, without prejudice to his any other rights or remedy against the contractor in respect of any delay, inferior workmanship, any claims for damages and/or any other provisions of this contract or otherwise, and whether the date of completion has or has not elapsed, by notice in writing absolutely determine the contract in any of the following cases:

- (i) If the contractor having been given by the Officer-in-Charge a notice in writing to rectify, reconstruct or replace any defective work or that the work is being performed in an inefficient or otherwise improper or un-workman like manner shall omit to comply with the requirement of such notice for a period of seven days thereafter.
- (ii) If the contractor has, without reasonable cause, suspended the progress of the work or has failed to proceed with the work with due diligence so that in the opinion of the Officer-in-Charge (which shall be final and binding) he will be unable to secure completion of the work by the date for completion and continues to do so after a notice in writing of seven days from the Managing Director.
- (iii) If the contractor fails to complete the work within the stipulated date or items of work with individual date of completion, if any stipulated, on or before such date(s) of completion and does not complete them within the period specified in a notice given in writing in that behalf by the Officer-in-Charge.
- (iv) If the contractor persistently neglects to carry out his obligations under the contract and/ or commits default in complying with any of the terms and conditions of the contract and does not remedy it or take effective steps to remedy it within 7 days after a notice in

writing is given to him in that behalf by the Officer-in-Charge.

- (v) If the contractor shall offer or give or agree to give to any person in Government or CGMFP service consultants or to the consultants engaged by CGMFP to any other person on his behalf any gift or consideration of any kind as an inducement or reward for doing or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of this or any other contract for CGMFP.
- (vi) If the contractor shall enter into a contract with CGMFP in connection with which commission has been paid or agreed to be paid by him or to his knowledge, unless the particulars of any such commission and the terms of payment thereof have been previously disclosed in writing to the Officer-in-Charge.
- (vii) If the contractor shall obtain a contract with CGMFP as a result of wrong tendering or other non-bonafide methods of competitive tendering.
- (viii) If the contractor being an individual, or if a firm, any partner thereof shall at any time be adjudged insolvent or have a receiving order or order for administration of his estate made against him or shall take any proceedings for liquidation or composition (other than a voluntary liquidation for the purpose of amalgamation or reconstruction) under any Insolvency Act for the time being in force or make any conveyance or assignment of his effects or composition or arrangement for the benefit of his creditors or purport so to do, or if any application be made under any Insolvency Act for the time being in force for the sequestration of his estate or if a trust deed be executed by him for benefit of his creditors.
- (ix) If the contractor being a company shall pass a resolution or the court shall make an order that the company shall be wound up or

if a receiver or a manager on behalf of a creditor shall be appointed or if circumstances shall arise which entitle the court or the creditor to appoint a receiver or a manager or which entitle the court to make a winding up order.

- (x) If the contractor shall suffer an execution being levied on his goods and allow it to be continued for a period of 21 days.
- (xi) If the contractor assigns, transfers, sublets (engagement of labour on a piece-work basis or of labour with materials not to be incorporated in the work, shall not be deemed to be subletting) or otherwise parts with or attempts to assign, transfer, sublet or otherwise parts with the entire works or any portion thereof without the prior written approval of the **Managing Director**.

When the contractor has made himself liable for action under any of the cases aforesaid, the **Managing Director** on behalf of the **Chhattisgarh State Minor Forest Produce (T&D) Cooperative Fed. Ltd. (CGMFP)** shall have powers:

- (a) To determine the contract as aforesaid (of which termination notice in writing to the contractor under the hand of the **Managing Director** shall be conclusive evidence). Upon such determination, the Earnest Money Deposit, Security Deposit already recovered and Performance Guarantee under the contract shall be liable to be forfeited and shall be absolutely at the disposal of the **CGMFP**
- (b) After giving notice to the contractor to measure up the work of the contractor and to take such whole, or the balance or part thereof, as shall be un-executed out of his hands and to give it to another contractor to complete the work. The contractor, whose contract is determined as above, shall not be allowed to participate in the tendering process for the balance work.

In the event of above courses being adopted by the **Managing Director**, the contractor shall have no claim to compensation for any loss sustained by him by reasons of his having purchased or procured any materials or entered into any engagements 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 Officer-in-Charge has certified in writing the performance of such work and the value payable in respect thereof and he shall only be entitled to be paid the value so certified.

CLAUSE 3A

In case, the work cannot be started due to reasons not within the control of the contractor within 1/8th of the stipulated time for completion of work, either party may close the contract. In such eventuality, the Earnest Money Deposit and the Performance Guarantee of the contractor shall be refunded, but no payment on account of interest, loss of profit or damages etc. shall be payable at all.

CLAUSE 4

Contractor liable to pay Compensation even if action not taken under Clause 3	<p>In any case in which any of the powers conferred upon the <u>Managing Director</u> by Clause-3 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 powers shall notwithstanding be exercisable in the event of any future case of default by the contractor and the liability of the contractor for compensation shall remain unaffected. In the event of the <u>Managing Director</u> putting in force all or any of the powers vested in him under the preceding clause he may, if he so desires after giving a notice in writing to the contractor, take possession of (or at the sole discretion of the <u>Managing Director</u> which shall be final and binding on the contractor) use as on hire (the amount of the hire money being also in the final determination of the <u>Managing</u></p>
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Director) all or any tools, plant, materials and stores, in or upon the works, or the site thereof belonging to the contractor, or procured by the contractor and intended to be used for the execution of the work/or any part 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 Officer-in-Charge, whose certificate thereof shall be final, and binding on the contractor, clerk of the works, foreman or other authorized agent to remove such tools, plant, materials, or stores from the premises (within a time to be specified in such notice) in the event of the contractor failing to comply with any such requisition, the Officer-in-Charge may remove them at the contractor's expense or sell them by auction or private sale on account of the contractor and his risk in all respects and the certificate of the Officer-in-Charge as to the expenses of any such removal and the amount of the proceeds and expenses of any such sale shall be final and conclusive against the contractor.

CLAUSE 5

Time and Extension for Delay	The time allowed for execution of the Works as specified in the Schedule 'F' or the extended time in accordance with these conditions shall be the essence of the Contract. The execution of the works shall commence from such time period as mentioned in schedule 'F' or from the date of handing over of the site whichever is later. If the Contractor commits default in commencing the execution of the work as aforesaid, <u>CGMFP</u> shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the earnest money & performance guarantee absolutely.
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5.1 As soon as possible after the Contract is concluded, the Contractor shall submit a Time and Progress Chart for each mile stone and get it approved by the Officer-in-Charge. The Chart shall be prepared in direct relation to the time stated in the Contract documents for completion of items of the works. It shall indicate the forecast of the dates of commencement and completion of various trades of sections of the work and may be amended as necessary by agreement between the

Executive Engineer, CGMFP and the Contractor within the limitations of time imposed in the Contract documents, and further to ensure good progress during the execution of the work, the contractor shall in all cases in which the time allowed for any work, exceeds one month (save for special jobs for which a separate programme has been agreed upon) complete the work as per mile stones given in Schedule 'F'.

5.2 If the work(s) be delayed by:-

- (i) force majeure, or
- (ii) abnormally bad weather, or
- (iii) serious loss or damage by fire, or
- (iv) civil commotion, local commotion of workmen, strike or lockout, affecting any of the trades employed on the work, or
- (viii) any other cause which, in the absolute discretion of the **Managing Director** is beyond the Contractor's control.

then upon the happening of any such event causing delay, the Contractor shall immediately give notice thereof in writing to the authority as indicated in Schedule 'F' but shall nevertheless use constantly his best endeavours to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Officer-in-Charge to proceed with the works.

5.3 Request for rescheduling of Mile stones and extension of time, to be eligible for consideration, shall be made by the Contractor in writing within fourteen days of the happening of the event causing delay on the prescribed form to the authority as indicated in Schedule 'F'. The Contractor may also, if practicable, indicate in such a request the period for which extension is desired.

5.4 In any such case the authority as indicated in Schedule 'F' may

give a fair and reasonable extension of time and reschedule the mile stones for completion of work. Such extension shall be communicated to the Contractor by the authority as indicated in Schedule 'F' in writing, within 3 months of the date of receipt of such request. Non application by the contractor for extension of time shall not be a bar for giving a fair and reasonable extension by the authority as indicated in Schedule 'F' and this shall be binding on the contractor.

CLAUSE 6

Measurements of Work Done Officer-in-Charge shall, except as otherwise provided, ascertain and determine by measurement, the value in accordance with the contract of work done.

All measurement of all items having financial value shall be entered in Measurement Book and/or level field book so that a complete record is obtained of all works performed under the contract.

All measurements and levels shall be taken jointly by the Officer-in-Charge or his authorized representative and by the contractor or his authorized representative from time to time during the progress of the work and such measurements shall be signed and dated by the Officer-in-Charge and the contractor or their representatives in token of their acceptance. If the contractor objects to any of the measurements recorded, a note shall be made to that effect with reason and signed by both the parties.

If for any reason the contractor or his authorized representative is not available and the work of recording measurements is suspended by the Officer-in-Charge or his representative, the Officer-in-Charge and the MD shall not entertain any claim from contractor for any loss or damages on this account. If the contractor or his authorized representative does not remain present at the time of such measurements after the contractor or his authorized representative has been given a notice in writing three (3) days in advance or fails to countersign or to record objection within a

week from the date of the measurement, then such measurements recorded in his absence by the Officer-in-Charge or his representative shall be deemed to be accepted by the Contractor.

The contractor shall, without extra charge, provide all assistance with every appliance, labour and other things necessary for measurements and recording levels.

Except where any general or detailed description of the work expressly shows to the contrary, measurements shall be taken in accordance with the procedure set forth in the specifications notwithstanding any provision in the relevant Standard Method of measurement or any general or local custom. In the case of items which are not covered by specifications, measurements shall be taken in accordance with the relevant standard method of measurement issued by the Bureau of Indian Standards and if for any item no such standard is available, then a mutually agreed method shall be followed.

The contractor shall give, not less than seven days' notice to the Officer-in-Charge or his authorized representative in charge of the work, 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 and shall not cover up and place beyond reach of measurement any work without consent in writing of the Officer-in-Charge or his authorized representative in charge of the work who shall within the aforesaid period of seven days inspect the work, and if any work shall be covered up or placed beyond the reach of measurements without such notice having been given or the Officer-in-Charge's consent being obtained in writing, 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.

Officer-in-Charge or his authorized representative may cause either themselves to check the measurements recorded jointly or otherwise as aforesaid and all provisions stipulated herein above shall be applicable to

such checking of measurements or levels. Provided that Executive Engineer, CGMFP nominated by **Managing Director**, CGMFP for the work shall also check at least 10% measurement.

It is also a term of this contract that recording of measurements of any item of work in the measurement book and/or its payment in the interim, on account or final bill shall not be considered as conclusive evidence as to the sufficiency of any work or material to which it relates nor shall it relieve the contractor from liabilities from any over measurement or defects noticed till completion of the defects liability period.

CLAUSE 6A

Computerized Measurement Book Officer-in-Charge shall, except as otherwise provided, ascertain and determine by measurement the value of work done in accordance with the contract. All measurements of all items having financial value shall be entered by the contractor and compiled in the shape of the Computerized Measurement Book having pages of A-4 size as per the format approved by the **Managing Director** so that a complete record is obtained of all the items of works performed under the contract.

All such measurements and levels recorded by the contractor or his authorized representative from time to time, during the progress of the work, shall be got checked by the contractor from the Officer-in-Charge or his authorized representative as per interval or program fixed in consultation with Officer-in-Charge or his authorized representative. After the necessary corrections made by the Officer-in-Charge, the measurement sheets shall be returned to the contractor for incorporating the corrections and for resubmission to the Engineer-in- Charge for the dated signatures by the Officer-in-Charge and the contractor or their representatives in token of their acceptance.

Whenever bill is due for payment, the contractor would initially submit draft computerized measurement sheets and these measurements would be got checked/test checked from the Officer-in-Charge and/or his authorized representative. The contractor will, thereafter, incorporate

such changes as may be done during these checks/test checks in his draft computerized measurements, and submit to the Engineer-in-Charge a computerized measurement book, duly bound, and with its pages machine numbered. The Officer-in-Charge and/or his authorized representative would thereafter check this MB, and record the necessary certificates for their checks/test checks.

The final, fair, computerized measurement book given by the contractor, duly bound, with its pages machine numbered, should be 100% correct, and no cutting or over-writing in the measurements would thereafter be allowed. If at all any error is noticed, the contractor shall have to submit a fresh computerized MB with its pages duly machine numbered and bound, after getting the earlier MB cancelled by CGMFP. Thereafter, the MB shall be taken in the Officer-in-Charge's office records and allotted a number as per the Register of Computerized MBs. This should be done before the corresponding bill is submitted to the Officer-in-Charge for payment. The contractor shall submit two spare copies of such computerized MB's for the purpose of reference and record by the various officers of the CGMFP.

The contractor shall also submit to the CGMFP separately his computerized Abstract of Cost and the bill based on these measurements, duly bound, and its pages machine numbered along with two spare copies of the bill. Thereafter, this bill will be processed by the Officer-in-Charge's and allotted a number as per the computerized record in the same way as done for the measurement book meant for measurements.

The contractor shall, without extra charge, provide all assistance with every appliance, labour and other things necessary for checking of measurements/levels by the Officer-in-Charge or his representative.

Except where any general or detailed description of the work expressly shows to the contrary, measurements shall be taken in accordance with the procedure set forth in the specifications notwithstanding any provision in the relevant Standard Method of measurement or any general or local

custom. In the case of items which are not covered by specifications, measurements shall be taken in accordance with the relevant standard method of measurement issued by the Bureau of Indian Standards and if for any item no such standard is available then a mutually agreed method shall be followed.

The contractor shall give not less than seven days' notice to the Officer-in-Charge or his authorized representative in charge of the work before covering up or otherwise placing beyond the reach of checking and/or test checking the measurement of any work in order that the same may be checked and/or test checked and correct dimensions thereof be taken before the same is covered up or placed beyond the reach of checking and/or test checking measurement and shall not cover up and place beyond reach of measurement any work without consent in writing of the Officer-in-Charge or his authorized representative in charge of the work who shall within the aforesaid period of seven days inspect the work, and if any work shall be covered up or placed beyond the reach of checking and/or test checking measurements without such notice having been given or the Officer-in-Charge's consent being obtained in writing 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.

Officer-in-Charge or his authorized representative may cause either themselves or through another officer of the department to check the measurements recorded by contractor and all provisions stipulated herein above shall be applicable to such checking of measurements or levels.

It is also a term of this contract that checking and/or test checking the measurements of any item of work in the measurement book and/or its payment in the interim, on account of final bill shall not be considered as conclusive evidence as to the sufficiency of any work or material to which it relates nor shall it relieve the contractor from liabilities from any over measurement or defects noticed till completion of the defects liability period.

CLAUSE 7

Payment on Intermediate Certificate to be Regarded as Advances No payment shall be made for work, estimated to cost Rs. Twenty thousand or less till after the whole of the work shall have been completed and certificate of completion given. For works estimated to cost over Rs. Twenty thousand, the interim or running account bills shall be submitted by the contractor for the work executed on the basis of such recorded measurements in the format of the approved by the Managing Director in triplicate on or before the date of every month fixed for the same by the Officer-in-Charge. The contractor shall not be entitled to be paid any such interim payment if the gross work done together with net payment/ adjustment of advances for material collected, if any, since the last such payment is less than the amount specified in Schedule 'F', in which case the interim bill shall be prepared on the appointed date of the month after the requisite progress is achieved. Officer-in-Charge shall arrange to have the bill verified by taking or causing to be taken, where necessary, the requisite measurements of the work. In the event of the failure of the contractor to submit the bills, Officer-in-Charge shall prepare or cause to be prepared such bills in which event no claims whatsoever due to delays on payment including that of interest shall be payable to the contractor. Payment on account of amount admissible shall be made by the Officer-in-Charge certifying the sum to which the contractor is considered entitled by way of interim payment at such rates as decided by the Officer-in-Charge. 75% (Seventy Five Percent) of the amount admissible shall be paid within 7 working days while the balance amount which may be found admissible after scrutiny shall be paid within 21 working days.

All such interim payments shall be regarded as payment by way of advances against final payment only and shall not preclude the requiring of bad, unsound and imperfect or unskilled work to be rejected, removed, taken away and reconstructed or re-erected. Any certificate given by the Officer-in-Charge relating to the work done or materials delivered forming part of such payment, may be modified, or corrected by any subsequent such certificate(s) or by the final certificate and shall not by itself be

conclusive evidence that any work or materials to which it relates is/are in accordance with the contract and specifications. Any such interim payment, or any part thereof shall not in any respect conclude, determine or affect in any way powers of the Officer-in-Charge under the contract or any of such payments be treated as final settlement and adjustment of accounts or in any way vary or affect the contract.

Pending consideration of extension of date of completion, interim payments shall continue to be made as herein provided without prejudice to the right of the **Managing Director** to take action under the terms of this contract for delay in the completion of work, if the extension of date of completion is not granted by the competent authority.

The **Managing Director** in his sole discretion on the basis of a certificate from the Officer-in-Charge to the effect that the work has been completed up to the level in question make interim advance payments without detailed measurements for work done (other than foundations, items to be covered under finishing items) up to lintel level (including sunshade etc.) and slab level, for each floor working out at 75% of the assessed value. The advance payments so allowed shall be adjusted in the subsequent interim bill by taking detailed measurements thereof.

**Payments in
composite
Contracts**

In case main contractor fails to make the payment to the contractor associated by him within 15 days of receipt of each running account payment, then on the written complaint of contractor associated for such minor component, Engineer in charge of minor component shall serve the show cause to the main contractor and if reply of main contractor either not received or found unsatisfactory, he may make the payment directly to the contractor associated for minor component as per the terms and conditions of the agreement drawn between main contractor and associate contractor fixed by him. Such payment made to the associate contractor shall be recovered by Officer-in-Charge of major or minor component from the next R/A/ final bill due to main contractor as the case may be.

CLAUSE 8

Completion Certificate and Completion Plans	Within ten days of the completion of the work, the contractor shall give notice of such completion to the Officer-in-Charge and within thirty days of the receipt of such notice, the Officer-in-Charge shall inspect the work and if there is no defect in the work, shall furnish the contractor with a final certificate of completion, otherwise a provisional certificate of physical completion indicating defects (a) to be rectified by the contractor and/or (b) for which payment will be made at reduced rates, shall be issued. But no final certificate of completion shall be issued, nor shall the work be considered to be complete until the contractor shall have removed from the premises on which the work shall be executed all scaffolding, surplus materials, rubbish and all huts and sanitary arrangements required for his/their work people on the site in connection with the execution of the works as shall have been erected or constructed by the contractor(s) and cleaned off the dirt from all wood work, doors, windows, walls, floor or other parts of the building, in, upon, or about which the work is to be executed or of which he may have had possession for the purpose of the execution; thereof, and not until the work shall have been measured by the Officer-in-Charge. If the contractor shall fail to comply with the requirements of this Clause as to removal of scaffolding, surplus materials and rubbish and all huts and sanitary arrangements as aforesaid and cleaning off dirt on or before the date fixed for the completion of work, the Officer-in-Charge may at the expense of the contractor remove such scaffolding, surplus materials and rubbish etc., and dispose of the same as he thinks fit and clean off such dirt as aforesaid, and the contractor shall have no claim in respect of scaffolding or surplus materials as aforesaid except for any sum actually realized by the sale thereof.
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CLAUSE 8A

Contractor to Keep Site Clean	When the annual repairs and maintenance of works are carried out, the splashes and droppings from white washing, colour washing, painting etc., on walls, floor, windows, etc. shall be removed and the surface cleaned simultaneously with the completion of these items of work in the
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individual rooms, quarters or premises 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 requirements of this clause, the Officer-in-Charge shall have the right to get this work done at the cost of the contractor either departmentally or through any other agency. Before taking such action, the Officer-in-Charge shall give ten days notice in writing to the contractor.

CLAUSE 8B

Completion Plans to be Submitted by the Contractor	The contractor shall submit completion plan as required vide General Specifications for Electrical works (Part-I internal) 2005 and (Part-II External) 1994 as applicable within thirty days of the completion of the work.
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In case, the contractor fails to submit the “As Built Drawing” maintenance manual completion plan as aforesaid, he shall be liable to pay a sum equivalent to 2.5% of the value of the work subject to a ceiling of Rs.1,50,000.00/- (Rs. One Lakh Fifty Thousand only) as may be fixed by the CGMFP concerned and in this respect the decision of the Executive CGMFP shall be final and binding on the contractor.

CLAUSE 9

Payment of Final Bill	The final bill shall be submitted by the contractor in the same manner as specified in interim bills within three months of physical completion of the work or within one month of the date of the final certificate of completion furnished by the Officer-in-Charge whichever is earlier. No further claims shall be made by the contractor after submission of the final bill and these shall be deemed to have been waived and extinguished. Payments of those items of the bill in respect of which there is no dispute and of items in dispute, for quantities and rates as approved by Officer-in-Charge, will, as far as possible be made within the period specified hereinunder, the period being reckoned from the date of receipt of the bill by the Officer-in-Charge, complete with account of materials issued by the CGMFP-and dismantled
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materials.

- (i) If the Tendered value of work is up to Rs. 15 lac: 3 months
- (ii) If the Tendered value of work exceeds Rs. 15 lac: 6 months

CLAUSE 9A

Payment of Contractor's Bills to Banks Payments due to the contractor may, if so desired by him, be made to his bank, registered financial, co-operative or thrift societies or recognized financial institutions instead of direct to him provided that the contractor furnishes to the Officer-in-Charge (1) an authorization in the form of a legally valid document such as a power of attorney conferring authority on the bank; registered financial, co-operative or thrift societies or recognized financial institutions to receive payments and (2) his own acceptance of the correctness of the amount made out as being due to him by Government or his signature on the bill or other claim preferred against Government before settlement by the Officer-in-Charge of the account or claim by payment to the bank, registered financial, co-operative or thrift societies or recognized financial institutions. While the receipt given by such banks; registered financial, co-operative or thrift societies or recognized financial institutions shall constitute a full and sufficient discharge for the payment, the contractor shall whenever possible present his bills duly receipted and discharged through his bank, registered financial, co-operative or thrift societies or recognized financial institutions.

Nothing herein contained shall operate to create in favour of the bank; registered financial, co-operative or thrift societies or recognized financial institutions any rights or equities visa-vis the **Chhattisgarh State Minor Forest Produce (T&D) Cooperative Fed. Ltd. (CGMFP)**.

CLAUSE 10

Materials supplied by Materials which CGMFP/Government will supply are shown in Schedule 'B' which also stipulates quantum, place of issue and rate(s) to be

Government charged in respect thereof. The contractor shall be bound to procure them from the Officer-in-Charge.

As soon as the work is awarded, the contractor shall finalize the programme for the completion of work as per clause 5 of this contract and shall give his estimates of materials required on the basis of drawings/or schedule of quantities of the work. The Contractor shall give in writing his requirement to the Officer-in-Charge which shall be issued to him keeping in view the progress of work as assessed by the Officer-in-Charge, in accordance with the agreed phased programme of work indicating monthly requirements of various materials. The contractor shall place his indent in writing for issue of such materials at least 7 days in advance of his requirement.

Such materials shall be supplied for the purpose of the contract only and the value of the materials so supplied at the rates specified in the aforesaid schedule shall be set off or deducted, as and when materials are consumed in items of work (including normal wastage) for which payment is being made to the contractor, from any sum then due or which may therefore become due to the contractor under the contract or otherwise or from the security deposit. At the time of submission of bills, the contractor shall certify that balance of materials supplied is available at site in original good condition.

The contractor shall submit along with every running bill (on account or interim bill) material-wise reconciliation statements supported by complete calculations reconciling total issue, total consumption and certified balance (diameter/section-wise in the case of steel) and resulting variations and reasons therefore. Officer-in-Charge shall (whose decision shall be final and binding on the contractor) be within his rights to follow the procedure of recovery in clause 42 at any stage of the work if reconciliation is not found to be satisfactory.

The contractor shall bear the cost of getting the material issued, loading, transporting to site, unloading, storing under cover as required, cutting assembling and joining the several parts together as necessary.

Notwithstanding anything to the contrary contained in any other clause of the contract and (or the CPWD Code) all stores/materials so supplied to the contractor or procured with the assistance of the CGMFP shall remain the absolute property of CGMFP and the contractor shall be the trustee of the stores/materials, and the said stores/materials shall not be removed/disposed off from the site of the work on any account and shall be at all times open to inspection by the Officer-in-Charge or his authorized agent. Any such stores/materials remaining unused shall be returned to the Officer-in-Charge in as good a condition in which they were originally supplied at a place directed by him, at a place of issue or any other place specified by him as he shall require, but in case it is decided not to take back the stores/materials the contractor shall have no claim for compensation on any account of such stores/materials so supplied to him as aforesaid and not used by him or for any wastage in or damage to in such stores/materials.

On being required to return the stores/materials, the contractor shall hand over the stores/ materials on being paid or credited such price as the Officer-in-Charge shall determine, having due regard to the condition of the stores/materials. The price allowed for credit to the contractor, however, shall be at the prevailing market rate not exceeding the amount charged to him, excluding the storage charge, if any. The decision of the Officer-in-Charge shall be final and conclusive. In the event of breach of the aforesaid condition, the contractor shall in addition to throwing himself open to account for contravention of the terms of the licenses or permit and/or for criminal breach of trust, be liable to Government for all advantages or profits resulting or which in the usual-course would have resulted to him by reason of such breach. Provided that the contractor shall in no case be entitled to any compensation or damages on account of any delay in supply or non-supply thereof all or any such materials and stores provided further that the contractor shall be bound to execute the entire work if the materials are supplied by the Government within the original scheduled time for completion of the work plus 50% thereof or schedule time plus 6 months whichever is more if the time of completion

of work exceeds 12 months, but if a part of the materials only has been supplied within the aforesaid period, then the contractor shall be bound to do so much of the work as may be possible with the materials and stores supplied in the aforesaid period. For the completion of the rest of the work, the contractor shall be entitled to such extension of time as may be determined by the Officer-in-Charge whose decision in this regard shall be final and binding on the contractor.

The contractor shall see that only the required quantities of materials are got issued. Any such material remaining unused and in perfectly good/original condition at the time of completion or determination of the contract shall be returned to the Officer-in-Charge at the stores from which it was issued or at a place directed by him by a notice in writing. The contractor shall not be entitled for loading, transporting, unloading and stacking of such unused material except for the extra lead, if any involved, beyond the original place of issue.

CLAUSE 10A

**Materials to be
provided by
the Contractor**

The contractor shall, at his own expense, provide all materials, required for the works.

The contractor shall, at his own expense and without delay, supply to the Officer-in-Charge samples of materials to be used on the work and shall get these approved in advance. All such materials to be provided by the Contractor shall be in conformity with the specifications laid down or referred to in the contract. The contractor shall, if requested by the Officer-in-Charge furnish proof, to the satisfaction of the Officer-in-Charge that the materials so comply. The Officer-in-Charge shall within thirty days of supply of samples or within such further period as he may require intimate to the Contractor in writing whether samples are approved by him or not. If samples are not approved, the Contractor shall forthwith arrange to supply to the Officer-in-Charge for his approval, fresh samples complying with the specifications laid down in the contract. When materials are required to be tested in accordance with specifications, approval of the Officer-in-

Charge shall be issued after the test results are received.

The Contractor shall at his risk and cost submit the samples of materials to be tested or analyzed and shall not make use of or incorporate in the work any materials represented by the samples until the required tests or analysis have been made and materials finally accepted by the Officer-in-Charge. The Contractor shall not be eligible for any claim or compensation either arising out of any delay in the work or due to any corrective measures required to be taken on account of and as a result of testing of materials.

The contractor shall, at his risk and cost, make all arrangements and shall provide all facilities as the Officer-in-Charge may require for collecting, and preparing the required number of samples for such tests at such time and to such place or places as may be directed by the Officer-in-Charge and bear all charges and cost of testing unless specifically provided for otherwise elsewhere in the contract or specifications. The Officer-in-Charge or his authorized representative shall at all times have access to the works and to all workshops and places where work is being prepared or from where materials, manufactured articles or machinery are being obtained for the works and the contractor shall afford every facility and every assistance in obtaining the right to such access.

The Officer-in-Charge shall have full powers to require the removal from the premises of all materials which in his opinion are not in accordance with the specifications and in case of default, the Officer-in-Charge shall be at liberty to employ at the expense of the contractor, other persons to remove the same without being answerable or accountable for any loss or damage that may happen or arise to such materials. The Officer-in-Charge shall also have full powers to require other proper materials to be substituted thereof and in case of default, the Officer-in-Charge may cause the same to be supplied and all costs which may attend such removal and substitution shall be borne by the Contractor.

The contractor shall at his own expense, provide a material testing lab at

the site for conducting routine field tests. The lab shall be equipped at least with the testing equipment as specified in schedule F.

CLAUSE 10B [DELETED]

Mobilization advances not applicable.

CLAUSE 10C

Payment on Account of Increase in Prices/Wages due to Statutory Order(s)	If after submission of the tender, the price of any material incorporated in the works (excluding the materials covered under Clause 10CA and/or wages of labour increases as a direct result of the coming into force of any fresh law, or statutory rule or order (but not due to any changes of rate in sales tax/VAT, Central/State Excise/Custom Duty) beyond the prices/wages prevailing at the time of the last stipulated date of receipt of tenders including extensions, if any, for the work during contract period including the justified period extended under the provisions of clause 5 of the contract without any action under clause 2, then the amount of the contract shall accordingly be varied and provided further that any such increase shall be limited to the price/wages prevailing at the time of stipulated date of completion or as prevailing for the period under consideration, whichever is less.
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If after submission of the tender, the price of any material incorporated in the works (excluding the materials covered under Clause 10CA and/or wages of labour as prevailing at the time of last stipulated date of receipt of tender including extensions, if any, is decreased as a direct result of the coming into force of any fresh law or statutory rules or order (but not due to any changes of rate in sales tax/VAT, Central/State Excise/Custom Duty), CGMFP shall in respect of materials incorporated in the works (excluding the materials covered under Clause 10CA and/or labour engaged on the execution of the work after the date of coming into force of such law statutory rule or order be entitled to deduct from the dues of the contractor, such amount as shall be equivalent to the difference between the prices of the materials and/or wages as prevailed at the time of the last stipulated date for receipt of tenders including

extensions if any for the work and the prices of materials and/or wages of labour on the coming into force of such law, statutory rule or order. This will be applicable for the contract period including the justified period extended under the provisions of clause 5 of the contract without any action under clause 2.

Officer-in-Charge may call books of account and other relevant documents from the contractor to satisfy himself about reasonability of increase in prices of materials and wages.

The contractor shall, within a reasonable time of his becoming aware of any alteration in the price of any such materials and/or wages of labour, give notice thereof to the Officer-in-Charge stating that the same is given pursuant to this condition together with all information relating thereto which he may be in position to supply.

For this purpose, the labour component of the work executed during period under consideration shall be the percentage as specified in Schedule F, of the value of work done during that period and the increase/decrease in labour shall be considered on the minimum daily wages in rupees of any unskilled adult male mazdoor, fixed under any law, statutory rule or order.

Escalation CLAUSE 10 CA:

Reimbursement /Refund on Variation in Prices of Materials / P. O. L. and Labour Wages

Price Adjustment: -

Contract price shall be adjusted for increase or decrease in rates and price of labour, materials, POL, in accordance with the following principles and procedure and as per formula given below.

Note: -Price adjustment shall be applicable from reckoned date and upto validly extended period under Clause 5.1 above but shall not apply to the period when, work is carried out under Clause 2 above.

- A. The price adjustment shall be determined during each month from the formula given in the hereunder.
- B. Following expressions and meanings are assigned to the work done during each month:

To the extent that full compensation for any rise or fall in costs to the contractor is not covered by the provisions of this or other clauses in the contract, the unit rates and prices included in the contract shall be deemed to include amounts to cover the contingency of such other rise or fall in costs.

The formulas (e) for adjustment of prices are: -

R= Total value of work done during the month. It would include the amount of secured advance granted, if any, during the month, less the amount of secured advance recovered, if any during the month. It will exclude value for works executed under variations for which price adjustment will be worked separately based on the terms mutually agreed.

Adjustment for labour component

- (i) Price adjustment for increase or decrease in the cost due to labour shall be paid in accordance with the following formula:

$$V_L = 0.85 \times P1/100 \times R \times (L_i - L_o)/L_o$$

V_L = increase or decrease in the cost of work during the month under consideration due to changes in rates for local labour.

L_o = the consumer price index for industrial workers at the town nearest to

the site or work as published by Labour Bureau, Ministry of Labour, Govt. of India, on the date of inviting tender

L_i = The consumer price index for industrial workers at the town nearest to the site of work for the month under

consideration as published by Labour Bureau,
Ministry of Labour, Government of India.

P_i = Percentage of labour component of the work.

Adjustment for cement component

- (ii) Price adjustment for increase or decrease in the cost of cement procured by the contractor shall be paid in accordance with the following formula;

$$V_c = 0.85 \times P_c / 100 \times R_x (C_i - C_o) / C_o$$

V_c = increase or decrease in the cost of work during the month under consideration due to changes in rates for cement

C_o = The all India wholesale price index for cement as published by the Ministry of Industrial Development, Government of India, New Delhi. on the date of inviting tender

C_i = The all India average wholesale price index for cement for the month under consideration as published by Ministry of Industrial Development, Govt. of India, New Delhi.

P_c = Percentage of cement component of the work.

Adjustment for steel component

- (iii) Price adjustment for increase or decrease in the cost of steel procured by the Contractor shall be paid in accordance with the following formula;

$$V_s = 0.85 \times P_s / 100 \times R_x (S_i - S_o) / S_o$$

V_s = increase or decrease in the cost of work during the month under consideration due to changes in the rates for steel.

S_o = The all India wholesale price index for steel (Bar and Rods) as published by the Ministry of Industrial Development, Government of India, New Delhi, on the date of inviting tender

S_j = The all India average wholesale price index for steel (Bar and Rods) for the month under consideration as published by Ministry of Industrial Development, New Delhi.

P_s = Percentage of steel component of the work.

Note:- for the application of this clause, index of Bars and Rods has been to represent steel group.

Adjustment of bitumen component

(iv) Price adjustment for increase or decrease in the cost of bitumen shall be paid in accordance with the following formula;

$$V_L = 0.85 \times P_b / 100 \times R_X (B_i - B_o) / B_o$$

V_b = Increase or decrease in the cost of work during the month under Consideration due to changes in rates for bitumen.

B_o = The official retail price of bitumen at the IOC depot at nearest centre on the date of inviting tender.

B_j = The official retail price of bitumen of IOC depot at nearest center for the 15th day of the month under consideration.

P_h = Percentage of bitumen component of the work.

Adjustment of POL (fuel and lubricant) component

(v) Price adjustment for increase or decrease in cost of POL (fuel and lubricant) shall be paid in accordance with the following formula;

$$V_f = 0.65 \times P_f / 100 \times R_X (F_i - F_o) / F_o$$

V_l = Increase or decrease in the cost or work during the month under consideration due to changes in rates for fuel and lubricants.

F_o = The official price of High Speed Diesel (HSD) at the existing consumer Diesel pumps out let at nearest center on

the date of tender

F_l = The official retail price of HSD at the existing consumer pumps of IOC at nearest center for the 15th day of month under consideration.

P_f = Percentage of fuel and lubricants component of the work.

Note: - For the application of this clause, the price of High speed Diesel Oil has been chosen to represent fuel and lubricants group.

Adjustment of Other Materials Component

(vii) Price adjustment for increase or decrease in cost of local materials other than

Cement, steel, Bitumen and POL procured by the contractor shall lay in accordance with the following formula;

$$V_m = 0.85 \times P_m / 100 \times R_x (M_t - M_0) / M_0$$

V_m = Increase or decrease in the cost of work during the month under consideration due to changes in rates for local materials other than cement, steel, bitumen and POL.

M₀ = The all India wholesale price index (all commodities) as published by the Ministry of Industrial Development, Govt. of India, New Delhi, on the date of inviting tender

M_t = The all India Wholesale price index (all commodities) for the month under consideration as published by Ministry of Industrial Development, Govt. of India, New Delhi.

P_m = Percentage of local material component (Other than cement, steel, bitumen and POL) of the work.

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

Sl.	Components	For road	For Building	For bridge
1	Labour- P _l	25%	35%	30%
2	Cement- P _c	5%	10%	25%
3	Steel - P _s	5%	10%	25%
4	Bitumen – P _b	10%	-	-
5	POL - P _f	10%	10%	10%
6	Other materials -	45%	35%	10%
	Total	100%	100%	100%

Note:-If in the execution of contract for Road works use of certain

material(s) is/are not involved (Viz cement, steel, Bitumen etc.), then the percentage of other material-Pm shall be increased to that extent

*Example: - Say in a contract of roadwork steel is not required (Ps-5%). Pm shall become
 $45\%+5\%=50\%$*

Or

Say cement & steel not required then Pm shall become
 $45\%+5\%+5\%=55\%$ and so on Work to be executed in
Accordance with Specification, Drawing, Order, etc.

CLAUSE 10 D

Dismantled Material CGMFP Property	The contractor shall treat all materials obtained during dismantling of a structure, excavation of the site for a work, etc. as CGMFP's property and such materials shall be disposed off to the best advantage of CGMFP according to the instructions in writing issued by the Officer-in-Charge.
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CLAUSE 11

Work to be Executed in Accordance with Specifications, Drawings, Orders etc.	<p>The contractor shall execute the whole and every part of the work in the most substantial and workmanlike manner both as regards materials and otherwise in every respect in strict accordance with the specifications.</p> <p>The contractor shall also conform exactly, fully and faithfully to the design, drawings and instructions in writing in respect of the work signed by the Officer-in-Charge and the contractor shall be furnished free of charge one copy of the contract documents together with specifications, designs, drawings and instructions as are not included in the standard specifications of Central Public Works Department, or/and MORTH, CPHEEO as specified in Schedule 'F' or in any Bureau of Indian Standard or any other, published standard or code or, Schedule of Rates or any other printed publication referred to elsewhere in the contract.</p>
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The contractor shall comply with the provisions of the contract and with the care and diligence execute and maintain the works and provide all

labour and materials, tools and plants including for measurements and supervision of all works, structural plans and other things of temporary or permanent nature required for such execution and maintenance in so far as the necessity for providing these, is specified or is reasonably inferred from the contract. The Contractor shall take full responsibility for adequacy, suitability and safety of all the works and methods of construction.

CLAUSE 12

**Deviations/
Variations
Extent and
Pricing**

The Executive Engineer with the approval of ED/MD shall have power (i) to make alteration in, omissions from, additions to, or substitutions for the original specifications, drawings, designs and instructions that may appear to him to be necessary or advisable during the progress of the work, and (ii) to omit a part of the works in case of non-availability of a portion of the site or for any other reasons and the contractor shall be bound to carry out the works in accordance with any instructions given to him in writing signed by the Officer-in-Charge and such alterations, omissions, additions or substitutions shall form part of the contract as if originally provided therein and any altered, additional or substituted work which the contractor may be directed to do in the manner specified above as part of the works, shall be carried out by the contractor on the same conditions in all respects including price on which he agreed to do the main work except as hereafter provided.

12.1 The time for completion of the works shall, in the event of any deviations resulting in additional cost over the tendered value sum being ordered, be extended, if requested by the contractor, as follows:

- (i) In the proportion which the additional cost of the altered, additional or substituted work, bears to the original tendered value plus
- (ii) 25% of the time calculated in (i) above or such further additional

time as may be considered reasonable by the Officer-in-Charge.

Deviation, Extra Items and Pricing	12.2	<p>In the case of extra item(s) (items that are completely new, and are in addition to the items contained in the contract), the contractor may within fifteen days of receipt of order or occurrence of the item(s) claim rates, supported by proper analysis, for the work and the Officer-in-Charge with prior approval of CGMFP shall within one month of the receipt of the claims supported by analysis, after giving consideration to the analysis of the rates submitted by the contractor, determine the rates on the basis of the market rates and the contractor shall be paid in accordance with the rates so determined.</p>
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In the case of substituted items (items that are taken up with partial substitution or in lieu of items of work in the contract), the rate for the agreement item (to be substituted) and substituted item shall also be determined in the manner as mentioned in the following para.

Deviation, Substituted Items, Pricing	(a)	<p>If the market rate for the substituted item so determined is more than the market rate of the agreement item (to be substituted), the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted) so increased to the extent of the difference between the market rates of substituted item and the agreement item (to be substituted).</p>
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	(b)	<p>If the market rate for the substituted item so determined is less than the market rate of the agreement item (to be substituted), the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted) so decreased to the extent of the difference between the market rates of substituted item and the agreement item (to be substituted).</p>
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Deviation, Deviated	<p>In the case of contract items, substituted items, contract cum substituted items, which exceed the limits laid down in schedule F, the contractor</p>
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**Quantities,
Pricing**

may within fifteen days of receipt of order or occurrence of the excess, claim revision of the rates, supported by proper analysis for the work in excess of the above mentioned limits, provided that if the rates so claimed are in excess of the rates specified in the schedule of quantities, the Engineer in Charge with prior approval of CGMFP shall within one month of receipt of the claims supported by analysis, after giving consideration to the analysis of the rates submitted by the contractor, determine the rates on the basis of the market rates and the contractor shall be paid in accordance with the rates so determined.

- 12.3 The provisions of the preceding paragraph shall also apply to the decrease in the rates of items for the work in excess of the limits laid down in Schedule F, and the Managing Director shall after giving notice to the contractor within one month of occurrence of the excess and after taking into consideration any reply received from him within fifteen days of the receipt of the notice, revise the rates with prior approval of the CGMFP for the work in question within one month of the expiry of the said period of fifteen days having regard to the market rates.
- 12.4 The contractor shall send to the Officer-in-Charge once every three months, an up to date account giving complete details of all claims for additional payments to which the contractor may consider himself entitled and of all additional work ordered by the Officer-in-Charge after approval of the Executive Director/Managing Director which he has executed during the preceding quarter failing which the contractor shall be deemed to have waived his right. However, the Executive Director/Managing Director may authorize consideration of such claims on merits.
- 12.5 For the purpose of operation of Schedule "F", the following works shall be treated as works relating to foundation unless & otherwise defined in the contractor:

- (i) For Buildings : All works up to 1.2 metres above ground level or up to floor 1 level whichever is lower.
- (ii) For abutments, piers and well staining : All works up to 1.2 m above the bed level.
- (iii) For retaining walls, wing walls, compound walls, chimneys, over head reservoirs/tanks and other elevated structures : All works up to 1.2 metres above the ground level.
- (iv) For reservoirs/tanks (other than overhead reservoirs/tanks) : All works up to 1.2 metres above the ground level.
- (v) For basement: All works up to 1.2 m above ground level or up to floor 1 level whichever is lower.
- (vi) For Roads, all items of excavation and filling including treatment of sub base.

12.6 Any operation incidental to or necessarily has to be in contemplation of tenderer while filing. tender, or necessary for proper execution of the item included in the Schedule of quantities or in the schedule of rates mentioned above, whether or not specifically indicated in the description of the item and the relevant specifications, shall be deemed to be included in the rates quoted by the tenderer or the rate given in the said schedule of rates, as the case may be. Nothing extra shall be admissible for such operations.

CLAUSE 13

Foreclosure of contract due to Abandonment or Reduction	If at any time after acceptance of the tender, <u>CGMFP</u> shall decide to abandon or reduce the scope of the works for any reason whatsoever and hence not require the whole or any part of the works to be carried out, the Officer-in-Charge shall give notice in writing to that effect to the
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**in Scope of
Work**

contractor and the contractor shall act accordingly in the matter. The contractor shall have no claim to any payment of compensation or otherwise whatsoever, on account of any profit or advantage which he might have derived from the execution of the works in full but which he did not derive in consequence of the foreclosure of the whole or part of the works.

The contractor shall be paid at contract rates, full amount for works executed at site and, in addition, a reasonable amount as certified by the Officer-in-Charge for the items hereunder mentioned which could not be utilized on the work to the full extent in view of the foreclosure;

- (i) Any expenditure incurred on preliminary site work, e.g. temporary access roads, temporary labour huts, staff quarters and site office; storage accommodation and water storage tanks.
- (ii) CGMFP shall have the option to take over contractor's materials or any part thereof either brought to site or of which the contractor is legally bound to accept delivery from suppliers (for incorporation in or incidental to the work) provided, however CGMFP shall be bound to take over the materials or such portions thereof as the contractor does not desire to retain. For materials taken over or to be taken over by CGMFP, cost of such materials as detailed by Officer-in-Charge shall be paid. The cost shall, however, take into account purchase price, cost of transportation and deterioration or damage which may have been caused to materials whilst in the custody of the contractor.
- (iii) If any materials supplied by CGMFP are rendered surplus, the same except normal wastage shall be returned by the contractor to CGMFP at rates not exceeding those at which these were originally issued, less allowance for any deterioration or damage which may have been caused whilst the materials were in the custody of the contractor. In addition, cost of transporting such materials from site to CGMFP stores, if so required by CGMFP,

shall be paid.

- (iv) Reasonable compensation for transfer of T & P from site to contractor's permanent stores or to his other works, whichever is less. If T & P are not transported to either of the said places, no cost of transportation shall be payable.
- (v) Reasonable compensation for repatriation of contractor's site staff and imported labour to the extent necessary.

The contractor shall, if required by the Engineer- in-Charge, furnish to him, books of account, wage books, time sheets and other relevant documents and evidence as may be necessary to enable him to certify the reasonable amount payable under this condition.

The reasonable amount of items on (i), (iv) and (v) above shall not be in excess of 2% of the cost of the work remaining incomplete on the date of closure, i.e. total stipulated cost of the work as per accepted tender less the cost of work actually executed under the contract and less the cost of contractor's materials at site taken over by the CGMFP as per item (ii) above. Provided always that against any payments due to the contractor on this account or otherwise, the Executive Director/Managing Director shall be entitled to recover or be credited with any outstanding balances due from the contractor for advance paid in respect of any tool, plants and materials and any other sums which at the date of termination were recoverable by the CGMFP from the contractor under the terms of the contract.

CLAUSE 14

**Carrying out
part work at
risk & cost of
contractor**

If contractor:

- (i) At any time makes default during currency of work or does not execute any part of the work with due diligence and continues to do so even after a notice in writing of 7 days in this respect from

the Officer-in-Charge; or

- (ii) Commits default in complying with any of the terms and conditions of the contract and does not remedy it or takes effective steps to remedy it within 7 days even after a notice in writing is given in that behalf by the Officer-in-Charge; or

Fails to complete the work(s) or items of work with individual dates of completion, on or before the date(s) so determined, and does not complete them within the period specified in the notice given in writing in that behalf by the Officer-in-Charge.

The Executive Director/Managing Director without invoking action under clause 3 may, without prejudice to any other right or remedy against the contractor which have either accrued or accrue thereafter to CGMFP, by a notice in writing to take the part work / part incomplete work of any item(s) out of his hands and shall have powers to:

- (a) Take possession of the site and any materials, constructional plant, implements, stores, etc., thereon; and/or
- (b) Carry out the part work / part incomplete work of any item(s) by any means at the risk and cost of the contractor.

The Officer-in-Charge shall determine the amount, if any, is recoverable from the contractor for completion of the part work/ part incomplete work of any item(s) taken out of his hands and execute at the risk and cost of the contractor, the liability of contractor on account of loss or damage suffered by CGMFP because of action under this clause shall not exceed 10% of the tendered value of the work.

In determining the amount, credit shall be given to the contractor with the value of work done in all respect in the same manner and at the same rate as if it had been carried out by the original contractor under the terms of his contract, the value of contractor's materials taken over and incorporated in the work and use of plant and machinery belonging

to the contractor. The certificate of the Officer-in-Charge as to the value of work done shall be final and conclusive against the contractor provided always that action under this clause shall only be taken after giving notice in writing to the contractor. Provided also that if the expenses incurred by the department are less than the amount payable to the contractor at his agreement rates, the difference shall not be payable to the contractor.

Any excess expenditure incurred or to be incurred by CGMFP in completing the part work/ part incomplete work of any item(s) or the excess loss of damages suffered or may be suffered by CGMFP as aforesaid after allowing such credit shall without prejudice to any other right or remedy available to CGMFP in law or per as agreement be recovered from any money due to the contractor on any account, and if such money is insufficient, the contractor shall be called upon in writing and shall be liable to pay the same within 30 days.

If the contractor fails to pay the required sum within the aforesaid period of 30 days, the Executive Director/Managing Director shall have the right to sell any or all of the contractors' unused materials, constructional plant, implements, temporary building at site etc. and adjust the proceeds of sale thereof towards the dues recoverable from the contractor under the contract and if thereafter there remains any balance outstanding, it shall be recovered in accordance with the provisions of the contract.

In the event of above course being adopted by the Executive Director/Managing Director, the contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials or entered into any engagements or made any advance on any account or with a view to the execution of the work or the performance of the contract.

CLAUSE 15

Suspension of (i) The contractor shall, on receipt of the order in writing of the

Work

Officer-in-Charge, (which he shall issue only after written approval of CGMFP and which decision shall be final and binding on the contractor) suspend the progress of the works or any part thereof for such time and in such manner as the CGMFP may consider necessary so as not to cause any damage or injury to the work already done or endanger the safety thereof for any of the following reasons:

- (a) on account of any default on the part of the contractor or;
- (b) for proper execution of the works or part thereof for reasons other than the default of the contractor; or
- (c) for safety of the works or part thereof.

The contractor shall, during such suspension, properly protect and secure the works to the extent necessary and carry out the instructions given in that behalf by the CGMFP.

- (ii) If the suspension is ordered for reasons (b) and (c) in sub-para (i) above:
 - (a) the contractor shall be entitled to an extension of time equal to the period of every such suspension PLUS 25%, for completion of the item or group of items of work for which a separate period of completion is specified in the contract and of which the suspended work forms a part, and
 - (b) If the total period of all such suspensions in respect of an item or group of items or work for which a separate period of completion is specified in the contract exceeds thirty days, the contractor shall, in addition, be entitled to such compensation as the CGMFP may consider reasonable in respect of salaries and/or wages paid by the contractor to his employees and labour at site, remaining idle during the period of suspension, adding thereto 2% to cover

indirect expenses of the contractor provided the contractor submits his claim supported by details to the CGMFP within fifteen days of the expiry of the period of 30 days.

- (iii) If the works or part thereof is suspended on the orders of the CGMFP for more than three months at a time, except when suspension is ordered for reason (a) in sub-para (i) above, the contractor may after receipt of such order serve a written notice on the CGMFP requiring permission within fifteen days from receipt by the CGMFP of the said notice, to proceed with the work or part thereof in regard to which progress has been suspended and if such permission is not granted within that time, the contractor, if he intends to treat the suspension, where it affects only a part of the works as an omission of such part by CGMFP or where it affects whole of the works, as an abandonment of the works by CGMFP, shall within ten days of expiry of such period of 15 days give notice in writing of his intention to the CGMFP. In the event of the contractor treating the suspension as an abandonment of the contract by CGMFP, he shall have no claim to payment of any compensation on account of any profit or advantage which he might have derived from the execution of the work in full but which he could not derive in consequence of the abandonment. He shall, however, be entitled to such compensation, as the CGMFP may consider reasonable, in respect of salaries and/or wages paid by him to his employees and labour at site, remaining idle in consequence adding to the total thereof 2% to cover indirect expenses of the contractor provided the contractor submits his claim supported by details to the CGMFP within 30 days of the expiry of the period of 3 months.

Provided, further, that the contractor shall not be entitled to claim any compensation from CGMFP for the loss suffered by him on account of delay by CGMFP in the supply of materials in schedule 'B' where such delay is covered by difficulties relating to the supply of wagons, force majeure including non-allotment of such

materials by controlling authorities, acts of God, acts of enemies of the state/country or any reasonable cause beyond the control of the CGMFP.

CLAUSE 16

Action in case work not done as per Specifications All works under or in course of execution or executed in pursuance of the contract, shall at all times be open and accessible to the inspection and supervision of the Engineer-In-charge, his authorized subordinates in charge of the work and all the superior officers, or any officer organization engaged by the CGMFP for Quality Assurance and of the Chief Technical Examiner's Office, and the contractor shall, at all times, during the usual working hours and at all other times at which reasonable notice of the visit of during the usual working hours and at all other times at which reasonable notice of the visit of such officers has 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.

If it shall appear to the Officer-in-Charge or his authorized subordinates incharge of the work or to the or the officers of the organization engaged by the CGMFP-for Quality Assurance or to the Chief Technical Examiner or his subordinate officers, that any work has been executed with unsound, imperfect, or unskillful workmanship, or with materials or articles provided by him for the execution of the work which are unsound or of a quality inferior to that contracted or otherwise not in accordance with the contract, the contractor shall, on demand in writing which shall be made within twelve months (six months in the case of work costing Rs. 10 Lac and below except road work) of the completion of the work from the Officer-in-Charge specifying the work, materials or articles complained of notwithstanding that the same may have been passed, certified and paid for forthwith rectify, or remove and reconstruct the work so specified in whole or in part, as the case may require or as the

case may be, remove the materials or articles so specified and provide other proper and suitable materials or articles at his own charge and cost. In the event of the failing to do so within a period specified by the Engineer-in- Charge in his demand aforesaid, then the contractor shall be liable to pay compensation at the same rate as under clause 2 of the contract (for non-completion of the work in time) for this default.

In such case the Officer-in-Charge may not accept the item of work at the rates applicable under the contract but may accept such items at reduced rates as the authority specified in schedule 'F' may consider reasonable during the preparation of on account bills or final bill if the item is so acceptable without detriment to the safety and utility of the item and the structure or he may reject the work outright without any payment and/or get it and other connected and incidental items rectified, or removed and re-executed at the risk and cost of the contractor. Decision of the Officer-in-Charge to be conveyed in writing in respect of the same will be final and binding on the contractor.

CLAUSE 17

Contractor Liable for Damages, defects during maintenance period	If the contractor or his working people or servants shall break, deface, injure or destroy any part of building in which they may be working, or any building, road, road kerb, fence, enclosure, water pipe, cables, drains, electric or telephone post or wires, trees, grass or grassland, or cultivated ground contiguous to the premises on which the work or any part is being executed, or if any damage shall happen to the work while in progress, from any cause whatever or if any defect, shrinkage or other faults appear in the work within Twenty four months after a certificate final or otherwise of its completion shall have been given by the Officer-in-Charge as aforesaid arising out of defect or improper materials or workmanship the contractor shall upon receipt of a notice in writing on that behalf make the same good at his own expense or in default the Officer-in-Charge cause the same to be made good by other workmen and deduct the expense from any sums that may be due or at any time thereafter may become due to the contractor, or from his security
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deposit or the proceeds of sale thereof or of a sufficient portion thereof.

The security deposit of the contractor shall not be refunded before the expiry of twelve months (six months in the case of work costing Rs. Ten lacs and below except road work) after the issue of the certificate final or otherwise, of completion of work, or till the final bill has been prepared and passed whichever is later. Provided that in the case of road work, if in the opinion of the Officer-in-Charge, half of the security deposit is sufficient, to meet all liabilities of the contractor under this contract, half of the security deposit will be refundable after six months and the remaining half after twelve months of the issue of the said certificate of completion or till the final bill has been prepared and passed whichever is later.

In case of Maintenance and Operation works of E&M services, the security deposit deducted from contractors shall be refunded within one month from the date of final payment or within one month from the date of completion of the maintenance contract whichever is earlier.

CLAUSE 18

The contractor shall provide at his own cost all materials (except such special materials, if any, as may in accordance with the contract be supplied from the Officer-in-Charge's stores), machinery, tools & plants as specified in schedule F. In addition to this, appliances, implements, other plants, ladders, cordage, tackle, scaffolding and temporary works required 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, or which may be necessary for the purpose of satisfying or complying with the requirements of the Officer-in-Charge as to any matter as to which under these conditions he is entitled to be satisfied, or which he is entitled to require together with carriage therefore to and from the work. 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 the measurement for examination at any time and from time to time of the work or materials. Failing his so doing, the same may be provided by the Officer-in-Charge at the expense of the contractor and the expenses may be deducted, from any money due to the contractor, under this contract or otherwise and/or from his security deposit or the proceeds of sale thereof, or of a sufficient portions thereof.

CLAUSE 18 A

Recovery of Compensation paid to Workmen	In every case in which by virtue of the provisions sub-section (1) of Section 12, of the Workmen's Compensation Act, 1923, <u>CGMFP</u> is obliged to pay compensation to a workman employed by the contractor, in execution of the works, <u>CGMFP</u> will recover from the contractor, the amount of the compensation so paid; and, without prejudice to the rights of the <u>CGMFP</u> under sub-section (2) of Section 12, of the said Act, <u>CGMFP</u> shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by <u>CGMFP</u> to the contractor whether under this contract or otherwise. <u>CGMFP</u> shall not be bound to contest any claim made against it under sub-section (1) of Section 12, of the said Act, except on the written request of the contractor and upon his giving to <u>CGMFP</u> full security for all costs for which <u>CGMFP</u> might become liable in consequence of contesting such claim.
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CLAUSE 18 B

Ensuring Payment and Amenities to Workers if Contractor fails	In every case in which by virtue of the provisions of the Contract Labour (Regulation and Abolition) Act, 1970, and of the Contract Labour (Regulation and Abolition) Central Rules, 1971, Government is obliged to pay any amounts of wages to a workman employed by the contractor in execution of the works, or to incur any expenditure in providing welfare and health amenities required to be provided under the above said Act and the rules under Clause 19H or under the <i>Contractor's Labour Regulations</i> , or under the Rules framed by Government from time to time for the protection of health and sanitary arrangements for
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workers employed by **Contractors**, CGMFP will recover from the contractor, the amount of wages so paid or the amount of expenditure so incurred; and without prejudice to the rights of the CGMFP under sub-section(2) of Section 20, and sub-section (4) of Section 21, of the Contract Labour (Regulation and Abolition) Act, 1970, CGMFP shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by CGMFP to the contractor whether under this contract or otherwise CGMFP shall not be bound to contest any claim made against it under sub-section (1) of Section 20, sub-section (4) of Section 21, of the said Act, except on the written request of the contractor and upon his giving to the CGMFP full security for all costs for which CGMFP might become liable in contesting such claim.

CLAUSE 19

Labour Laws to be complied by the Contractor The contractor shall obtain a valid licence under the Contract Labour (R&A) Act, 1970, and the Contract Labour (Regulation and Abolition) Central Rules, 1971, before the commencement of the work, and continue to have a valid license until the completion of the work. The contractor shall also abide by the provisions of the Child Labour (Prohibition and Regulation) Act, 1986.

The contractor shall also comply with the provisions of the building and other Construction Workers (Regulation of Employment & Conditions of Service) Act, 1996 and the building and other Construction Workers Welfare Cess Act, 1996.

Any failure to fulfill these requirements shall attract the penal provisions of this contract arising out of the resultant non-execution of the work.

CLAUSE 19 A

No labour below the age of fourteen years shall be employed on the work.

CLAUSE 19 B

Payment of Wages

Payment of wages:

- (i) The contractor shall pay to labour employed by him either directly or through subcontractors, wages not less than fair wages as defined in the **Contractor's Labour Regulations** or as per the provisions of the Contract Labour (Regulation and Abolition) Act, 1970 and the contract Labour (Regulation and Abolition) Central Rules, 1971, wherever applicable.
- (ii) The contractor shall, notwithstanding the provisions of any contract to the contrary, cause to be paid fair wage to labour indirectly engaged on the work, including any labour engaged by his sub-contractors in connection with the said work, as if the labour had been immediately employed by him.
- (iii) In respect of all labour directly or indirectly employed in the works for performance of the contractor's part of this contract, the contractor shall comply with or cause to be complied with the **contractor's Labour Regulations** made by Government from time to time in regard to payment of wages, wage period, deductions from wages recovery of wages not paid and deductions unauthorizedly made, maintenance of wage books or wage slips, publication of scale of wages and other terms of employment, inspection and submission of periodical returns and all other matters of the like nature or as per the provisions of the Contract Labour (Regulation and Abolition) Act, 1970, and the Contract Labour (Regulation and Abolition) Central Rules, 1971, wherever applicable.
- (iv) (a) The Officer-in-Charge concerned shall have the right to deduct from the moneys due to the contractor any sum required or estimated to be required for making good the

loss suffered by a worker or workers by reason of non-fulfillment of the conditions of the contract for the benefit of the workers, non-payment of wages or of deductions made from his or their wages which are not justified by their terms of the contract or non-observance of the Regulations.

- (b) Under the provision of ***Minimum Wages (Central) Rules, 1950***, the contractor is bound to allow to the labours directly or indirectly employed in the works one day rest for 6 days continuous work and pay wages at the same rate as for duty. In the event of default, the Officer-in-Charge shall have the right to deduct the sum or sums not paid on account of wages for weekly holidays to any labours and pay the same to the persons entitled thereto from any money due to the contractor by the Officer-in-Charge concerned.
- (v) The contractor shall comply with the provisions of the Payment of Wages Act, 1936, Minimum Wages Act, 1948, Employees Liability Act, 1938, Workmen's Compensation Act, 1923, Industrial Disputes Act, 1947, Maternity Benefits Act, 1961, and the Contractor's Labour (Regulation and Abolition) Act 1970, or the modifications thereof or any other laws relating thereto and the rules made there under from time to time.
- (vi) The contractor shall indemnify and keep indemnified CGMFP against payments to be made under and for the observance of the laws aforesaid and the ***Contractor's Labour Regulations*** without prejudice to his right to claim indemnity from his sub-contractors.
- (vii) The laws aforesaid shall be deemed to be a part of this contract and any breach thereof shall be deemed to be a breach of this contract.

- (viii) Whatever is the minimum wage for the time being, or if the wage payable is higher than such wage, such wage shall be paid by the contractor to the workmen directly without the intervention of Jamadar and that Jamadar shall not be entitled to deduct or recover any amount from the minimum wage payable to the workmen as and by way of commission or otherwise.

CLAUSE 19 C

In respect of all labour directly or indirectly employed in the work for the performance of the contractor's part of this contract, the contractor shall at his own expense arrange for the safety provisions as per Safety Code framed from time to time and shall at his own expense provide for all facilities in connection therewith. In case the contractor fails to make arrangement and provide necessary facilities as aforesaid, he shall be liable to pay a penalty as may be decided by the CGMFP not exceeding Rs. 5,000/- for each default and in addition, the Engineer-in- Charge shall be at liberty to make arrangement and provide facilities as aforesaid and recover the costs incurred in that behalf from the contractor.

CLAUSE 19 D-Deleted

CLAUSE 19 E-Deleted

CLAUSE 19 G-Deleted

CLAUSE 19 H-Deleted

CLAUSE 19 I-Deleted

CLAUSE 19 J-Deleted

CLAUSE 19 K

Employment of skilled/semi skilled	The contractor shall, at all stages of work, deploy skilled/semi skilled tradesmen who are qualified and possess certificate in particular trade from <u>Chhattisgarh Nirman Academy</u> <u>CGMFP</u> Training Institute/Industrial
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workers Training Institute/National Institute of construction Management and Research (NICMAR)/ National Academy of Construction, CIDC or any similar reputed and recognized Institute managed/ certified by State/Central Government. The number of such qualified tradesmen shall not be less than 20% of total skilled/semi skilled workers required in each trade at any stage of work. The contractor shall submit number of man days required in respect of each trade, its scheduling and the list of qualified tradesmen along with requisite certificate from recognized Institute to Engineer in charge for approval. Notwithstanding such approval, if the tradesmen are found to have inadequate skill to execute the work of respective trade, the contractor shall substitute such tradesmen within two days of written notice from Officer-in-Charge. Failure on the part of contractor to obtain approval of Officer-in-Charge or failure to deploy qualified tradesmen will attract a compensation to be paid by contractor at the rate of Rs. 100 per such tradesman per day. Decision of Engineer in Charge as to whether particular tradesman possesses requisite skill and amount of compensation in case of default shall be final and binding.

Provided always, that the provisions of this clause, shall not be applicable for works with estimated cost put to tender being less than Rs. 5 crores.

CLAUSE 20

Minimum Wages Act to be Complied with The contractor shall comply with all the provisions of the Minimum Wages Act, 1948, and Contract Labour (Regulation and Abolition) Act, 1970, amended from time to time and rules framed thereunder and other labour laws affecting contract labour that may be brought into force from time to time.

CLAUSE 21

Work not to be sublet Action in case of The contract shall not be assigned or sublet without the written approval of the CGMFP. And if the contractor shall assign or sublet his contract, or attempt to do so, or become insolvent or commence any insolvency

insolvency proceedings or make any composition with his creditors or attempt to do so, or if any bribe, gratuity, gift, loan, perquisite, reward or advantage pecuniary or otherwise, shall either directly or indirectly, be given, promised or offered by the contractor, or any of his servants or agent to any public officer or person in the employ of Government or CGMFP in any way relating to his office or employment, or if any such officer or person shall become in any way directly or indirectly interested in the contract, the Managing Director on behalf of the **Chhattisgarh State Minor Forest Produce (T&D) Cooperative Fed. Ltd. (CGMFP)** shall have power to adopt the course specified in Clause 3 hereof in the interest of Government or CGMFP and in the event of such course being adopted, the consequences specified in the said Clause 3 shall ensue.

CLAUSE 22

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 CGMFP** without reference to the actual loss or damage sustained and whether or not any damage shall have been sustained.

CLAUSE 23

Changes in firm's Constitution to be intimated Where the contractor is a partnership firm, the previous approval in writing of the Managing Director shall be obtained before any change is made in the constitution of the firm. Where the contractor is an individual or a Hindu undivided family business concern, such approval as aforesaid shall likewise be obtained before the contractor enters into any partnership agreement where under the partnership firm would have the right to carry out the works hereby undertaken by the contractor. If previous approval as aforesaid is not obtained, the contract shall be deemed to have been assigned in contravention of Clause 21 hereof and the same action may be taken, and the same consequences shall ensue as provided in the said Clause 21.

CLAUSE 24

All works to be executed under the contract shall be executed under the direction and subject to the approval in all respects of the Officer-in-Charge who shall be entitled to direct at what point or points and in what manner they are to be commenced, and from time to time carried on.

CLAUSE 25

Settlement of disputes & Arbitration

Except where otherwise provided in the contract, all questions and disputes relating to the meaning of the specifications, design, drawings and instructions here-in before mentioned and as to the quality of workmanship or materials used on the work or as to any other question, claim, right, matter or thing whatsoever in any way arising out of or relating to the contract, designs, drawings, specifications, estimates, instructions, orders or these conditions or otherwise concerning the works or the execution or failure to execute the same whether arising during the progress of the work or after the cancellation, termination, completion or abandonment thereof shall be dealt with as mentioned hereinafter:

- (i) If the contractor considers any work demanded of him to be outside the requirements of the contract, or disputes any drawings, record or decision given in writing by the Officer-in-Charge on any matter in connection with or arising out of the contract or carrying out of the work, to be unacceptable, he shall promptly within 15 days request the CGMFP in writing for written instruction or decision. Thereupon, the CGMFP shall give his written instructions or decision within a period of one month from the receipt of the contractor's letter.

If the CGMFP fails to give his instructions or decision in writing within the aforesaid period or if the contractor is dissatisfied with the instructions or decision of the CGMFP, the contractor may, within 15 days of the receipt of CGMFP decision, appeal to the

Managing Director who shall afford an opportunity to the contractor to be heard, if the latter so desires, and to offer evidence in support of his appeal. The Managing Director shall give his decision within 30 days of receipt of contractor's appeal. If the contractor is dissatisfied with this decision, the contractor shall within a period of 30 days from receipt of the decision, give notice to the CGMFP for appointment of arbitrator on prescribed proforma as per Appendix XV, failing which the said decision shall be final binding and conclusive and not referable to adjudication by the arbitrator.

- (ii) Except where the decision has become final, binding and conclusive in terms of Sub Para (i) above, disputes or difference shall be referred for adjudication through arbitration by a sole arbitrator appointed by the Managing Director, CGMFP. If the arbitrator so appointed is unable or unwilling to act or resigns his appointment or vacates his office due to any reason whatsoever, another sole arbitrator shall be appointed in the manner aforesaid. Such person shall be entitled to proceed with the reference from the stage at which it was left by his predecessor.

It is a term of this contract that the party invoking arbitration shall give a list of disputes with amounts claimed in respect of each such dispute along with the notice for appointment of arbitrator and giving reference to the rejection by the Managing Director of the appeal.

It is also a term of this contract that no person, other than a person appointed by the GMFP, CGMFP as aforesaid, should act as arbitrator and if for any reason that is not possible, the matter shall not be referred to arbitration at all.

It is also a term of this contract that if the contractor does not make any demand for appointment of arbitrator in respect of any claims in writing as aforesaid within 120 days of receiving the intimation from the Officer-in-Charge that the final bill is ready for

payment, the claim of the contractor shall be deemed to have been waived and absolutely barred and the CGMFP shall be discharged and released of all liabilities under the contract in respect of these claims.

The arbitration shall be conducted in accordance with the provisions of the **Chhattisgarh Madhyastham Adhikaran Adhiniyam, 1983** or any statutory modifications or re-enactment thereof and the rules made thereunder and for the time being in force shall apply to the arbitration proceeding under this clause.

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It is also a term of this contract that the arbitrator shall adjudicate on only such disputes as are referred to him by the appointing authority and give separate award against each dispute and claim referred to him and in all cases where the total amount of the claims by any party exceeds Rs. 1,00,000/-, the arbitrator shall give reasons for the award.

It is also a term of the contract that if any fees are payable to the arbitrator, these shall be paid equally by both the parties.

It is also a term of the contract that the arbitrator shall be deemed to have entered on the reference on the date he issues notice to both the parties calling them to submit their statement of claims and counter statement of claims. The venue of the arbitration shall be such place as may be fixed by the arbitrator in his sole discretion. The fees, if any, of the arbitrator shall, if required to be paid before the award is made and published, be paid half and half by each of the parties. The cost of the reference and of the award (including the fees, if any, of the arbitrator) shall be in the discretion of the arbitrator who may direct to any by whom and in what manner, such costs or any part thereof shall be paid and fix or settle the amount of costs to be so paid.

CLAUSE 26

Contractor to indemnify CGMFP against Patent Rights	<p>The contractor shall fully indemnify and keep indemnified the <u>Chhattisgarh State Minor Forest Produce (T&D) Cooperative Fed. Ltd. (CGMFP)</u> against any action, claim or proceeding relating to infringement or use of any patent or design or any alleged patent or design rights and shall pay any royalties which may be payable in respect of any article or part thereof included in the contract. In the event of any claims made under or action brought against <u>CGMFP</u> in respect of any such matters as aforesaid, the contractor shall be immediately notified thereof and the contractor shall be at liberty, at his own expense, to settle any dispute or to conduct any litigation that may arise therefrom, provided that the contractor shall not be liable to indemnify the <u>Chhattisgarh State Minor Forest Produce (T&D) Cooperative Fed. Ltd. (CGMFP)</u> if the infringement of the patent or design or any alleged patent or design right is the direct result of an order passed by the Officer-in-Charge in this behalf.</p>
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CLAUSE 27

Lumpsum Provisions in Tender	<p>When the estimate on which a tender is made includes lump sum in respect of parts of the work, the contractor shall be entitled to payment in respect of the items of work involved or the part of the work in question at the same rates as are payable under this contract for such items, or if the part of the work in question is not, in the opinion of the Officer-in-Charge payable of measurement, the Officer-in-Charge may at his discretion pay the lump-sum amount entered in the estimate, and the certificate in writing of the Officer-in-Charge shall be final and conclusive against the contractor with regard to any sum or sums payable to him under the provisions of the clause.</p>
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CLAUSE 28

Action where no Specifications	<p>In the case of any class of work for which there is no such specifications as referred to in Clause 11, such work shall be carried out in accordance with the Bureau of Indian Standards Specifications. In case there are no such specifications in Bureau of Indian Standards, the work shall be</p>
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are specified carried out as per manufacturers' specifications, if not available then as per District Specifications. In case there are no such specifications as required above, the work shall be carried out in all respects in accordance with the instructions and requirements of the Officer-in-Charge.

CLAUSE 29

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

It is an agreed term of the contract that the sum of money or moneys so withheld or retained under the lien referred to above by the Officer-in-Charge or CGMFP will be kept withheld or retained as such by the Officer-in-Charge or CGMFP till the claim arising out of or under the contract is determined by the arbitrator(if the contract is governed by the arbitration clause) by the competent court, as the case may be and that the contractor

will have no claim for interest or damages whatsoever on any account in respect of such withholding or retention under the lien referred to above and duly notified as such to the contractor. For the purpose of this clause, where the contractor is a partnership firm or a limited company, the Officer-in-Charge or the CGMFP shall be entitled to withhold and also have a lien to retain towards such claimed amount or amounts in whole or in part from any sum found payable to any partner/limited company as the case may be, whether in his individual capacity or otherwise.

- (ii) CGMFP shall have the right to cause an audit and technical examination of the works and the final bills of the contractor including all supporting vouchers, abstract, etc., to be made after payment of the final bill and if as a result of such audit and technical examination any sum is found to have been overpaid in respect of any work done by the contractor under the contract or any work claimed to have been done by him under the contract and found not to have been executed, the contractor shall be liable to refund the amount of over-payment and it shall be lawful for CGMFP to recover the same from him in the manner prescribed in sub-clause (i) of this clause or in any other manner legally permissible; and if it is found that the contractor was paid less than what was due to him under the contract in respect of any work executed by him under it, the amount of such under payment shall be duly paid by CGMFP to the contractor, without any interest thereon whatsoever.

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

CLAUSE 29 A

Lien in respect of claims in other Contracts Any sum of money due and payable to the contractor (including the security deposit returnable to him) under the contract may be withheld or retained by way of lien by the Officer-in-Charge or the CGMFP or any other contracting person or persons through CGMFP against any claim of the Officer-in-Charge or CGMFP or such other person or persons in respect of payment of a sum of money arising out of or under any other contract made by the contractor with the Engineer-in-Charge or the CGMFP or with such other person or persons.

It is an agreed term of the contract that the sum of money so withheld or retained under this clause by the Officer-in-Charge or the CGMFP will be kept withheld or retained as such by the Officer-in-Charge or the CGMFP or till his claim arising out of the same contract or any other contract is either mutually settled or determined by the arbitration clause or by the competent court, as the case may be and that the contractor shall have no claim for interest or damages whatsoever on this account or on any other ground in respect of any sum of money withheld or retained under this clause and duly notified as such to the contractor.

CLAUSE 30--Deleted

CLAUSE 31

Unfiltered Water Supply The contractor(s) shall make his/their own arrangements for water required for the work and nothing extra will be paid for the same. This will be subject to the following conditions.

- (i) That the water used by the contractor(s) shall be fit for construction purposes to the satisfaction of the Officer-in-Charge.
- (ii) The Officer-in-Charge shall make alternative arrangements for supply of water at the risk and cost of contractor(s) if the arrangements made by the contractor(s) for procurement of water are in the opinion of the Engineer-in-Charge, unsatisfactory.

CLAUSE 31 A

**Departmental
Water Supply,
if available**

Water if available may be supplied to the contractor by the department subject to the following conditions:-

- (i) The water charges @ 1 % shall be recovered on gross amount of the work done.
- (ii) The contractor(s) shall make his/their own arrangement of water connection and laying of pipelines from existing main of source of supply.
- (iii) The CGMFP do not guarantee to maintain uninterrupted supply of water and it will be incumbent on the contractor(s) to make alternative arrangements for water at his/ their own cost in the event of any temporary break down in the CGMFP water supply so that the progress of his/their work is not held up for want of water. No claim of damage or refund of water charges will be entertained on account of such break down.

CLAUSE 32

**Alternate water
arrangements**

- (i) Where there is no piped water supply arrangement and the water is taken by the contractor from the wells or hand pump tube well constructed by the CGMFP, no charge shall be recovered from the contractor on that account. The contractor shall, however, draw water at such hours of the day that it does not interfere with the normal use for which the hand pumps and wells are intended. He will also be responsible for all damage and abnormal repairs arising out of his use, the cost of which shall be recoverable from him. The Officer-in-Charge shall be the final authority to determine the cost recoverable from the contractor on this account and his decision shall be binding on the contractor.
- (ii) The contractor shall be allowed to construct temporary wells and

/or tube well in CGMFP land for taking water for construction purposes only after he has got permission of the Officer-in-Charge in writing. No charges shall be recovered from the contractor on this account, but the contractor shall be required to provide necessary safety arrangements to avoid any accidents or damage to adjacent buildings, roads and service lines. He shall be responsible for any accidents or damage caused due to construction and subsequent maintenance of the wells and he should handover to CGMFP in good working condition with free of cost.

CLAUSE 33

**Return of
Surplus
materials**

Notwithstanding anything contained to the contrary in this contract, where any materials for the execution of the contract are procured with the assistance of CGMFP purchase made under orders or permits or licences issued by Government, the contractor shall hold the said materials economically and solely for the purpose of the contract and not dispose of them without the written permission of the CGMFP and return, if required by the Officer-in-Charge, all surplus or unserviceable materials that may be left with him after the completion of the contract or at its termination for any reason whatsoever on being paid or credited such price as the Officer-in-Charge shall determine having due regard to the condition of the materials. The price allowed to the contractor however shall not exceed the amount charged to him excluding the element of storage charges. The decision of the Officer-in-Charge shall be final and conclusive. In the event of breach of the aforesaid condition, the contractor shall in addition to throwing himself open to action for contravention of the terms of the licence or permit and/or for criminal breach of trust, be liable to CGMFP for all moneys, advantages or profits resulting or which in the usual course would have resulted to him by reason of such breach.

CLAUSE 34 Deleted

CLAUSE 35 – Deleted

CLAUSE 36

**Employment of Contractors Superintendence, Supervision, Technical Staff & Employees
Technical Staff**

and (i) The contractor shall provide all necessary superintendence during execution of the work and all along thereafter as may be necessary for proper fulfilling of the obligations under the contract.

employees

The contractor shall immediately after receiving letter of acceptance of the tender and before commencement of the work, intimate in writing to the Officer-in-Charge, the name(s), qualifications, experience, age, address(s) and other particulars along with certificates, of the principal technical representative to be in charge of the work and other technical representative(s) who will be supervising the work. Minimum requirement of such technical representative(s) and their qualifications and experience shall not be lower than specified in Schedule 'F'. The Officer-in-Charge shall within 3 days of receipt of such communication intimate in writing his approval or otherwise of such a representative(s) to the contractor. Any such approval may at any time be withdrawn and in case of such withdrawal, the contractor shall appoint another such representative(s) according to the provisions of this clause. Decision of the tender accepting authority shall be final and binding on the contractor in this respect. Such a principal technical representative and other technical representative(s) shall be appointed by the contractor soon after receipt of the approval from Officer-in-Charge and shall be available at site before start of work.

All the provisions applicable to the principal technical representative under this agreement will also be applicable to other technical representative(s) The principal technical

representative and other technical representative(s) shall be present at the site of work for supervision at all times when any construction activity is in progress and also present himself/themselves, as required, to the Officer-in-Charge and/or his designated representative to take instructions. Instructions given to the principal technical representative or other technical representative(s) shall be deemed to have the same force as if these have been given to the contractor. The principal technical representative and other technical representative(s) shall be actually available the decision of the Officer-in-Charge as recorded in the site order book and measurement recorded checked/test checked in Measurement Books shall be final and binding on the contractor. Further if the contractor fails to appoint suitable technical Principal technical representative and/or other technical representative(s) and if such appointed persons are not effectively present or are absent by more than two days without duly approved substitute or do not discharge their responsibilities satisfactorily, the Officer-in-Charge shall have full powers to suspend the execution of the work until such date as suitable other technical representative(s) is/are appointed and the contractor shall be held responsible for the delay so caused to the work. The contractor shall submit a certificate of employment of the technical representative(s) alongwith every on account bill/ final bill and shall produce evidence if at any time so required by the Officer-in-Charge.at site fully during all stages of execution of work, during recording/checking/test checking of measurements of works and whenever so required by the Officer-in-Charge and shall also note down instructions conveyed by the Engineer-in-Charge or his designated representative(s) in the site order book and shall affix his/their signature in token of noting down the instructions and in token of acceptance of measurements/ checked measurements/test checked measurements. The representative(s) shall not look after any other work. Substitutes, duly approved by Officer-in-Charge of the work in similar manner

as aforesaid shall be provided in event of absence of any of the representative(s) by more than two days.

If the Officer-in-Charge, whose decision in this respect is final and binding on the contractor, is convinced that no such technical representative(s) is/are effectively appointed or is/are effectively attending or fulfilling the provision of this clause, a recovery (non-refundable) shall be effected from the contractor as specified in Schedule 'F' and

- (ii) The contractor shall pay all quarry, Royalty charges etc. If the contractor fails to produce the royalty clearance certificate from concerned department then the EE shall deduct the royalty charges from his bills and keep in deposit head, which shall be refunded to the contractor on production of royalty clearance certificate from the concerned department. If he fails to produce the royalty clearance certificate within 30 days of submission of final bill, then royalty charges which was kept under deposit head by the EE shall be deposited to the concerned department and his final bill payment shall be released.

Any change in the royalty rates of minor minerals notified by the state after the date of submission of financial offer by the bidder/contractor, then this increase/decrease in the rates shall be reimbursed/deducted on actual basis.

The contractor shall provide and employ skilled, semiskilled and unskilled labour as is necessary for proper and timely execution of the work.

The Officer-in-Charge shall be at liberty to object to and require the contractor to remove from the works any person who in his opinion misconducts himself, or is incompetent or negligent in the performance of his duties or whose employment is otherwise considered by the Officer-in-Charge to be undesirable. Such person shall not be employed again at works site without the written permission of the Officer-in-Charge and the persons so

removed shall be replaced as soon as possible by competent substitutes.

CLAUSE 37

Levy/Taxes payable by Contractor	(i) i)(a) Before submitting a tender, the tenderer will be deemed to have satisfied himself by actual inspection of the site and locality of the works, that all conditions liable to be encountered during the execution of the work are taken into account and that the rates he enters in the tender forms are adequate and all inclusive in accordance with the provisions of Clause- 37 of the General Conditions of Contract for the completion of work to the entire satisfaction of the Engineer. (b) Tenderers will examine the various provisions of The Central Goods and Services Tax Act, 2017(CGST)/ Integrated Goods and Services Tax Act, 2017(IGST)/ Union Territory Goods and Services Tax Act, 2017(UTGST)/ respective state's State Goods and Services Tax Act (5GST) also, as notified by Central/State Govt. & as amended from time to time and applicable taxes before bidding. Tenderers will ensure that full benefit of Input Tax Credit (ITC) likely to be availed by them is duly considered while quoting rates. (c) The successful tenderer who is liable to be registered under CGST/IGST/UTGST/SGST Act shall submit GSTIN along with other details required under CGST/IGST /UTG5175GST Act to CGMFP immediately after the award of contract, without which no payment shall be released to the contractor. The contractor shall be responsible for deposition of applicable GST to the concerned authority. (d) In case the successful tenderer is not liable to be registered under CGST/IGST/UGST/ SGST Act, the CGMFP shall deduct the applicable GST from his/their bills under reverse charge mechanism (RCM) and deposit the same to the concerned authority
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- (ii) The contractor shall deposit royalty and obtain necessary permit for supply of the red bajri, stone, kankar, etc. from local authorities.

If pursuant to or under any law, notification or order any royalty, cess or the like becomes payable by the CGMFP and does not any time become payable by the contractor to the State Government, Local authorities in respect of any material used by the contractor in the works, then in such a case, it shall be lawful to the CGMFP and it will have the right and be entitled to recover the amount paid in the circumstances as aforesaid from dues of the contractor.

CLAUSE 38

Conditions for reimbursement of levy/taxes if levied after receipt of tenders

- (i) All tendered rates shall be inclusive of all taxes and levies (except Service Tax) payable under respective statutes. However, if any further tax or levy or cess is imposed by Statute, after the last stipulated date for the receipt of tender including extensions if any and the contractor thereupon necessarily and properly pays such taxes/levies/cess, the contractor shall be reimbursed the amount so paid, provided such payments, if any, is not, in the opinion of the CGMFP (whose decision shall be final and binding on the contractor) attributable to delay in execution of work within the control of the contractor.
- (ii) The contractor shall keep necessary books of accounts and other documents for the purpose of this condition as may be necessary and shall allow inspection of the same by a duly authorized representative of the CGMFP and/or the Officer-in-Charge and shall also furnish such other information/document as the Officer-in-Charge may require from time to time.
- (iii) The contractor shall, within a period of 30 days of the imposition of any such further tax or levy or cess, give a written notice

thereof to the Officer-in-Charge that the same is given pursuant to this condition, together with all necessary information relating thereto.

CLAUSE 39

Termination of Contract on death of contractor Without prejudice to any of the rights or remedies under this contract, if the contractor dies, the Managing Director on behalf of the CGMFP shall have the option of terminating the contract without compensation to the contractor.

CLAUSE 40

If relative working in CGMFP then the contractor not allowed to tender The contractor shall not be permitted to tender for works in the his near relative is posted-as an officer in any capacity between the grades of the Managing Director to Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any officer in CGMFP. Any breach of this condition by the contractor would render him liable to be debarred from tendering in CGMFP for any breach of this condition.

NOTE: By the term "near relatives" is meant wife, husband, parents and grandparents, children and grand children, brothers and sisters, uncles, aunts and cousins and their corresponding in-laws.

CLAUSE 41

No Engineer to work as Contractor within one year of retirement No engineer employed in CGMFP engineering or administrative duties in CGMFP shall work as a contractor or employee of a contractor for a period of one year after his retirement from CGMFP service without the previous permission of CGMFP in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found at any time to be such a person who had not obtained the permission of CGMFP as aforesaid, before submission of the tender or engagement in the contractor's service, as the case may be.

CLAUSE 42-Deleted

CLAUSE 43

Compensation during warlike situations The work (whether fully constructed or not) and all materials, machines, tools and plants, scaffolding, temporary buildings and other things connected therewith shall be at the risk of the contractor until the work has been delivered to the Officer-in-Charge and a certificate from him to that effect obtained. In the event of the work or any materials properly brought to the site for incorporation in the work being damaged or destroyed in consequence of hostilities or warlike operation, the contractor shall when ordered (in writing) by the Officer-in-Charge to remove any debris from the site, collect and properly stack or remove in store all serviceable materials salvaged from the damaged work and shall be paid at the contract rates in accordance with the provision of this agreement for the work of clearing the site of debris, stacking or removal of serviceable material and for reconstruction of all works ordered by the Officer-in-Charge, such payments being in addition to compensation upto the value of the work originally executed before being damaged or destroyed and not paid for. In case of works damaged or destroyed but not already measured and paid for, the compensation shall be assessed by the. The contractor shall be paid for the damages/destruction suffered and for restoring the material at the rate based on analysis of rates tendered for in accordance with the provision of the contract. The certificate of the Officer-in-Charge regarding the quality and quantity of materials and the purpose for which they were collected shall be final and binding on all parties to this contract.

Provided always that no compensation shall be payable for any loss in consequence of hostilities or warlike operations (a) unless the contractor had taken all such precautions against air raid as are deemed necessary by the A.R.P. Officers or the Officer-in-Charge (b) for any material etc. not on the site of the work or for any tools, plant, machinery, scaffolding, temporary building and other things not intended for the work.

In the event of the contractor having to carry out reconstruction as aforesaid, he shall be allowed such extension of time for its completion as is considered reasonable by the Officer-in-Charge.

CLAUSE 44

Apprentices Act provisions to be complied with The contractor shall comply with the provisions of the Apprentices Act, 1961 and the rules and orders issued thereunder from time to time. If he fails to do so, his failure will be a breach of the contract and the Managing Director may, in his discretion, cancel the contract. The contractor shall also be liable for any pecuniary liability arising on account of any violation by him of the provisions of the said Act.

CLAUSE 45

Release of Security Deposit of the work shall not be refunded till the contractor produces a clearance deposit after labour certificate from the Labour Officer. As soon as the work is virtually complete the contractor clearance shall apply for the clearance certificate to the Labour Officer under intimation to the Officer-in-Charge. The Officer-in-Charge, on receipt of the said communication, shall write to the Labour Officer to intimate if any complaint is pending against the contractor in respect of the work. If no complaint is pending, on record till after 3 months after completion of the work and/or no communication is received from the Labour Officer to this effect till six months after the date of completion, it will be deemed to have received the clearance certificate and the Security Deposit will be released if otherwise due.

SAFETY CODE

1. Suitable scaffolds should be provided for workmen for all works that cannot safely be done from the ground, or from solid construction except such short period work as can be done safely from ladders. When a ladder is used, an extra mazdoor shall be engaged for holding the ladder and if the ladder is used for carrying materials as well suitable footholds and hand-hold shall be provided on the ladder and the ladder shall be given an inclination not steeper than V^* to 1(¹A horizontal and 1 vertical.)
2. Scaffolding of staging more than 3.6 m (12ft.) above the ground or floor, swung or suspended from an overhead support or erected with stationary support shall have a guard rail properly attached or bolted, braced and otherwise secured at least 90 cm. (3ft.) high above the floor or platform of such scaffolding or staging and extending along the entire length of the outside and ends thereof with only such opening as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure.
3. Working platforms, gangways and stairways should be so constructed that they should not sag unduly or unequally, and if the height of the platform or the gangway or the stairway is more than 3.6 m (12ft.) above ground level or floor level, they should be closely boarded, should have adequate width and should be suitably fastened as described in (2) above.
4. Every opening in the floor of a building or in a working platform shall be provided with suitable means to prevent the fall of person or materials by providing suitable fencing or railing whose minimum height shall be 90 cm. (3ft.)
5. Safe means of access shall be provided to all working platforms and other working places. Every ladder shall be securely fixed. No portable single ladder shall be over 9m. (30ft.) in length while the width between side rails in rung ladder shall in no case be less than 29 cm. ($11\frac{1}{2}$ ") for ladder upto and including 3 m. (10 ft.) in length. For longer ladders, this width should be

increased at least V'' for each additional 30 cm. (1 foot) of length. Uniform step spacing of not more than 30 cm shall be kept. Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the sites or work shall be so stacked or placed as to cause danger or inconvenience to any person or the public. The contractor shall provide all necessary fencing and lights to protect the public from accident and shall be bound to bear the expenses of defence of every suit, action or other proceedings at law that may be brought by any person for injury sustained owing to neglect of the above precautions and to pay any damages and cost which may be awarded in any such suit; action or proceedings to any such person or which may, with the consent of the contractor, be paid to compensate any claim by any such person.

6. Excavation and Trenching - All trenches 1.2 m. (4ft.) or more in depth, shall at all times be supplied with at least one ladder for each 30 m. (100 ft.) in length or fraction thereof, Ladder shall extend from bottom of the trench to at least 90 cm. (3ft.) above the surface of the ground. The side of the trenches which are 1.5 m. (5ft.) or more in depth shall be stepped back to give suitable slope or securely held by timber bracing, so as to avoid the danger of sides collapsing. The excavated materials shall not be placed within 1.5 m. (5ft.) of the edges of the trench or half of the depth of the trench whichever is more. Cutting shall be done from top to bottom. Under no circumstances, undermining or undercutting shall be done.
7. Demolition - Before any demolition work is commenced and also during the progress of the work,
 - (i) All roads and open areas adjacent to the work site shall either be closed or suitably protected.
 - (ii) No electric cable or apparatus which is liable to be a source of danger or a cable or apparatus used by the operator shall remain electrically charged.
 - (iii) All practical steps shall be taken to prevent danger to persons employed from risk of fire or explosion or flooding. No floor, roof or other part of the

building shall be so overloaded with debris or materials as to render it unsafe.

8. All necessary personal safety equipment as considered adequate by the Officer-in-Charge should be kept available for the use of the person employed on the site and maintained in a condition suitable for immediate use, and the contractor should take adequate steps to ensure proper use of equipment by those concerned:- The following safety equipment shall invariably be provided.
- (i) Workers employed on mixing asphaltic materials, cement and lime mortars shall be provided with protective footwear and protective goggles.
 - (ii) Those engaged in white washing and mixing or stacking of cement bags or any material which is injurious to the eyes, shall be provided with protective goggles.
 - (iii) Those engaged in welding works shall be provided with welder's protective eye-shields.
 - (iv) Stone breaker shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.
 - (v) When workers are employed in sewers and manholes, which are in active use, the contractors shall ensure that the manhole covers are opened and ventilated atleast for an hour before the workers are allowed to get into the manholes, and the manholes so opened shall be cordoned off with suitable railing and provided with warning signals or boards to prevent accident to the public. In addition, the contractor shall ensure that the following safety measure are adhered to:-
 - (a) Entry for workers into the line shall not be allowed except under supervision of the engineer deputed by Officer-in-Charge.
 - (b) At least 5 to 6 manholes upstream and downstream should be kept open for at least 2 to 3 hours before any man is allowed to enter into

the manhole for working inside.

- (c) Before entry, presence of Toxic gases should be tested by inserting wet lead acetate paper which changes colour in the presence of such gases and gives indication of their presence.
- (d) Presence of Oxygen should be verified by lowering a detector lamp into the manhole. In case, no Oxygen is found inside the sewer line, workers should be sent only with Oxygen kit.
- (e) Safety belt with rope should be provided to the workers. While working inside the manholes, such rope should be handled by two men standing outside to enable him to be pulled out during emergency.
- (f) The area should be barricaded or cordoned off by suitable means to avoid mishaps of any kind. Proper warning signs should be displayed for the safety of the public whenever cleaning works are undertaken during night or day.
- (g) No smoking or open flames shall be allowed near the blocked manhole being cleaned.
- (h) The malba obtained on account of cleaning of blocked manholes and sewer lines should be immediately removed to avoid accidents on account of slippery nature of the malba.
- (i) Workers should not be allowed to work inside the manhole continuously. He should be given rest intermittently. The Officer-in-Charge may decide the time up to which a worker may be allowed to work continuously inside the manhole.
- (j) Gas masks with Oxygen Cylinder should be kept at site for use in emergency.

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- (k) Air-blowers should be used for flow of fresh air through the manholes. Whenever called for, portable air blowers are recommended for ventilating the manholes. The Motors for these shall be vapour proof and of totally enclosed type. Non sparking gas engines also could be used but they should be placed at least 2 metres away from the opening and on the leeward side protected from wind so that they will not be a source of friction on any inflammable gas that might be present.
 - (l) The workers engaged for cleaning the manholes/sewers should be properly trained before allowing to work in the manhole.
 - (m) The workers shall be provided with Gumboots or non sparking shoes bump helmets and gloves non sparking tools safety lights and gas masks and portable air blowers (when necessary). They must be supplied with barrier cream for anointing the limbs before working inside the sewer lines.
 - (n) Workmen descending a manhole shall try each ladder stop or rung carefully before putting his full weight on it to guard against insecure fastening due to corrosion of the rung fixed to manhole well.
 - (o) If a man has received a physical injury, he should be brought out of the sewer immediately and adequate medical aid should be provided to him.
 - (p) The extent to which these precautions are to be taken depend on individual situation but the decision of the Officer-in-Charge regarding the steps to be taken in this regard in an individual case will be final.
- (vi) The Contractor shall not employ men and women below the age of 18 years on the work of painting with products containing lead in any form. Wherever men above the age of 18 are employed on the work of lead

painting, the following precaution should be taken:-

- (a) No paint containing lead or lead products shall be used except in the form of paste or ready made paint.
- (b) Suitable face masks should be supplied for use by the workers when paint is applied in the form of spray or a surface having lead paint is dry rubbed and scrapped.
- (c) Overalls shall be supplied by the contractors to the workmen and adequate facilities shall be provided to enable the working painters to wash during and on the cessation of work.

9. (iv) the Contractor shall not employ women and men below the age of 18 on the work of painting with product containing lead in any form, wherever men above the age of 18 are employed on the work of lead painting, the following principles must be observed for such use :

- (i) White lead, sulphate of lead or product containing these pigment, shall not be used in painting operation except in the form of pastes or paint ready for use.
- (ii) Measures shall be taken, wherever required in order to prevent danger arising from the application of a paint in the form of spray.
- (iii) Measures shall be taken, wherever practicable, to prevent danger arising out of from dust caused by dry rubbing down and scraping.
- (iv) Adequate facilities shall be provided to enable working painters to wash during and on cessation of work,
- (v) Overall shall be worn by working painters during the whole of working period.
- (vi) Suitable arrangement shall be made to prevent clothing put off during

working hours being spoiled by painting materials.

- (vii) Cases of lead poisoning and suspected lead poisoning shall be notified and shall be subsequently verified by medical man as directed by Officer-in-Charge.
 - (viii) Officer-in-Charge may require, when necessary medical examination of workers.
 - (ix) Instructions with regard to special hygienic precautions to be taken in the painting trade shall be distributed to working painters.
10. When the work is done near any place where there is risk of drowning, all necessary equipments should be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision, should be made for prompt first aid treatment of all injuries likely to be obtained during the course of the work.
11. Use of hoisting machines and tackle including their attachments, anchorage and supports shall conform to the following standards or conditions :-
- (i) (a) These shall be of good mechanical construction, sound materials and adequate.
 - (b) Every rope used in hoisting or lowering materials or as a means of suspension shall be of durable quality and adequate strength, and free from patent defects.
 - (ii) Every crane driver or hoisting appliance operator, shall be properly qualified and no person under the age of 21 years should be in charge of any hoisting machine including any scaffolding winch or give signals to operator.
 - (iii) In case of every hoisting machine and of every chain ring hook, shackle swivel and pulley block used in hoisting or as means of suspension, the

safe working load shall be ascertained by adequate means. Every hoisting machine and all gear referred to above shall be plainly marked with the safe working load. In case of a hoisting machine having a variable safe working load each safe working load and the condition under which it is applicable shall be clearly indicated. No part of any machine or any gear referred to above in this paragraph shall be loaded beyond the safe working load except for the purpose of testing.

- (iv) As regards contractor's machines the contractors shall notify the safe working load of the machine to the Officer-in-Charge whenever he brings any machinery to site of work and get it verified by the Engineer nominated by Officer-in-Charge concerned.

12. Motors, gearing, transmission, electric wiring and other dangerous parts of hoisting appliances should be provided with efficient safeguards. Hoisting appliances should be provided with such means as will reduce to the minimum the risk of accidental descent of the load. Adequate precautions should be taken to reduce to the minimum the risk of any part of a suspended load becoming accidentally displaced. When workers are employed on electrical installations which are already energized, insulating mats, wearing apparel, such as gloves, sleeves and boots as may be necessary should be provided. The worker should not wear any rings, watches and carry keys or other materials which are good conductors of electricity.
13. All scaffolds, ladders and other safety devices mentioned or described herein shall be maintained in safe condition and no scaffold, ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities should be provided at or near places of work.
14. These safety provisions should be brought to the notice of all concerned by display on a notice board at a prominent place at work spot. The person responsible for compliance of the safety code shall be named therein by the contractor.

-
15. To ensure effective enforcement of the rules and regulations relating to safety precautions the arrangements made by the contractor shall be open to inspection by the Labour Officer or Officer-in-Charge of the department or their representatives.
 16. Notwithstanding the above clauses from (1) to (15), there is nothing in these to exempt the contractor from the operations of any other Act or Rule in force in the Republic of India.

MODEL RULES RELATING TO LABOUR, WATER SUPPLY AND SANITATION IN LABOUR CAMPS

Notes: These model rules are intended primarily for labour camps, which are not of a permanent nature. They lay down the minimum desirable standard, which should be adhered to standards in permanent or semi-permanent labour camps should not be obviously be lower than those for temporary camps.

1. Location-: The camp should be located in elevated and well drained ground in the locality.
2. Labour huts to be constructed for one family of 5 persons each. The layout to be shown in the prescribed sketch.
3. Hutting: The huts to be built of local material. Each hut should provide at least 20 sqm. of living space.
4. Sanitary facilities: Latrines and urinals shall be provided at least 15 meters away from the nearest quarters separately for man and women specially so marked on the following scale.
5. Latrines - Pit provided at the rate of 10 users or two families per scat, separate urinals as required as the privy can also be used for this purpose.
6. Drinking Water - Adequate arrangement shall be made for the supply of drinking water. If practicable filtered and chlorinated supplies shall be arranged when supplies are from intermittent sources overhead storage tank shall be provided with capacity of five liters a person per day. Where the supply is to be made from a well, it shall conform to the sanitary standard laid down in the report of the Rural Sanitation Committee. The well should be at least 30 meters away from any latrine or other source of population. If possible, hand pump should be installed for drinking water from well. The well should be effectively disinfected once every month and the quality of water should be got tested at the public Health Institution between each work of disinfecting.
7. Bathing and Washing - Separate bathing and washing place shall be provided for men and women for every 25 persons in the camp. There shall be one gap and space of 2 sqm. for washing and bathing. Proper drainage for the wastewater should be provided.
8. Waste Disposal - (A) Dustbin shall be provided at suitable places in camp and the residents shall be directed to throw all rubbish into these dustbin. The dustbins

shall be provided with cover. The contents shall be removed every day and disposed off by trenching.

9. Medical facilities

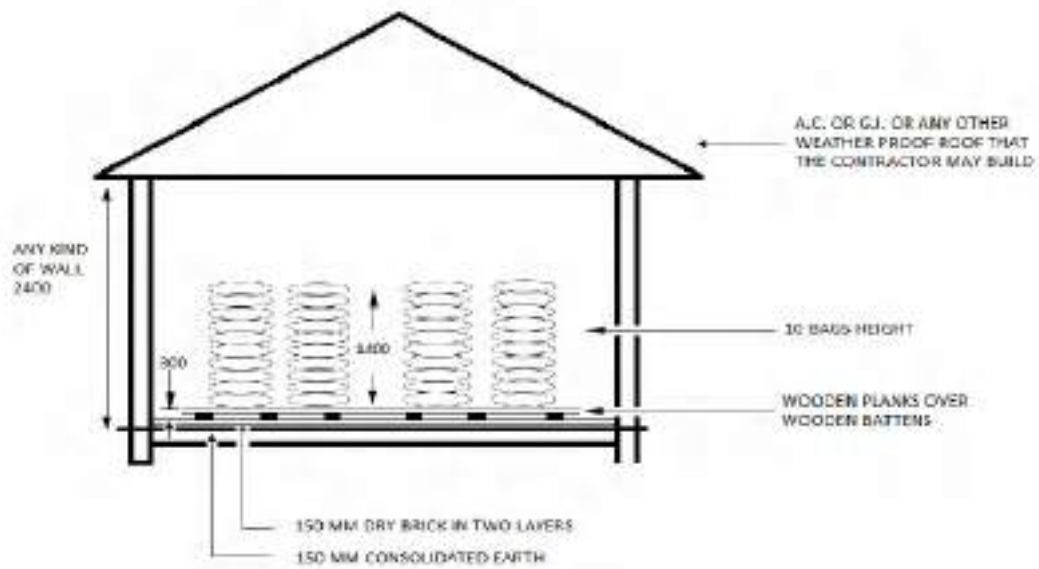
- (A) Every camp where 1000 or more persons reside shall be provided with whole time Doctor and Dispensary. If there are women in the camp, a whole time nurse Shall be employed.
- (B) Every camp where less than 1000 but more than 250 persons reside shall be provided with Dispensary and a part time Nurse/Midwife.
- (C) If there are less than 250 persons in any camp a First Aid Kit shall be maintained in-charge of whole time persons, trained in First Aid.

All the medical facilities mentioned above shall be for all residents in the camp including a dependent of the worker, if any free of cost.

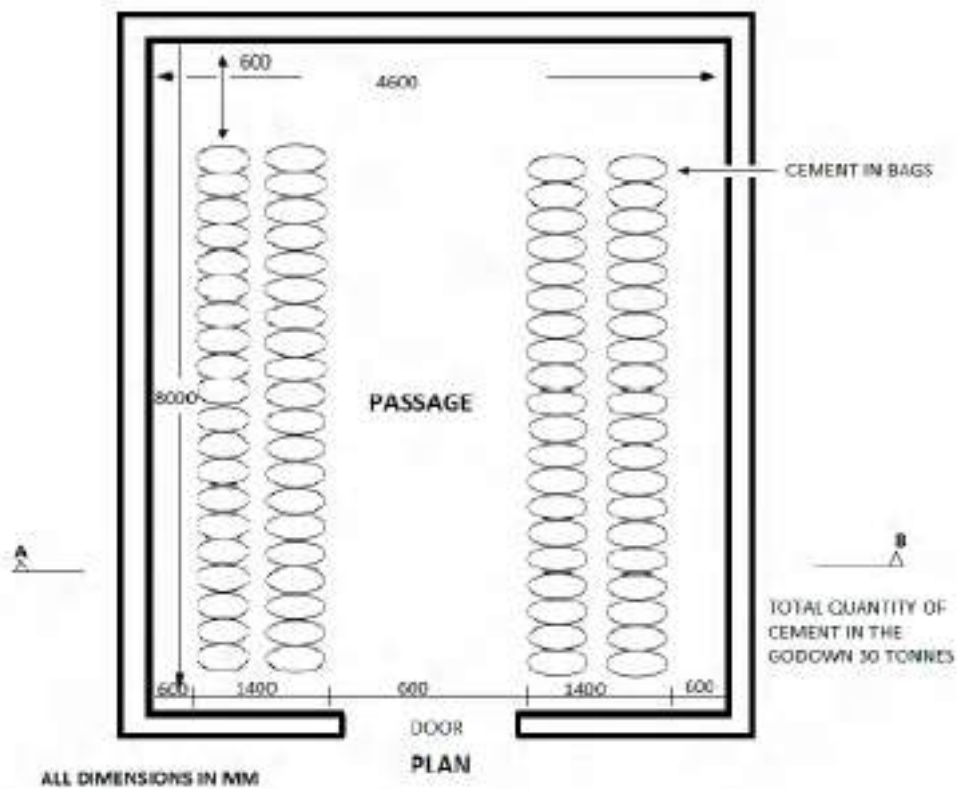
Sanitary Staff - For each labour camp, there shall be qualified Sanitary Inspector and Sweeper should be provided in the following scales:

- (1) For camps with strength over 200 but not exceeding 500 persons. One sweeper for every 75 persons above the first 200 for which 3 sweepers shall be provided.
- (2) For camps with strength over 500 persons one sweeper for every 100 persons above 1 st 500 for which 6 sweepers should be provided.

SKETCH OF CEMENT GODOWN



SECTION AB



CONTRACT FORMS

A. Draft Format for Performance Guarantee

(On Rs.100/- (Rupees hundred only) Stamp Paper from a Nationalized Bank and operatable in Raipur, Chhattisgarh only)

To,
Managing Director,
CGMFP
Raipur 492006, CHHATTISGARH

1. In consideration of the **Chhattisgarh State Minor Forest Produce (T&D) Cooperative Fed. Ltd. (CGMFP)** Van Dhan Bhawan, Sector-24, Nawa Raipur Atal Nagar, Raipur (C.G.) 492006. (hereinafter called "CGMFP" which expression shall unless repugnant to the subject or context include its successor and assigns) having agreed under the terms and conditions of Contract awarded to _____ (hereinafter called "the Contractor" which expression shall unless repugnant to the subject or context include his heirs, executors administrators and assigns/its successors and assigns) and the CGMFP in connection with _____ (hereinafter called "the Said Contract") to accept a Performance Security as herein provided for Rs. _____ from a Nationalised Bank and operatable in Raipur, Chhattisgarh in lieu of the Performance security deposit to be paid for the due fulfillment by the Contractor as per the terms and conditions contained in the said Contract, We the Bank _____ constituted and established under the Banking Companies Acquisition and Transfer of Undertaking Act 1970 (hereinafter referred to as "the said Bank") and having our Head Office at _____ at the request of Contractor do hereby undertake to pay to the CGMFP an amount not exceeding Rs. _____ against any loss or damage caused to or suffered or would be caused to or suffered by the CGMFP by reason of breach or breaches by the said Contractor(s) of any of the terms and conditions contained in the said agreement, and to unconditionally pay the amount claimed by the CGMFP on demand and without demur to the extent expressed.
2. We _____ (name of Bank) do hereby undertake to pay the amounts due and payable under this guarantee without any demur, merely on a demand from the CGMFP stating that the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the CGMFP by reason of breach by the said contractor of any of the terms or conditions contained in the said Agreement or by reason of the contractor(s) failure to perform the said Agreement. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. _____.
3. We _____ (name of Bank) further agree that the Chief Executive Officer, CGMFP shall be the sole judge of and as to whether the contractor has committed any breach or breaches of any of the terms and conditions of the said contract and the extent of loss, damage, costs, charges and expenses caused to or suffered by or that may be caused to or suffered by the CGMFP on account thereof and the decision of the Chief Executive Officer, CGMFP that the Contractor has committed such breach or breaches and as to the amount or amounts of loss, damage, costs, charges and expenses caused to or suffered by or that may be caused to or suffered by the CGMFP from time to time shall be final and binding on us'.
4. We undertake to pay to the Chief Executive Officer, CGMFP any money so demanded notwithstanding any dispute or disputes raised by the Contractor/ supplier in any suit or proceeding pending before any court or Tribunal relating thereto our liability under this present being absolute and unequivocal.

The payment so made by us under this security bond shall be a valid discharge of our liability for payment there under and the contractor /supplier shall have no claim against us for making such payment.

5. We, _____ (indicate the name of Bank) further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Agreement and that it shall continue to be enforceable till all the dues of the CGMFP under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or till the Chief Executive Officer, CGMFP certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the said Contractor(s) and accordingly discharges this guarantee. Unless a demand or claim under this guarantee is made on us in writing on or before the _____ we shall be discharged from all liability under this guarantee thereafter.
6. We _____ (indicate the name of the Bank) further agree with the Chief Executive Officer, CGMFP shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and condition of the said Agreement or to extend time of performance by the said contractor from time to time or to postpone for any time or from time to time any of the powers exercisable by the CGMFP against the said Contractor and to forbear or enforce any of the terms and conditions relating to the said Agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Contractor or for any forbearance, act or commission on the part of the CGMFP or any indulgence by the CGMFP to the said Contractor or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provisions have effect of so relieving us.
7. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor/ Supplier(s).
8. We, _____ (indicate the name of Bank) lastly undertake not to revoke this guarantee during its currency except with the previous consent of the CGMFP in writing.
9. This guarantee is valid till _____ unless a suitable action to enforce the claim under this guarantee is made within 6 (six) months from _____ all your rights under this guarantee shall be forfeited and we shall be relieved and discharged from all liabilities there under.

Dated this _____ day of _____ for
and on behalf of the Bank

The above Guarantee is accepted by the
CGMFP. For and on behalf of the CGMFP

Dated: _____

(Name and Designation)

B. Format of Contract Agreement

(On Rs. 100/- Stamp Paper)

THIS AGREEMENT made theday of, between **Chhattisgarh State Minor Forest Produce (T&D) Cooperative Fed. Ltd. (CGMFP)**, Van Dhan Bhawan, Sector-24, Nawa Raipur Atal Nagar, Raipur (C.G.), Chhattisgarh (herein after called 'CGMFP, the Employer' which expression shall unless it be repugnant to the subject or context on meaning thereof include its successors and assign or assigns) of the one part and M/s _____ whose registered office is situated at _____ (hereinafter called the 'CONTRACTOR') of the other part.

WHEREAS the CGMFP, the Employer, desires that the Works known as name of the Contract. should be executed by the Contractor, and Employer has accepted the tender submitted by the Contractor for the execution and completion of the Work and the remedying of any defects therein,

WHEREAS The contractor has deposited with the CGMFP the sum of Rs. _____ (Rupees _____ only) being the Performance security deposit and undertakes to pay the security deposit by allowing the CGMFP to deduct amount from the running bills payable to him with the rate specified in the conditions of contract.

NOW THIS AGREEMENT WITNESS AND IT IS HEREBY AGREED BY AND BETWEEN THE PARTIES AND DECLARED AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Contract documents referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement. This Agreement shall prevail over all other Contract documents.
 - (a) the Letter of acceptance for contract;
 - (b) the tender submitted by the tenderer;
 - (c) addendum to the tender document if any
 - (d) the Special Conditions of Contract
 - (e) the contract data
 - (e) the General Conditions of Contract;
 - (f) the Specification
 - (g) the Drawings;
 - (h) Soil Investigation Report, Photographs & Other Information and
 - (i) the completed Schedules etc
3. In consideration of the payments to be made to the contractor for the work to be executed by him the contractor shall and will duly provide, execute and complete the said work on or before the dates mentioned in the tender document/ contract document and shall maintain the same at his own cost for the defects liability period thereafter, perform all such acts and things in the contract mentioned or described or which are to be implied there from or may be reasonably necessary for the completion of the said works and at the times and the manner subject to the terms and conditions or stipulations mentioned in the contract.

4. In consideration of the due provision, execution and completion of the said work, the CGMFP does hereby agree with the contractor that the CGMFP will pay to the contractor the respective amount for the work actually done by him at the rates quoted and such other sums as may become payable to the contractor under the provisions of the contract, such payment to be made at such time and in such manner as provided for in the agreement.
5. In consideration of the due provision, execution and completion of the said work contractor does hereby agree to pay to the CGMFP the amount as may be due to CGMFP for the service if any rendered by the CGMFP to the contractor and such other sum or sums as may become payable to the CGMFP towards loss, damage to the CGMFP's equipment, materials, construction plant and machinery, including those hired to the contractor, if any as set forth in the said conditions of contract, such payments to be made at such time and in such manner as provided in the contract.
6. All disputes arising out of or in any way connected with this agreement shall be deemed to have arisen in Raipur and only the courts in Raipur shall have jurisdiction to determine the same.
7. All parts of this contract have been read by us and fully understood by us.

IN WITNESS WHEREAS THE PARTIES HAVE EXECUTED THESE PRESENT IN DUPLICATE THE DAY AND YEAR FIRST MENTIONED ABOVE.

SIGNED AND DELIVERED FOR AND ON BEHALF OF THE WITHIN NAMED CGMFP,
CHHATTISGARH STATE MINOR FOREST PRODUCE (T&D) COOPERATIVE FED. LTD. (CGMFP).

Signature: _____

Designation: _____

In the presence of witness

1. _____ Address

2. _____ Address

SIGNED AND DELIVERED FOR & ON BEHALF OF

Signature: _____

In the presence of witness

1. _____ Address

2. _____ Address

Draft Format for Performance Guarantee for Water Proofing and Anti-termite Works

(On Rs.100/- (Rupees hundred only) Stamp Paper)

To,

Chhattisgarh State Minor Forest Produce (T&D) Cooperative Fed. Ltd. (CGMFP)

1st floor, Udyog Bhawan, Ring Road No.-1, Telibandha,

Raipur 492 006, CHHATTISGARH

Name of Work: -----

1. We hereby guarantee that the treatment given to water-tanks, terraces, WC, bath, chhajas, below kitchen sinks, balconies, decks, lift-pits and anti-termite treatment under contract of _____ will remain water proof, Termite proof free of any defect for a period of 10 (ten) years from date of completion of work.
2. If by any chance a defect is noticed in the water proofing work and/or anti-termite treatment work in the above case due to bad workmanship, we will rectify the same free of cost to CGMFP at any time during the above guarantee period.
3. The question of whether the work is defective as aforesaid shall be decided by the Officer-in-Charge of the said work, and the decision of the Chief Executive Officer, CGMFP shall be final conclusive and binding on the contractor. The defects will be rectified subject to the following:
 - (a) The work is not subject to any undue pressure and tension due to abnormal conditions such as earthquake, bombardment, natural catastrophe, etc.
 - (b) On account of the water proofing and/ or anti-termite treatment work being tampered with or punctured under any circumstances.
4. In case we are unable/decline or neglect to remedy the defect noticed during the 10 (ten) years of guarantee period as stated above, the CGMFP will rectify these through any other competent contractor and recover (including interest from us all expenses) for doing the job.
5. All disputes arising out of or in any way connected with these be decided to have arisen in Raipur and only the courts in Raipur shall have jurisdiction to determine the same.
6. Contract document and works requirement have been read and fully understand by us.
7. In token of their consent, the guarantee is countersigned by M/s. _____ who have carried out specialized water proofing treatment and anti-termite treatment.
8. 0.5 % (half percent) of total Contract amount for all building work and on-site infrastructure work shall be deposited in the form of Bank guarantee in approved format by the main contractor for a period of 10 (ten) years. Bank guarantee shall be from a Nationalised bank in Raipur and operatable in Raipur,

Chhattisgarh. The said Bank Guarantee shall remain valid for entire guarantee period and shall be

released only after successful completion of the performance period of 10 (ten) years.

Signature:

Signature:

M/s _____

M/s _____

Water proofing Contractor:

Contractor:

Address:

Office:

Anti-termite Treatment Contractor:

Address:

C. Indemnity Bond

(On Rs.100/- (Rupees hundred only) Stamp Paper)

In consideration of **Chhattisgarh State Minor Forest Produce (T&D) Cooperative Fed. Ltd. (CGMFP)** Van Dhan Bhawan, Sector-24, Nawa Raipur Atal Nagar, Raipur (C.G.), Chhattisgarh (hereinafter referred to as 'the CGMFP', which expression shall unless it be repugnant to the context or meaning awarded to M/s. _____ a partnership/ proprietorship/ Pvt. Ltd./ Ltd. firm carrying in such name and style the business of constructing -----works (hereinafter referred to as 'the Contractor' which expression shall, unless it be repugnant to the context or meaning thereof, include its partners or partner/ proprietor for the time being or its surviving partner or his heirs and executors) for the construction of -----, Chhattisgarh at an estimated cost of Rs. _____ crores and in compliance with the terms and conditions of the said contract.

We, M/s _____, being the contractor do hereby agree and undertake and indemnify and save harmless the CGMFP in consequence of the manufacturing defect, latent manufacturing defect and construction defect found in the constructed works such as Building/ Road/ Bridges of the ----- -----at any time in a period of 3 years commencing with the grant of completion certificate by the CGMFP to the Contractor in accordance with and subject to the provision of the said contract.

It is hereby agreed and declared that the MD of the CGMFP or any officer acting as such MD of the CGMFP shall be the Competent Authority to decide upon the question as to the defects in the construction of infrastructure/ buildings and the remedy to be applied by the contractor for their rectification at their cost and his decision shall be final, conclusive and binding upon both the CGMFP and the Contractor, provided that the MD shall so decide after giving an opportunity to the Contractor to represent his case.

We hereby agree and undertake irrevocably and unconditionally to carry out duly each and every decision, order, direction or instruction as may be issued by the said MD or as the case may be, the officer of the CGMFP in this behalf and to rectify properly and promptly the defect found by him irrespective of the fact that, CGMFP and/or Project Manager have checked, supervised and approved the work.

In the event of failure of Contractor to carry out the repair and rectifications as per the decision of MD, the CGMFP will be at liberty to carry out the repair and rectification works at the risk and cost of the Contractor.

FOR AND ON BEHALF OF M/s. _____

RAIPUR

Date

SEAL

Notary Chhattisgarh State

BEFORE ME

Noted and Registered at Serial
Number _____

Accepted By

For and on Behalf of
Managing Director, CGMFP,
Van Dhan Bhawan, Sector-24, Nawa Raipur Atal
Nagar, Raipur (C.G.).

D. Indenture Bond

(On Rs.100/- (Rupees hundred only) Stamp Paper)

To,
Chhattisgarh State Minor Forest Produce (T&D) Cooperative Fed. Ltd. (CGMFP)
Van Dhan Bhawan, Sector-24, Nawa Raipur Atal Nagar, Raipur (C.G.)

THIS INDENTURE made on the _____ day of _____ between M/s _____ (hereinafter called the 'CONTRACTOR' which expression shall where the context as admits or implies be deemed to include his heirs, executors, administrators and assigns) of the One Part and **Chhattisgarh State Minor Forest Produce (T&D) Cooperative Fed. Ltd. (CGMFP)** Van Dhan Bhawan, Sector-24, Nawa Raipur Atal Nagar, Raipur (C.G.), Chhattisgarh (hereinafter called the CGMFP, which expression shall where the context so admits or implies be deemed to include its successors and assigns) of the Other Part.

WHEREAS

1. The Contractor have entered into a contract dated _____ with the CGMFP for the execution of "-----Chhattisgarh." on conditions set out therein.
2. The Contractor have applied to the CGMFP that he be allowed advance on the security of materials absolutely belonging to him and brought by them to the site of the work for use in the construction of such of the works as he had undertaken to execute at stipulated rates and aforesaid nature. The quantities and other particulars of the materials on the security of which the advance or advances are made being detailed in -----Running Account Bill for the said works.

NOW THIS INDENTURE WITNESS :

That in pursuance of the said contract and in consideration of the sum of Rs. _____/- (Rupees _____ only) paid on or before the execution of these presents to the Contractor both hereby acknowledge) and of such further advance (if any) as may be made to him as aforesaid the contractor both hereby covenant and agree with CGMFP and declare as follows:

1. That the said sum of Rs. ----- /- (Rupees _____ only) advanced by CGMFP to the Contractor aforesaid and all or any further sum or sums advanced as aforesaid shall be employed by the contractor in or towards expenditure the execution of the said works and for no other purpose whatsoever.
2. That the materials detailed in the said Running Account Bill which have been offered to and accepted by the CGMFP as security are absolutely the Contractor's own property and free from encumbrances of any kind and the Contractor shall not make any application for or receive a further advance from the CGMFP on the security of materials which are absolutely his own property and free from encumbrances of any kind and the contractor indemnifies the CGMFP against all claims to any materials in respect of which an advance has been made to him as aforesaid.

3. That the materials detailed in the said Running Account bill and all other materials on the security of which any further advance or advances may hereinafter be made as aforesaid (hereinafter called the said 'materials') shall be used by the contractor solely in the execution of the said works in accordance with the directions of the Manager of CGMFP/ Engineer and the terms of the said contract.
4. That the contractor shall make at their own cost all necessary and adequate arrangement for the proper watch, safe, custody and protection against all risks of the said materials and that until used in construction as aforesaid the said materials shall remain at the site of the said works in the contractor's custody and on their own responsibility and shall at all time be open to inspection by the Manager or any officer authorised by him/ Engineer. In the event of the said materials or any part thereof being stolen, destroyed or damaged, the contractor shall forthwith replace or repair the same as required by the Manager of CGMFP/ Engineer.
5. That the said materials shall not on any account be removed from the site of works except with the written permission of the Engineer or an officer authorised by him in that behalf.
6. That the advance shall be repayable in full when or before the contractor received payment from the CGMFP of the price payable to him for the said works under the contract provided that if any intermediate payments are made to the contractor on account of work done then on the occasion of each such payment the CGMFP will be at liberty to make a recovery from the contractor's bill for such payment by deducting there from the value of the said materials then actually used in the construction and in respect of which recoveries has not been made previously the value for this purpose being determined in respect of each description of materials at the rate of which the accounts of the advance made under these presents were calculated.
7. That if the contractor shall at any time make any default in the performance or observance in any respect of any of the terms and provision of the said contract or of these presents, the total amounts of the advance or advances that may still be owing in the CGMFP shall be immediately on happening of such default be repayable by the contractor to the CGMFP together with interest thereon at 12 % (twelve percent) per annum from the date of repayment and with all costs, charges, damages and expenses incurred by the CGMFP in or for the recovery thereof on the enforcement of this security or otherwise by reason of the default of the contractor and the contractors hereby covenants and agree with the CGMFP to repay and pay the same respectively to the CGMFP accordingly.
8. That the contractor hereby hypothecates all the said materials with the repayment to the CGMFP of the said sum of Rs. _____(Rupees _____ only) and any further sum or sums advanced as aforesaid and all costs, charges, damages, and expenses payable under these presents PROVIDED ALWAYS and it is hereby agreed and declared that notwithstanding anything in the said Agreement and without prejudice to the powers contained therein if and whenever the convenient for payment or repayment herein before contained shall become enforceable and the money owing shall become enforceable and the money owing shall not be paid in accordance herewith the CGMFP may at any time thereafter adopt all or any of the following courses as it may deem fit.
 - (a) Seize and utilize the said materials or any part thereof in the completion of the said works on behalf of the contractor in accordance debiting the contractor with the actual cost of the effecting such completion and the amount due in respect of advance under these presents and crediting the contractor with the value of work done as if he had carried it out in accordance with the said contract and the rates hereby provided. If the balance is against the contractor he is to pay same to the CGMFP on demand.

- (b) Remove and sell by public auction the seized materials on any parts thereof and out of the moneys arising from the sale retain all the sums aforesaid repayable to the CGMFP under these presents and pay over the surplus (if any) to the contractor.
- (c) Deduct all or any part of the money owing out of the security deposit or any sum due to the contractor under the said contract.
- (d) Recovery through Revenue Recovery Certificate (RRC) issued by CGMFP to respective collector of the District.

9. That except in the event of such default on the part of the contractor as aforesaid interest on the said advance shall be payable.

10. The contractor shall execute a promissory note for the sum of Rs. _____ /- (Rupees _____ only) in favour of the CEO, CGMFP to provide a collateral security for the payment of the advance made or to be made to the contractor.

IN WITNESS WHEREOF THE SAID M/s _____ AND **CHHATTISGARH STATE MINOR FOREST PRODUCE (T&D) COOPERATIVE FED. LTD. (CGMFP)**. HAVE HEREUNTO SET THEIR RESPECTIVE HANDS THE DAY AND YEAR FIRST ABOVE WRITTEN ;

SIGNED SEALED AND DELIVERED BY THE SAID CONTRACTOR IN THE PRESENCE OF:

- 1.
- 2.

SIGNED SEALED AND DELIVERED BY THE ENGINEER WITHIN NAMED **CHHATTISGARH STATE MINOR FOREST PRODUCE (T&D) COOPERATIVE FED. LTD. (CGMFP)** BY THE HAND OF SHRI CGMFP IN THE PRESENCE OF:

- 1.
- 2.

E. Notice for Appointment of Arbitrator

To

Managing Director

.....

.....

Dear Sir,

In terms of clause 25 of the agreement, particulars of which are given below, I/we hereby give notice to you to appoint an arbitrator for settlement of disputes mentioned below:

1. Name of applicant
2. Whether applicant is Individual/Prop. Firm/Partnership Firm/Ltd. Co.
3. Full address of the applicant
4. Name of the work and contract number in which arbitration sought
5. Name of the Division which entered into contract
6. Contract amount in the work
7. Date of contract
8. Date of contract Date of initiation of work
9. Stipulated date of completion of work
10. Actual date of completion of work (if completed)
11. Total number of claims made
12. Total amount claimed
13. Date of intimation of final bill (if work is completed)
14. Date of payment of final bill (if work is completed)
15. Amount of final bill (if work is completed)
16. Date of request made to SE for decision
17. Date of receipt of SE's decision
18. Date of appeal to you

19. Date of receipt of your decision.

Specimen signatures of the applicant (only the person/authority who signed the contract should sign)

I/We certify that the information given above is true to the best of my/our knowledge. I/We enclose following documents.

1. Statement of claims with amount of claims.
- 2.
- 3.
- 4.

Yours faithfully,

(Signatures)

Copy in duplicate to:

1. Executive Engineer,
.....

PROFORMA OF SCHEDULES (Schedule 'A' to Schedule 'F')
(Separate Performa for Civil, Elect. & Hort. Works in case of Composite Tenders)
(Operative Schedules to be supplied separately to each intending tenderer)

SCHEDULE 'A'

Schedule of quantities (as per CGMFP)

SCHEDULE 'B'

Schedule of materials to be issued to the contractor.

Sl. No.	Description of item	Quantity	Rates in figures & words at which the material will be charged to the contractor	Place of issue
1	2	3	4	5

SCHEDULE 'C'

Tools and plants to be hired to the contractor

Sl. No.	Description	Hire charges per day	Place of Issue
1	2	3	4

SCHEDULE 'D'

Extra schedule for specific requirements/document for the work, if any.

SCHEDULE 'E'

Reference to General Conditions of contract.

Name of Work :

Estimated cost of work : Rs.

(i) Earnest Money : Rs.

(ii) Performance : 5% of tendered value
Guarantee

(iii) Security Deposit : 5% of tendered value

SCHEDULE 'F'

GENERAL RULES & DIRECTIONS : Officer inviting tender

Maximum percentage for quantity of items of work to be executed beyond which rates are to be determined in accordance with Clauses 12.2 & 12.3: See below

Definitions:

- 2(v) Officer-in-Charge
- 2(viii) Accepting Authority
- 2(x) Percentage on cost
 of materials and
 Labour to cover all
 overheads and
 profits: 15 %
- 2(xi) Standard Schedule
 of Rates
- 2(xii) Department

Clause 1

- (i) Time allowed for submission of Performance days
 Guarantee from the date of issue of letter of
 acceptance
- (ii) Maximum allowable extension beyond the period days
 provided in (i) above

Clause 2

Authority for fixing
compensation under clause 2

Clause 2A

Whether Clause 2A shall be applicable Yes / No

Clause 5

Number of days from the date of issue days
of letter of acceptance for reckoning
date of start

Mile stone(s) as per table given below:-

Sl. No.	Description of Milestone (Physical)	Time allowed in days(from date of start)	Amount to be with-held in case of non achievement of mile stone
1.			
2.			
3.			
4.			
5.			

Time allowed for execution
of work

Authority to decide:

- (i) Extension of time.....(Engineer in Charge or Engineer in Charge of Major Component in case of Composite Contracts, as the case may be)

- (ii) Rescheduling of mile stones
(Superintending Engineer in Charge or Superintending Engineer in Charge of Major Component in case of Composite Contracts, as the case may be)

Clause 6, 6A

Clause applicable - (6 or 6A)

Clause 7

Gross work to be done together with Rs.
net payment /adjustment of advances
for material collected, if any, since the
last such payment for being eligible to
interim payment

Clause 10A

1. 2. 3.
4. 5. 6.

Clause 10B(ii)

Whether Clause 10B (ii) shall be Yes / No
applicable

Clause 10C

Component of labour expressed as =%
percent of value of work

Clause 10CA

Sl. No.	Material covered under this clause	Nearest Materials (other than cement, reinforcement bars and the structural steel) for which All India Wholesale Price Index to be followed	Base Price of all Materials covered under clause 10 CA*
1.			
2.			
3.			
4.			

* Base price of all the materials covered under clause 10 CA is to be mentioned at the time of approval of NIT.

Clause 11

Specifications to be followed for
execution of work

Clause 12

12.2. & 12.3 Deviation Limit beyond which clauses
12.2 & 12.3 shall apply for building
work

12.5 Deviation Limit beyond which clauses
12.2 & 12.3 shall apply for foundation
work

Clause 16

Competent Authority for deciding
reduced rates.

Clause 18

List of mandatory machinery, tools & plants to be deployed by the contractor at site:-

- | | | |
|---------|---------|---------|
| 1. | 2. | 3. |
| 4. | 5. | 6. |
| 7. | 8. | 9. |

Clause 36 (i)

Requirement of Technical Representative(s) and recovery Rate

Sl. No.	Minimum Qualification of Technical Representative	Discipline	Designation (Principal Technical/ Technical Representative)	Minimum Experience	Number	Rate at which recovery shall be made from the contractor in the event of not fulfilling provision of clause 36(i)	
						Figures	Words
1.							
2.							
3.							
4.							
5.							

Assistant Engineers retired from Government services that are holding Diploma will be treated at par with Graduate Engineers.

Clause 42

- (i) (a) Schedule/statement for determining theoretical quantity of cement & bitumen on the basis of C.G.S.O.R

.....

printed by C.G.P.W.D.

- (ii) Variations permissible on theoretical quantities:

- (a) Cement

For works with estimated cost put to tender not more than Rs. 5 lakh.

3% plus/minus.

For works with estimated cost put to tender more than Rs.5 lakh.

2% plus/minus.

- (b) Bitumen All Works 2.5% plus & only & nil on minus side.
- (c) Steel Reinforcement and structural steel sections for each diameter, section and category 2% plus/minus
- (d) All other materials. Nil

RECOVERY RATES FOR QUANTITIES BEYOND PERMISSIBLE VARIATION

Sl. No.	Description of Item	Rates in figures and words at which recovery shall be made from the Contractor	
		Excess beyond permissible variation	Less use beyond permissible variation
1.	Cement		
2.	Steel Reinforcement		
3.	Structural Sections		
4.	Bitumen issued free		
5.	Bitumen issued at stipulated fixed price		