

STANDARD OPERATING PROCEDURES TO BE FOLLOWED BY BIDDERS TO MONITOR GST COMPLIANCE & INCOME TAX ACT :

Stage I :- Floating of Notice Inviting Tender (NIT)

- It is to ensure that the all prospective bidders to submit copy of Registration Certificate under GST Act.
- The following undertakings (on the letter head of bidder) to be submitted by all bidders:
 - 1.1 GST registration is valid as on date.
 - 1.2 No default has ever been made by bidder in filing the various GST returns and deposit of GST dues with the department.
 - 1.3 Bidders having multiple registrations under GST will submit undertaking for each & every GST number. A default under a GST number even if the GST number pertains to some other state, will make the vendor ineligible to participate in tender.

In addition, the successful bidder will also submit the following undertakings in addition to above immediately after issue of work order and with submission of each & every bill unless mentioned otherwise:

- 1.4 Undertakings mentioned at 1.1, 1.2 and 1.3.
- 1.5 A CA certificate regarding validity of GST registration will be submitted every six months during the tenure of contract.
- 1.6 Vendor will submit copies of GSTR I and GSTR 3B/challans as evidence to deposit of GST with certification that GST collected from HPGCL, to be specified in exact rupees, has been paid to Govt. vide this challan (specifying the challan no. & date of deposit) and returns filed (date of filing of return) includes the transaction of supply of Good or/and services to HPGCL.
- 1.7 Vendor will inform immediately the HPGCL about initiation of any proceeding (if any) against him under the GST laws which may result in suspension or cancellation of GST number of the Vendor.
- 1.8 Undertaking to indemnify the HPGCL in case of any financial implication on HPGCL due to non-compliance of prescribed obligation under the GST Law on part of the Supplier/vendor.
- 1.9 In case of ARCs/AMCs having duration above one year, copies of GSTR 1, GSTR 2A and GSTR 3B along with copies of invoices raised to HPGCL, duly reconciled with three returns to be submitted on quarterly basis.
In case of one time job orders and purchase orders, copies of GSTR 1, GSTR 2A and GSTR 3B along with copies of invoices raised to HPGCL, duly reconciled with three returns to be submitted before release of the security.

Stage II :Scrutiny of bids -

- The GST registration status of vendors will be verified from the official website www.gst.gov.in
- The address of vendor, the place from which supplies will be made or the invoice will be raised, mentioned in bid document should match with the GST registration number on the department's website. In case vendor is having multiple GST registration numbers, executive to ensure that GST number linked to place of supplier should be submitted to HPGCL.
- Filing status of following returns is to be verified that the returns are being filed by vendor within due dates:

Return	Periodicity of filing	Return for
GSTR1	Monthly	Outward supplies
GSTR2A	Monthly	Its auto populated on GST portal on the basis of GSTR 1 filed by vendor.
GSTR 3B	Monthly	Payment of GST
GSTR9	Yearly	Compilation of outward and inward supplies, made during the FY
GSTR9C	Yearly	Analytical statement on GST returns certified by GST Auditor

- Will be verified the undertakings, as specified in NIT, have been submitted by bidders. Failure to submit unconditional undertakings will render the bidder to ineligible at technical stage of evaluation itself.

Construction of RCC Overhead water tank of 2,00,000 litres capacity at PTPS Colony, Panipat.

Stage III: Award of contract/ Issue of WO.

- Purchase order/work order to specify that in case of failure at the end of vendor regarding deposit of tax and in complying with conditions mentioned at stage I & II, HPGCL will have right to recover the GST amount in default along with interest & penal amount and deposit the same directly with GST department on behalf of vendor to the credit of HPGCL.
- Vendor will undertake to immediately inform the HPGCL about any amendment in the GST certificate and to immediately submit the updated registration certificate.

Stage IV : Receipt of first invoice-

- Executives wing to verify that the invoice is in performance as specified under GST laws (Section 31 to 34 of CGST Act read with Rules 46 to 55A of the CGST rules deal with the Tax invoice, Credit notes and debit notes) with correct GST number of HPGCL so that no difficulty is faced by HPGCL while claiming Input Tax Credit of GST due to incorrect GST number and also to reconcile the GST number and address of supplier as per invoice with the GST number & address given in tender documents submitted by vendor and submit the duly verified invoice to accounts wing.
- After the implementation of the E-Invoice w.e.f.01 Oct 2020 generation of e-invoice from common e-invoice portal for B2B supplies by person having aggregate annual turnover of more than Rs.500 Crs has been made compulsory. And w.e.f.01.Jan.2021 Generation of E-invoice for GST supplies by person having aggregate turnover of more than Rs. 100 Crs. has been made compulsory. And w.e.f 01.04.2021 generation of E-invoice for GST supplies by the person having aggregate turnover of more than Rs.5 Crs is proposed to be made compulsory. The nodal officer/engineer in charge of the contract/appointed officer of the respective plant should demand from the supplier E-Invoice containing the invoice reference number (IRN) and QR code. It is worthwhile to note that any tax invoice including tax credit / Debit note issued by such notified person for B2B supplies without following the e-invoicing procedure shall not be treated as a valid document.
- Obtain an undertaking from the vendor who are not generating e-invoice in following format:
We M/s.....having PANand GSTIN Registration Numberhereby undertake that our Aggregate Turnover (as per Section 2(6) of Central Goods and Services Tax Act, 2017)for FY 2019-20 does not exceed the prescribed threshold (as on the date of this declaration) for generation a Unique Invoice Registration Number (IRN)and QR code as per the provisions of Central Goods and Services Tax Act,2017 and rules there under ("GST Law").Further, we also undertake that if the aggregate turnover of M/s.....exceeds the current threshold or revised threshold notified by Government of India at any future date, then we shall issue invoice and credit note in compliance with the required provisions of GST Law. In case of any queries from the any state or centre Goods and Services Tax authorities, M/s.will be solely responsible.

Yours Truly,

For M/s.....

Authorized Signatory Name: Designation:

- Accounts wing to check Arithmetical accuracy, Rate of GST charged & other calculations.
- In case there is difference in value of invoice, due to difference in quantity or quality actually supplied, GST will be applied on revised value of invoice.

Stage V: Receipt of IInd & subsequent invoices

- In addition to procedure mentioned in stage IV, following steps to be undertaken
- All undertaking mentioned at stage to be obtained & verified.
- GSTR 2A should be matched with amount of GST paid. In case, the details are not there in GSTR2A, issue needs to be taken up with vendor and GST consultant of HPGCL.

Others:

- EMD and Securities/Bank guarantees taken by HPGCL may be refunded only after payment of GST by vendor/contractor which was charged from HPGCL.
- In case any issue arises wrt failure by the firm in GST compliances, all future payments

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to be put on hold after having consultation with HPGCL's GST consultant.

Undertaking from the vendor (on vendor's letter head for not generating e-invoice)

We M/s..... having PAN..... and GSTIN Registration Number.....hereby undertake that our Aggregate Turnover (as per Number Section 2(6) of Central Goods and Services Tax Act, 2017) for FY ----- does not exceed the prescribed threshold (as on the date of this declaration) for generation a Unique Invoice Registration Number (IRN) and QR code as per the provisions of Central Goods and Services Tax Act, 2017 and rules there under ("GST Law") Further, we also undertake that if the aggregate turnover of M/s..... exceeds the current threshold or revised threshold notified by Government of India at any future date, then we shall issue invoice and credit note in compliance With the required provisions of GST Law. In case of any queries from the any state or centre Goods and Services Tax authorities, M/s.....

Yours Truly,

For M/s.....

Authorized Signatory Name: Designation:

Undertaking from the vendor (on vendor's letter head) regarding validation of GST registration (for each GST number separately)

1.7.1. GST registration of GST no..... date in name of M/s..... is valid as on Date.....

1.7.2. No default has ever been made by me/my firm in name of in filing the various GST returns and deposit of GST dues with the department with respect to GSTN.....

Yours Truly,

For M/s.....

Authorized Signatory Name: Designation:

Undertaking cum declaration from the vendor (on vendor's letter head)

1.8. I undertake to submit a CA certificate regarding validity of GST registration on every six months during the tenure of contract.

1.9. I undertake to submit copies of GSTR I and GSTR 3B/ challans as evidence to deposit of GST with certification that GST Collected from HPGCL, to be specified in exact rupees, has been paid to Govt. vide this challans (specifying the challan no. & date of deposit) and returns filed (date of filing of return) includes the transaction of supply of Good or/and services to HPGCL.

1.10. I undertake to inform immediately the HPGCL about initiation of any proceeding (if any) against me/my firm under the GST laws which may result in suspension or cancellation of GST number of the Vendor.

Yours Truly

For M/s.....

Authorized Signatory Name: Designation:

Undertaking cum indemnity bond from the vendor (on vendor's letter head) regarding timely deposition of GST

- a) Certified that we are registered as taxable person under GST Act, our GST no. is and which is active as on.....
- b) Certified that bill for the month of..... In which GST has been claimed, is included in all the GST returns submitted by us to the GST authorities.

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- c) Certified that we shall deposit the amount of GST collected from PTPS/HPGCL to the Government exchequer within the time specified under the GST Law.
- d) Certified that the goods/services on which GST has been charged have not been exempted from GST under GST Act. The rate/amount of GST in these goods/services is correct under the provisions of the GST Act.
- e) We give Undertaking-cum-indemnity bond to PTPS/HPGCL that we shall indemnify to PTPS/HPGCL for any loss sustained in case we does not deposit the GST to the government exchequer, which it has recovered from the M/s HPGCL as tax.

Yours Truly,
 For M/s.....
 Authorized Signatory Name: Designation:

STANDARD OPERATING PROCEDURES TO MONITOR COMPLIANCES UNDER TDS PROVISIONS OF INCOME TAX ACT:-

Any person making specified payments mentioned under the Income Tax Act are required to deduct TDS at the time of making such specified payment (annexure-A). The SOP deals with procedure to be followed when HPGCL deducts the tax while making payment to others and when tax is deducted from payments made to HPGCL.

HPGCL as a deductor of tax:

- Any tax deducted from payment to any person is a liability of HPGCL and the tax is to be deposited invariably on or before the due date as per annexure I by filing challan no. ITNS-281
- Filing of TDS return is mandatory and the return should be filed on or before the due date as per annexure. The type of return to be filed is as under:

Form	Transaction to be reported
24Q	TDS on salaries
26Q	TDS on all payments except salaries
26QC	TDS on rent
- As per section 196 of Income Tax Act 1961, no deduction of tax shall be made by any person from any sums payable to Govt (State & Central Govt)
- As per Circular No. 18/2017, The Central Board of Direct Taxes (the Board) for such entities whose income is unconditionally exempt under Section 10 of the Income-tax Act (the Act) and who are also statutorily not required to file return of income as per Section 139 of the Act, there would be no requirement for tax deduction at source (TDS) from the payments made to them since their income is anyway exempted from tax under the Act.

HPGCL is in receipt of payment net TDS:

- Payer to submit an undertaking that all the TDS pertaining to HPGCL will be deposited and return of TDS so deposited will be filed, with in due time.
- Staff to monthly monitor the Form 26AS to ensure that the TDS deducted out of payment of HPGCL has been deposited to the PAN of HPGCL.
- In case, TDS deducted is not updated in Form 26As after expiry of due date of filing of TDS return, issue needs to be taken up with the concerned party
- Staff to undertake periodic reconciliation of TDS as per 26AS and TDS as appearing in books
- TDS so deducted by other party should be claimed in Income Tax Return of that financial year

Annexure-A

Specified Payments/ Transaction applicable to TDS

TDS is to be deducted on the specified transaction mentioned under Income tax act. These transactions are given below with their section, limits & rate as per FY.

Section	Income Type	Limit	TDS Rate In %
192	Salary Income	As per Basic Exemption limit & deduction	---
193	Interest on securities	Rs.10,000	10%
193	Interest on debenture	Rs.5,000	10%
194	Dividend other than listed	NA	10%
194A	Interest other than on securities by other than Bank/FIs	Rs. 5,000	10%

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194H	Commission on brokerage	Rs. 15,000	5%
194I	Rent of Land, Building and Furniture	Rs. 2,40,000	10%
194I	Rent of plant & machinery	Rs. 2,40,000	2%
194IB	Rent	Rs. 50,000 per month	--
194IA	Transfer of immovable property other than agriculture land	Rs. 50 Lakh	1%
194C	Payment to contractor subcontractor (single transaction)	Rs. 30,000	2%
194C	Payment to contractor during the year	Rs. 1,00,000	2%
194J	Professional fees/Technical fees etc.	Rs. 30,000	10%

Due date for payment/depositing TDS/return filed

Date of ending of the quarter of FY	Due date for filling of return
30th June (April –June)	31st July of FY
30th September (July-September)	31st October of FY
31st December (Oct.-Dec.)	31st January of FY
31st March (Jan-March)	31st May of FY immediately following FY
Months	Due date of TDS payment
April to February	7th of following month
March	30th April

DECLARATION OF TDS

I, _____, _____ (Designation) of _____
(Name of the Corporation/Company/ Board/ Trust), having PAN - _____ (here in after referred as the Corporation/Company/ Board/ Trust), hereby declare and affirm a under:

1. That the Corporation/Company/Board/ Trust is a regular income tax assessee.
2. That the Corporation/Company/ Board/ Trust has been filing its return of income tax regularly.
3. That the Corporation/Company/ Board/ Trust has filed returns of income tax for the financial years 2021-22 and 2022-23 under the provisions of section 139(1) of the Income Tax Act, 1961 as per details given below;

Assessment Year	Acknowledgement Number	Date of filing

4. That the new provisions of Section 206AB/Section 206CCA which require deduction/ collection of tax at source at higher rates are not applicable to our Corporation/Company/ Board/ Trust and hence tax may not be deducted/collected at source at higher rates.

(Deponent)

That whatever stated above in the above stated para(s) are true to my knowledge and belief.

(Deponent)

Construction of RCC Overhead water tank of 2,00,000 litres capacity at PTPS Colony, Panipat.

ADDITIONAL TERMS & CONDITIONS OF WORK ORDER

1) RISK AND COST: -

In case the contractor fails to full fill the contractual obligation, the work shall be got done from some other agency at the risk and cost of the contractor. It shall be without prejudice to the right of HPGCL to recover any further amount or any liquidated and/or other damages.

2) DOCUMENTATION: -

The contractor and the executive in-charge of the work shall ensure the following document before forwarding the final bill of the contractor to the Accounts Wing for pass and payment to avoid delay in payment of the contractor:-

- i. Contractor shall submit running/final bill through HEWP portal along with the followings:-
 - a. Bill for the work done should be in duplicate. The bills should be on the contractors bill book duly serially numbered and bearing date of issue, contractors EPF Code, ESI Code, GST No., PAN No., A photo copy of the EPF Code, ESI Code, GST No., Labour License, PAN No. shall be attached with the bill for reference and record.
 - b. Self-attested copy of the deposit challan of EPF contribution, ESI contribution labour welfare fund deposited by the contractor for the labour engaged for the work duly validated with dossier of works and their account number in the appropriate prescribed Performa.
 - c. Self-attested copy of the attendance sheet, wages register and evidence of wage payment with wage slip.
- ii. The bill of the contractor along with the annexure submitted by the contractor at (i) above, should be approved and verified by the officer in-charge for gross value as well as net payable value and accompanied with the certificates / documents mentioned at (iii) and (iv) below.
- iii. Certificate from the Engineer In-Charge the:-
 - a. Work has actually been done as per the contract and to the entire satisfaction of EIC.
 - b. The copy of EPF challan, ESI Challan etc. submitted by contractor pertains to the labour deployed at site and none of workers has been excluded there from.
 - c. The record entry of the work done has been taken in the small measurement book (SMB) at Page No. ____ dated _____.
 - d. No penalty is leviable on the contractor on any account as per the contract if leviable the amount of penalty is _____.
 - e. Copy of protocol and certificate for stage payment, if required.
- iv. Certificate from labour welfare officer / factory manager stating that contractor has complied with all labour laws and safety clearance certificate from safety officer. In case of non-availability of labour welfare officer / safety officer from EIC.

Note Documentation attached along with the contractor bill should be referred in the forwarding letter of the executive office forwarded the bill for pass and payment.

3) FORCE MAJEURE: -

The delay in completion of work may be treated as force majeure to the contractor only if: -

- a. The delay is resulted from any causes arising out of compliance with regulations, orders or instructions of the Central or State Governments, acts of God, acts of Civil & Military authority, fires, floods, strikes, lock-outs, freight embargoes, war risk riots and civil commotion.
- b. The contractor's request for extension of the delivery period along with all necessary evidence comes, before the expiry of the schedule date(s) of delivery.

4) IDLE LABOUR CHARGES: -

No idle labour charges will be admissible in the event of any stoppage caused in the work resulting in contractor's labour being rendered idle due to any cause.

5) OVER RUN CHARGES: -

No overrun charges shall be paid in the event of the completion period being extended for any reasons.

6) WATCH & WARD: -

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The watch and ward of T&P and other material will be the responsibility of the contractor.

7) STATUTORY DEDUCTIONS: -

Statutory deduction on account of Income Tax etc. including surcharge shall be made at source from the bills of the contractor at the prevailing rates.

8) FACTORY ACT/MINIMUM WAGES ACT/INSURANCE ACT/ EPF ACT ETC.: -

Strict adherence of various applicable laws like the Factories Act, Minimum Wages Act, ESI Act, Payment of Wages Act, the workman's Compensation Act, EPF Act, Contractor labour (Regulation & Abolition) Act, 1970 and all other statutory requirements as amended from time to time to the entire satisfaction of Central/State Govt. Authorities, shall be the responsibility of the Contractor and he shall have to make good loss, if any, suffered by HPGCL on account of default in this regard by the contractor. EPF/ESI contributions will be deposited by the contractor in his own EPF/ESI code no. in the respective account of the workers. The contractor will submit the copy of EPF/ESI challan to the Labour Welfare Officer, at the time of payment along with corresponding list of workers.

The contractor shall make the payment of wages to its labour/worker in their bank account only. Documentary evidence thereof shall be submitted along with the running bills.

9) SAFETY RULES: -

A firm shall have to comply with all the provisions of safety rules. The chief Safety officer may impose penalty of Rs. 200/- per day per head if the workers of contractor are found to be working carelessly without proper protective equipment's in unsafe conditions. Against violation of any other clause, a penalty of Rs 500/- per violation (minimum) shall be levied. In case of repeated violation of serious nature resulting in various serious accident or direct loss to the corporation/ threatens to cause severe consequences, higher penalty rates may be imposed including suspension/termination of the contract. If any action is initiated by Chief Inspector of Factories, Chandigarh or any other authority against occupier/factory manager or any other authority of HPGCL in case of any fatal/non-fatal accident or any other violation of factory act, 1948, Pb. Hr. Factory rules, 1952 or any other industrial or labour act, the contractor shall be liable for the same and also to deposit the amount of fine/penalty if any. In case of default action as deem fit shall be initiated against the contractor.

This office reserves the right to claim adequate compensation from the contractor on account of any damage caused to the plant & equipment handed over to him for execution of the work, due to careless handling or negligence on the part of the contractor.

10) LAWS GOVERNING CONTRACTS: -

All contracts shall be governed by the laws of India for the time being in force. Irrespective of the place of delivery, place of performance or place of payment under the contract, the contract shall be deemed to have been made at the place from which the acceptance of tender has been issued. The courts of the place from where the acceptance of tender has been issued shall alone have exclusive jurisdiction to decide any dispute arising out of or in respect of the contract.

- 11)** The contract may be short closed at any time during the period of contract by HPGCL without assigning any reason by giving a notice of one month, for which no compensation shall be payable to the contractor.

DETAILED DRAWING

NOTES :-
 1. ALL THE DIMENSIONS ARE IN MM UNLESS OTHERWISE SPECIFIED.
 2. ALL R.C.C. WORKS TO BE DONE AS PER IS 456-2000 & IS 13920.
 3. REINFORCED CONCRETE IS OF GRADE M-30 AND SHOULD CONFORM TO IS 456-2000.
 4. COARSE AGGREGATE FOR CONCRETE SHALL CONSIST OF HARD CRUSHED GRANITE STONE OF MAXIMUM SIZE 20mm AND SHALL BE PERFECTLY CLEANED AND WELL GRADED CONFORMING TO IS:383 AND IS : 2386.
 5. REINFORCEMENT BARS SHALL BE TOR STEEL (Fe-500) GRADE CONFORMING TO IS:1786. REINFORCEMENT SHALL BE CLEAN AND FREE FROM OIL, MILL SCALE ETC. SHALL BE BENT COLD TO THE SHAPES AND DIMENSIONS INDICATED AND SHALL BE PLACED EXACTLY AS SHOWN.
 6. ALUMINIUM LADDER, ANODISED AND SEALED TO RESIST CORROSION TO BE PROVIDED, AS DECIDED BY ENGINEER-IN-CHARGE.
 7. THE LAP LENGTH OF BARS SHALL NOT BE LESS THAN 60 TIMES THE DIA OF BARS.
 8. FOR OTHERS NOTES REFER SHEET NO. 2
 9. ALL EXPOSED STEEL BARS WHICH ARE SUBMERGED IN WATER SHALL BE COATED WITH READY MIXED PAINT IN ACCORDANCE WITH I.S.158-1981
 10. FOR DETAILS OF COLUMNS, BRACINGS, STAIRCASE AND FOUNDATION REFER SHEET NO.2
 11. WATER LEVEL INDICATOR MUST BE PROVIDED AT SUITABLE LOCATION AS DECIDED BY ENGINEER-IN-CHARGE.
 12. MAXIMUM PERMISSIBLE HEIGHT OF COLUMN IS 20 METER FROM THE GROUND LEVEL TO BOTTOM OF CIRCULAR GIRDER AND THIS MAY BE REDUCED ACCORDING TO THE REQUIREMENT BY REMOVING BAYS IN FULL FROM THE BOTTOM.
 13. CONSTRUCTION JOINTS IN ACCORDANCE WITH I.S.3370 (PART) 1965 SHALL BE GIVEN AT THE TOP OF STAGING AND THE JUNCTION OF CYLINDRICAL WALL & TOP RING BEAM.
 THE CYLINDRICAL WALL THICKNESS IS KEPT AS 150 MM THICK

CLEAR COVER (IN MM) TO BE AS FOLLOWS
 1. FOR SLAB 20 AT TOP & BOTTOM
 2. FOR LINTELS AND BEAMS 25 ALL-ROUND
 3. FOR END OF SLAB, BEAM & LINTELS 50 OF BAR WHICH EVER IS MORE

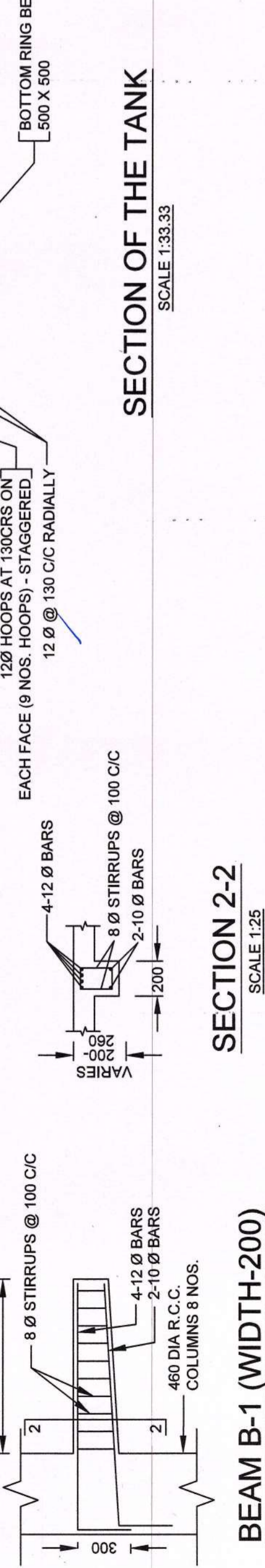
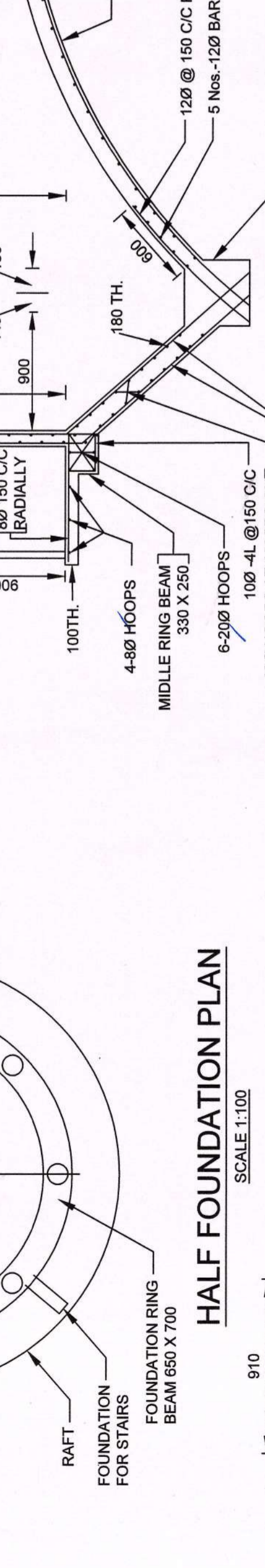
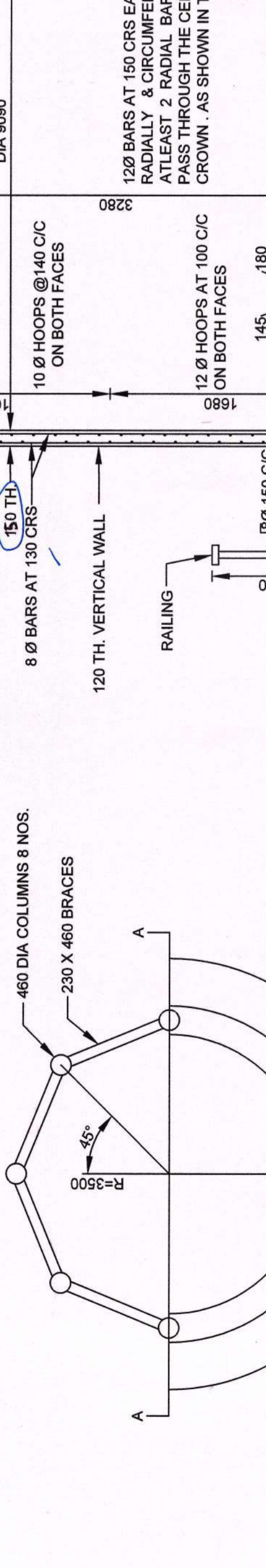
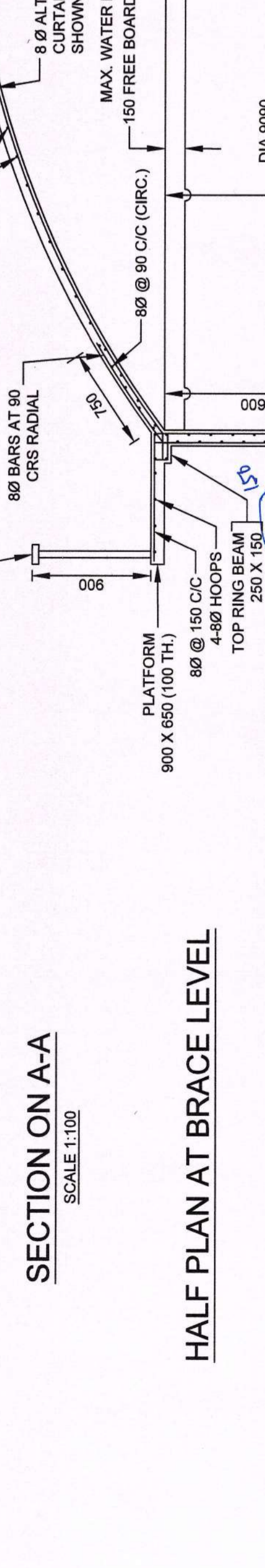
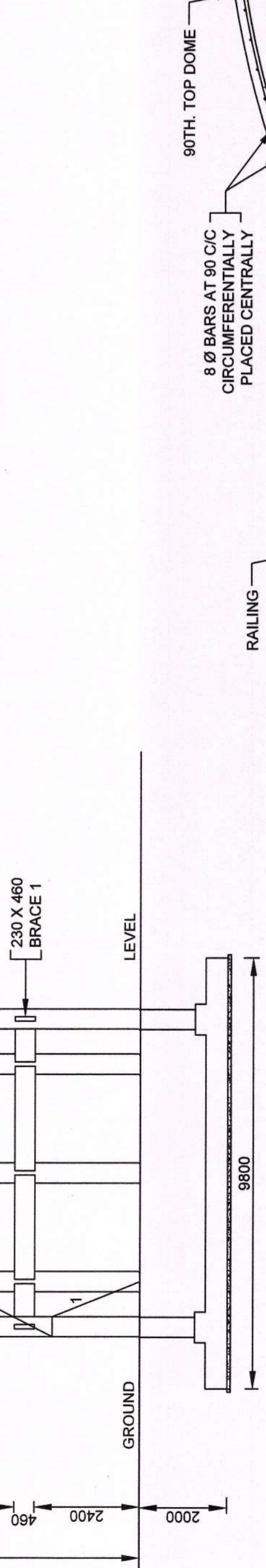
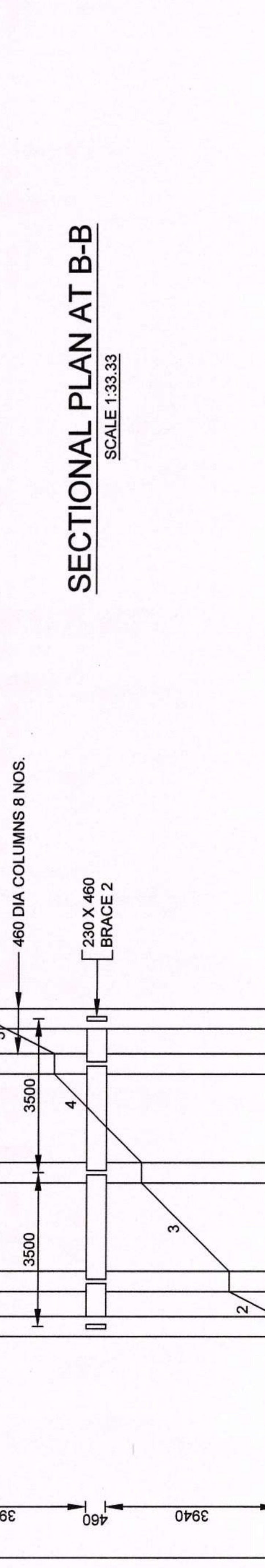
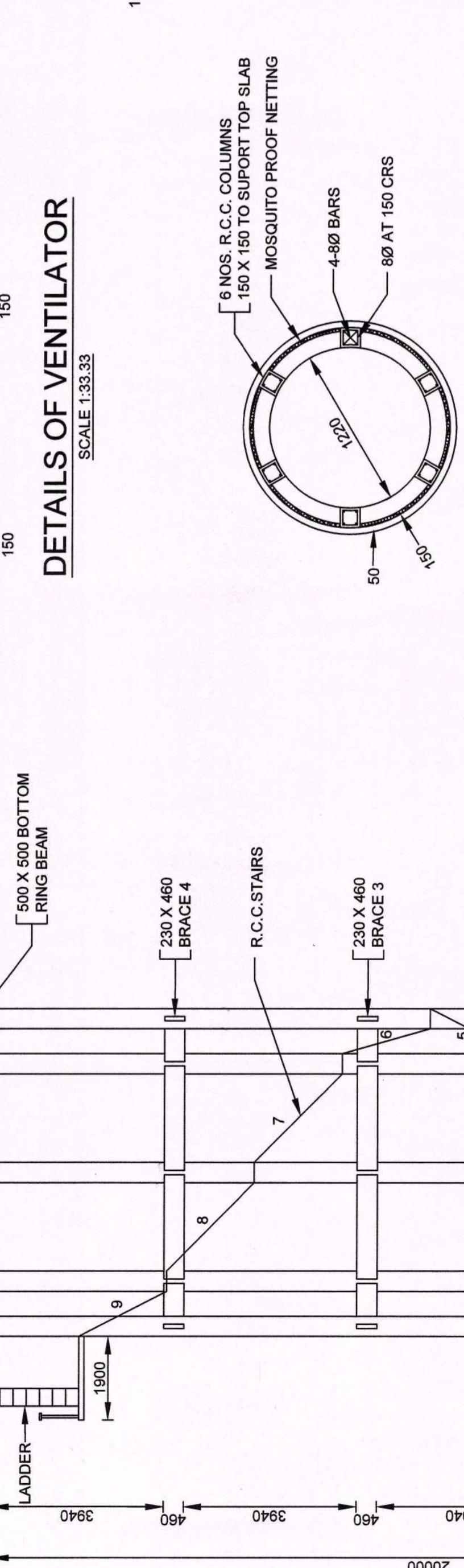
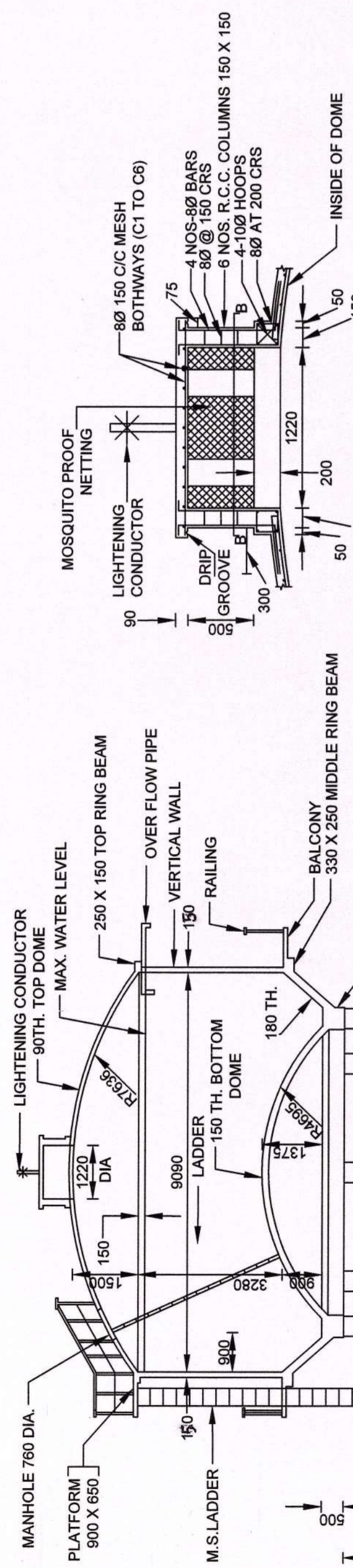
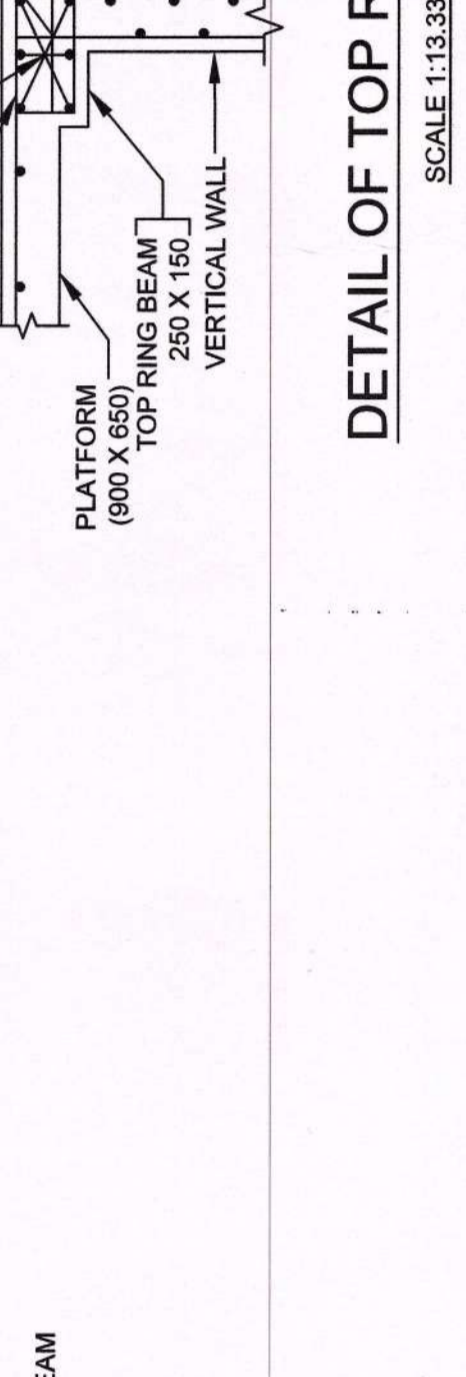
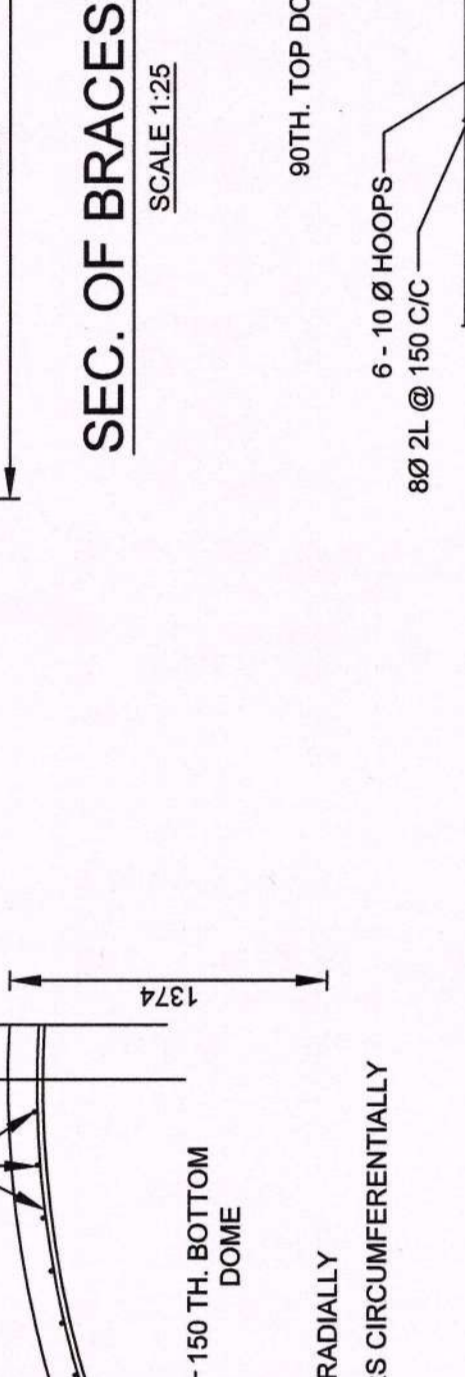
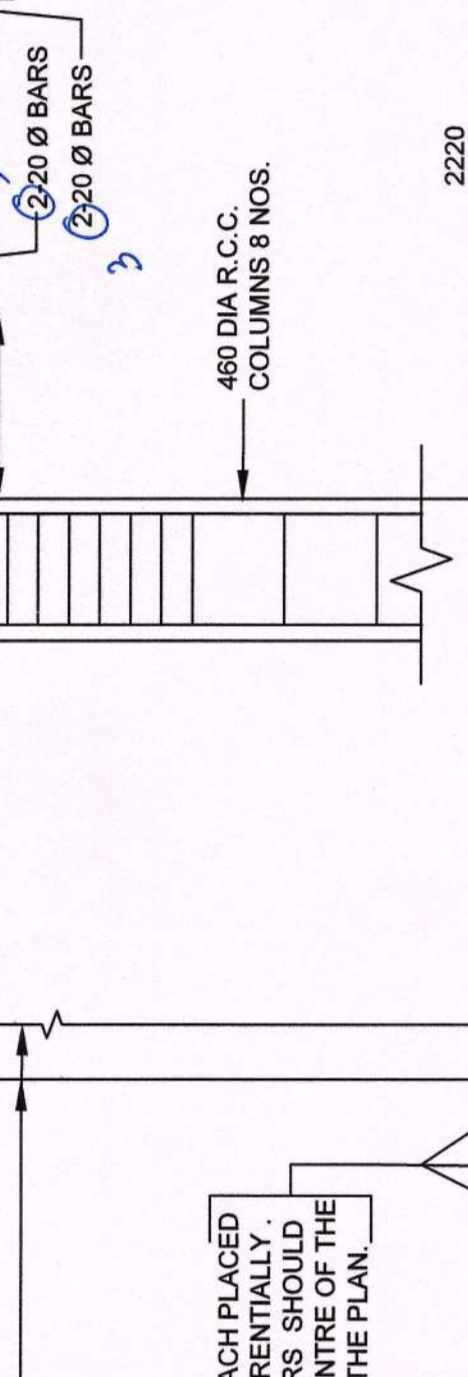
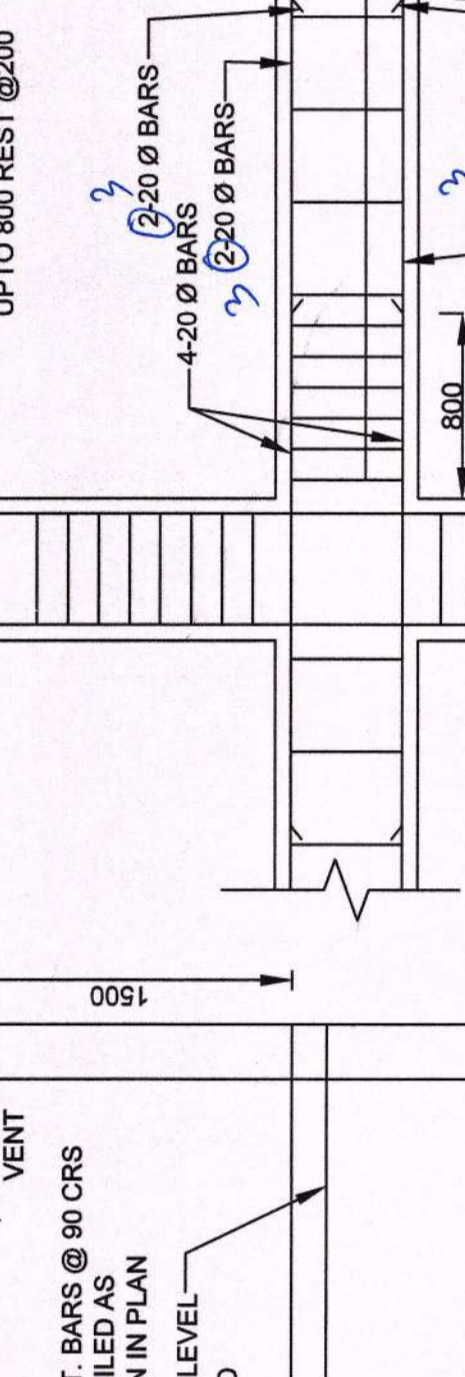
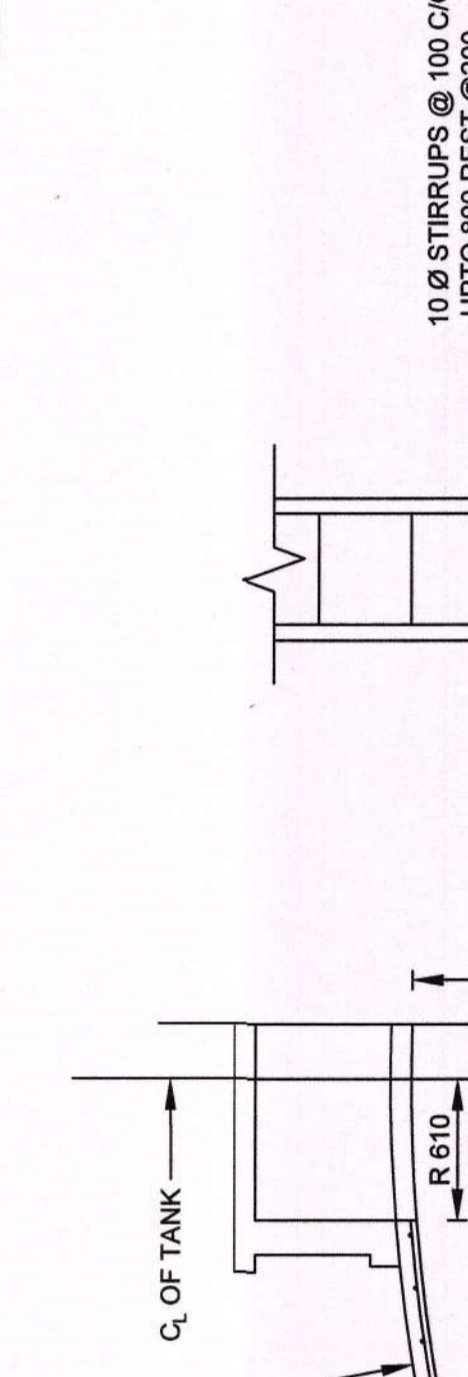
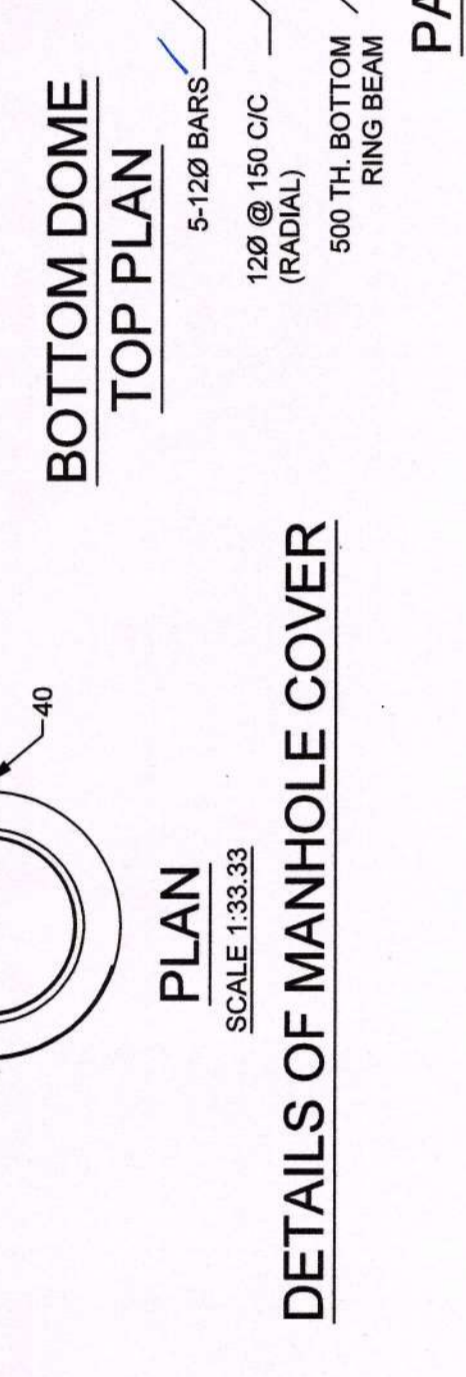
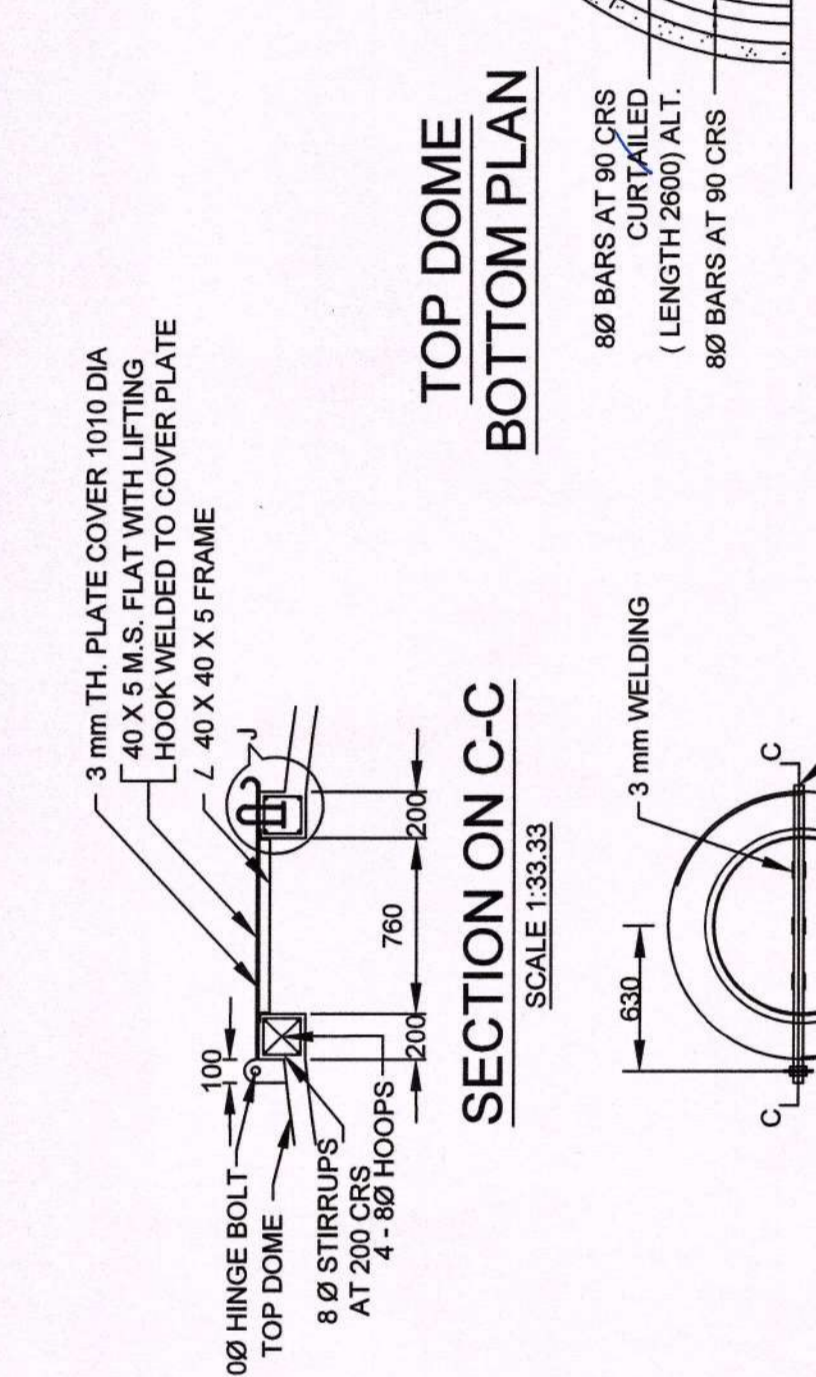
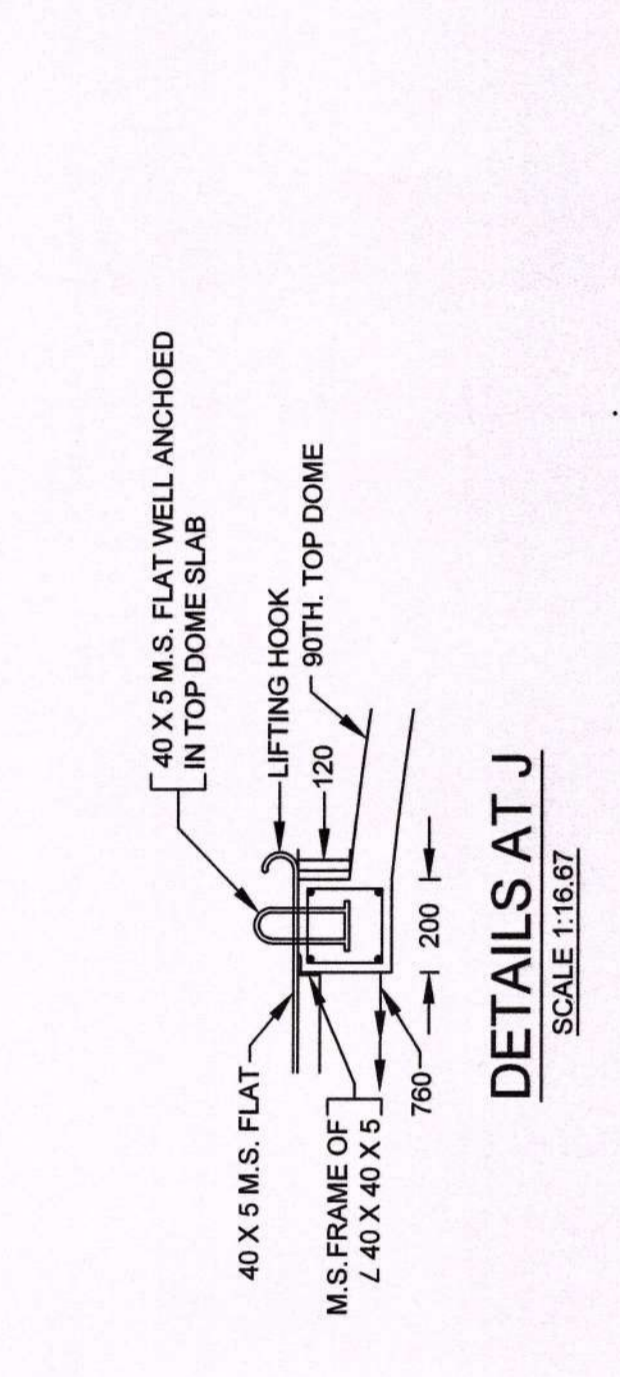
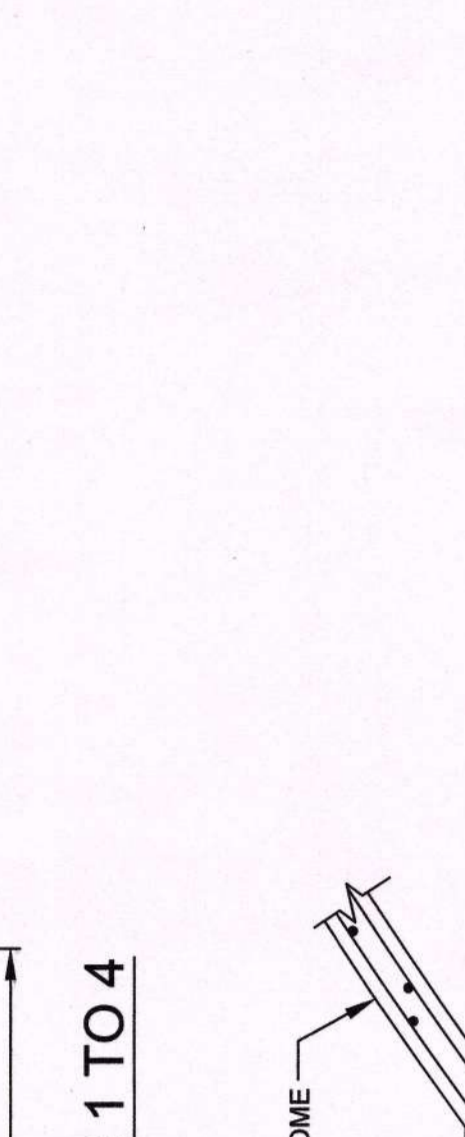
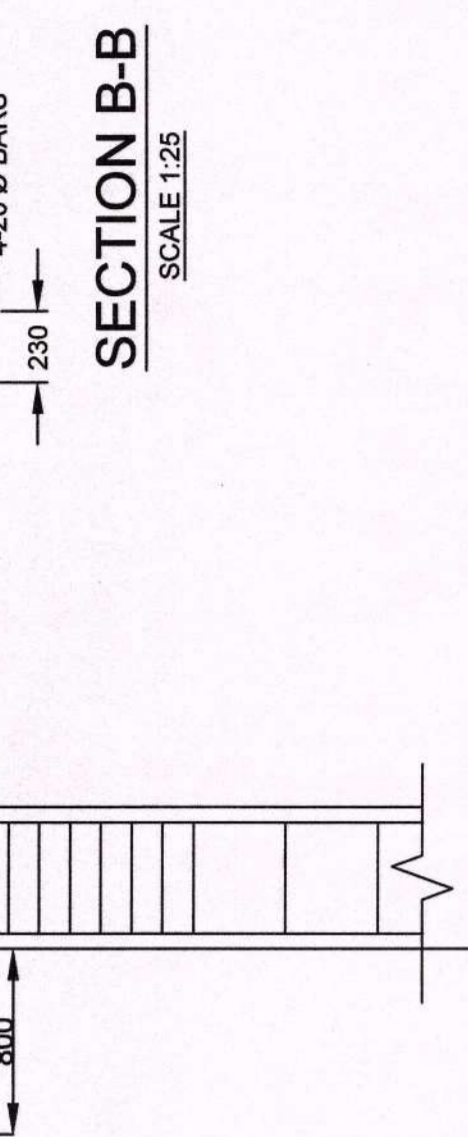
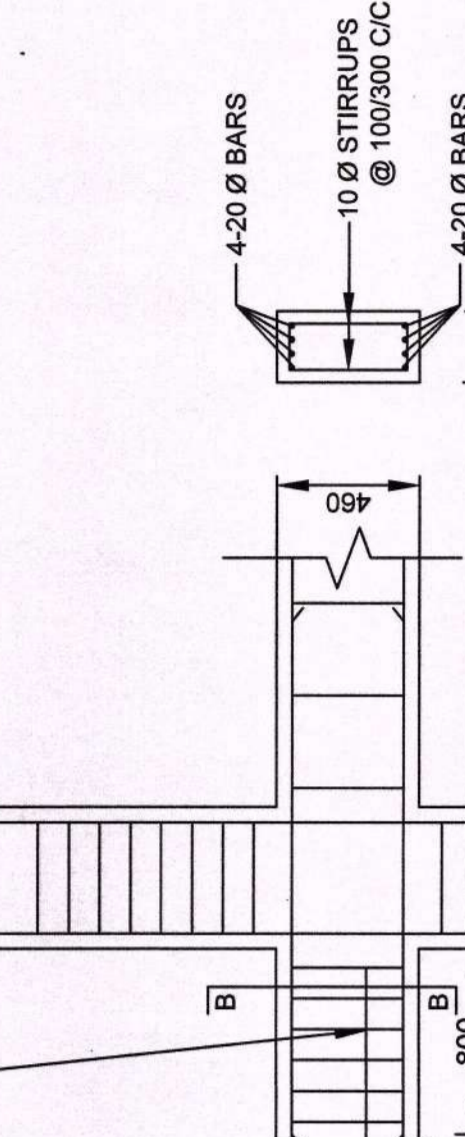
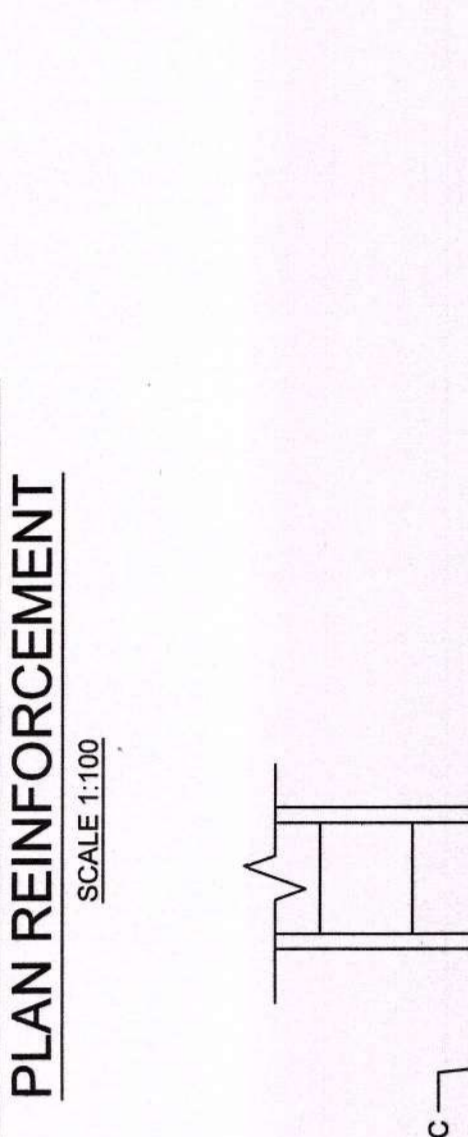
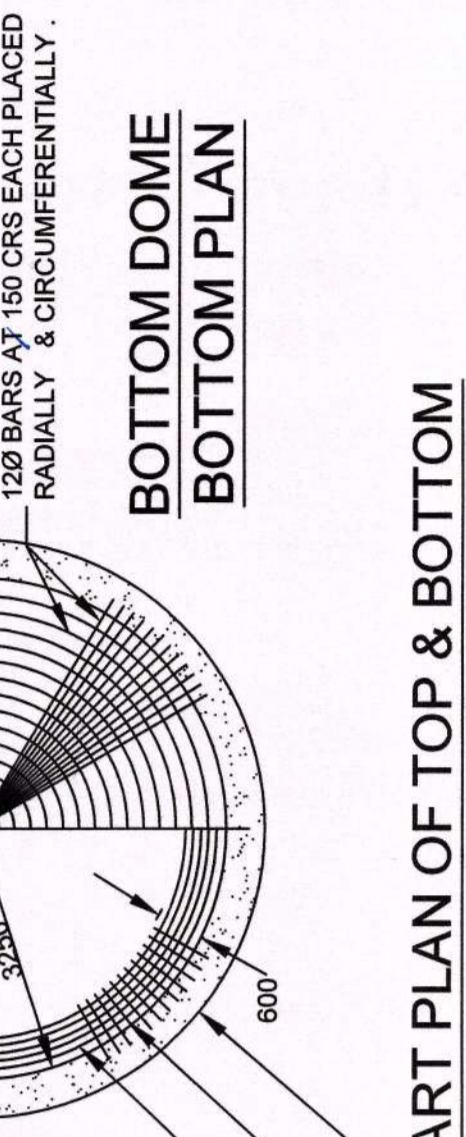
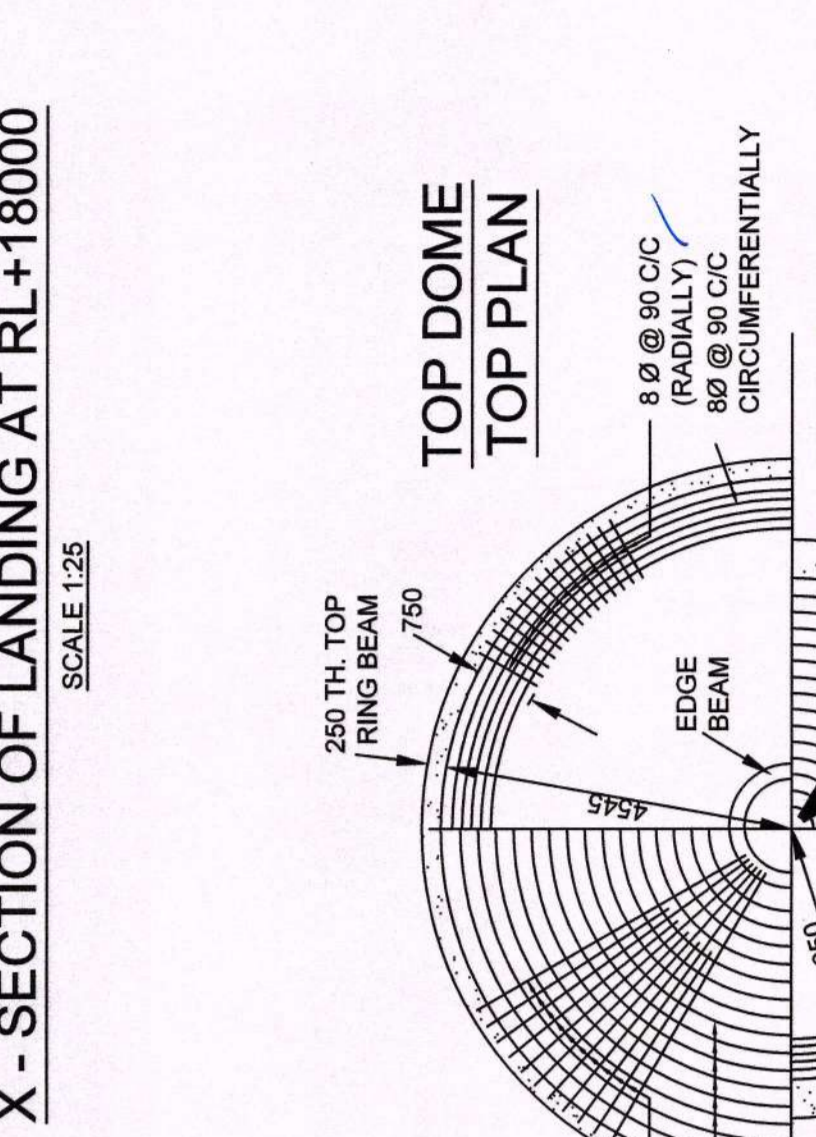
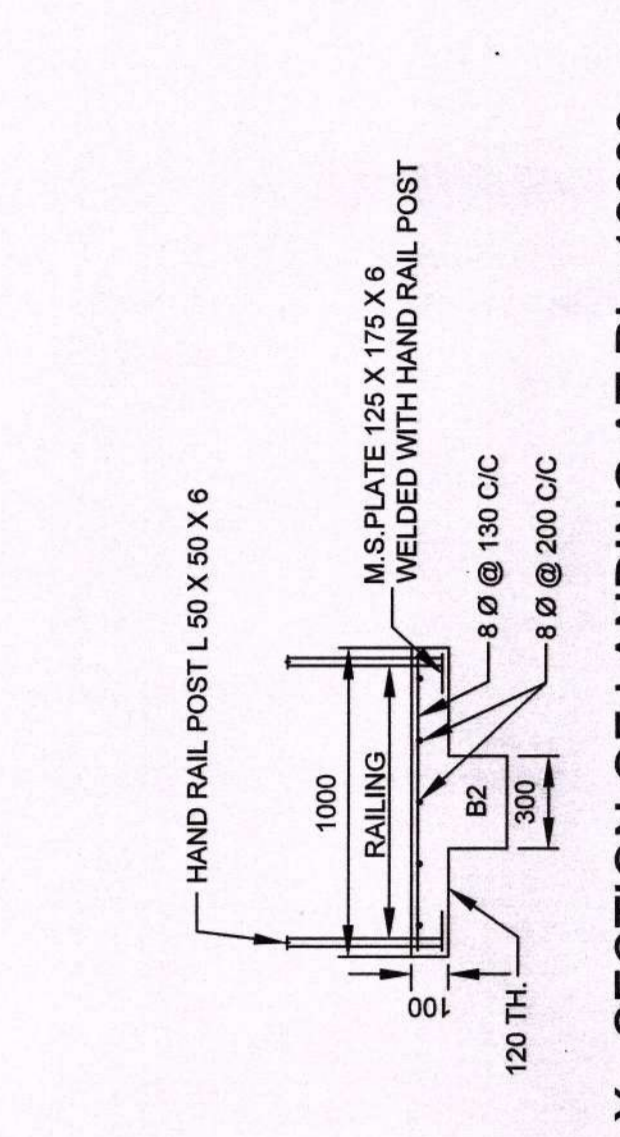
CLIENT: HARYANA POWER GENERATION CORPORATION LTD. - PANIPAT THERMAL POWER STATION, PANIPAT

PROJECT: STRUCTURAL DESIGN AND DRAWING FOR OVERHEAD WATER TANK OF 2,00,000 LITERS CAPACITY IN PTPS COLONY, PANIPAT

STRUCTURE CONSULTANT: M. S. SAHNI & SONS CONSULTING STRUCTURAL ENGINEERS #204-P, SECTOR-3, URBAN ESTATE, AMBALA CITY. PH. NO. :- 870893361, 8629106155 EMAIL:- sahniengineers1969@gmail.com

TITLE: TYPE PLAN & R.C.C. DETAILS OF R.C.C. OVERHEAD TANK 200 KL CAPACITY WITH 20 MTR HIGH STAGING

SCALE: N.T.S.
 DRAWN BY: AARTI WADHWA
 DESIGNED BY: GAGANDEEP
 CHECKED BY: SHAHE SANMI
 DATE: 08.11.2023
 DRAWING NO.: SHEET 01 OF 02

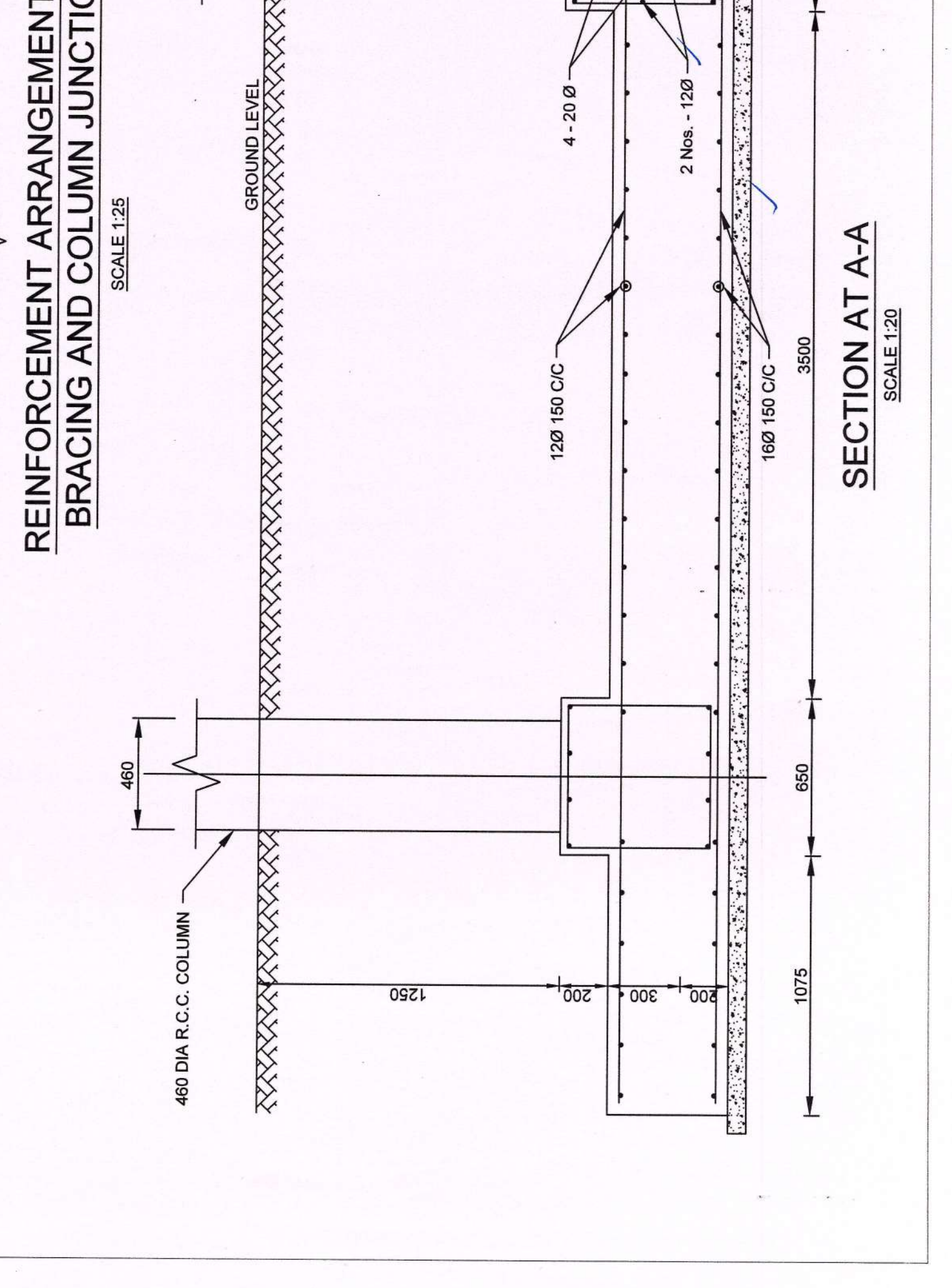
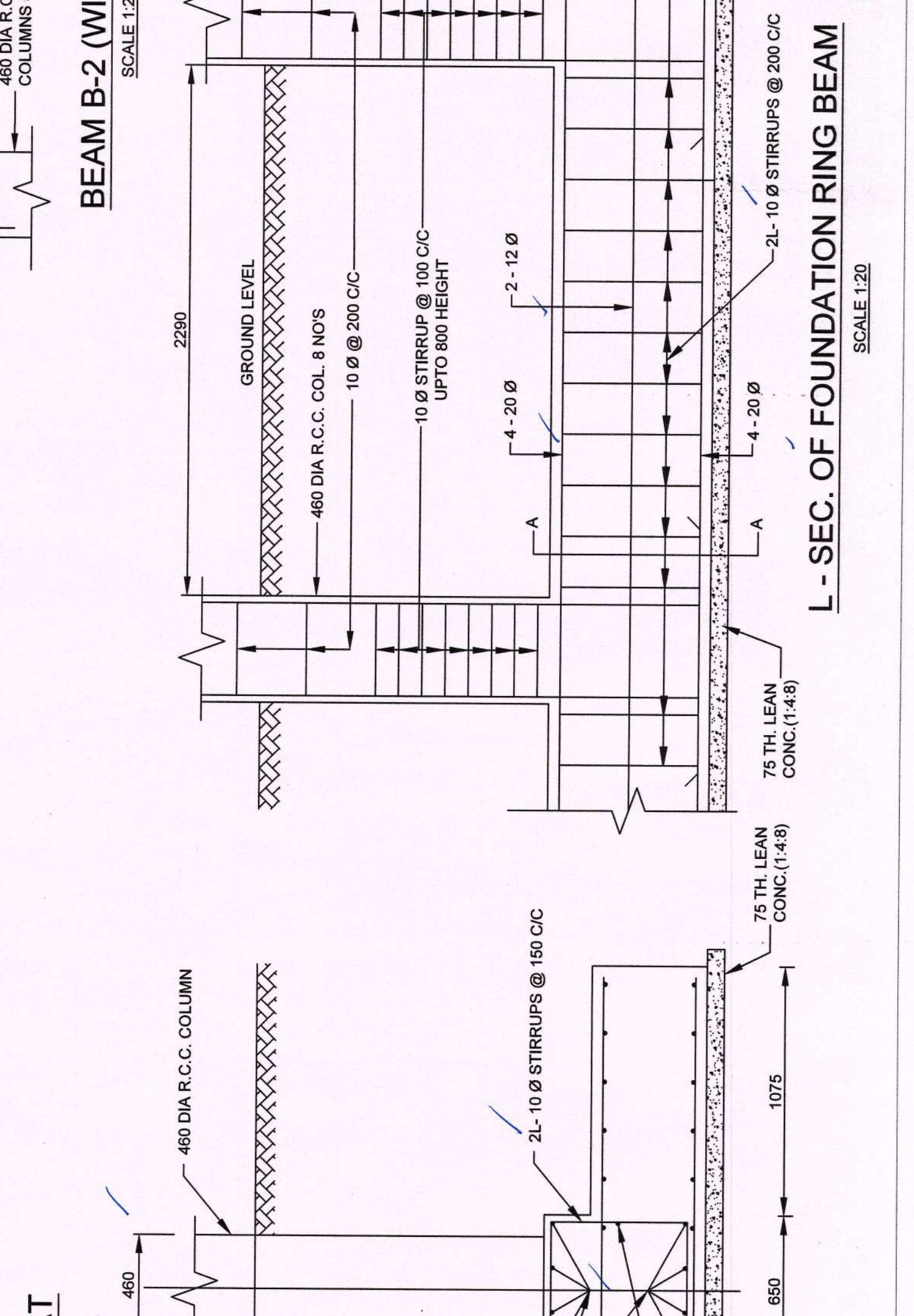
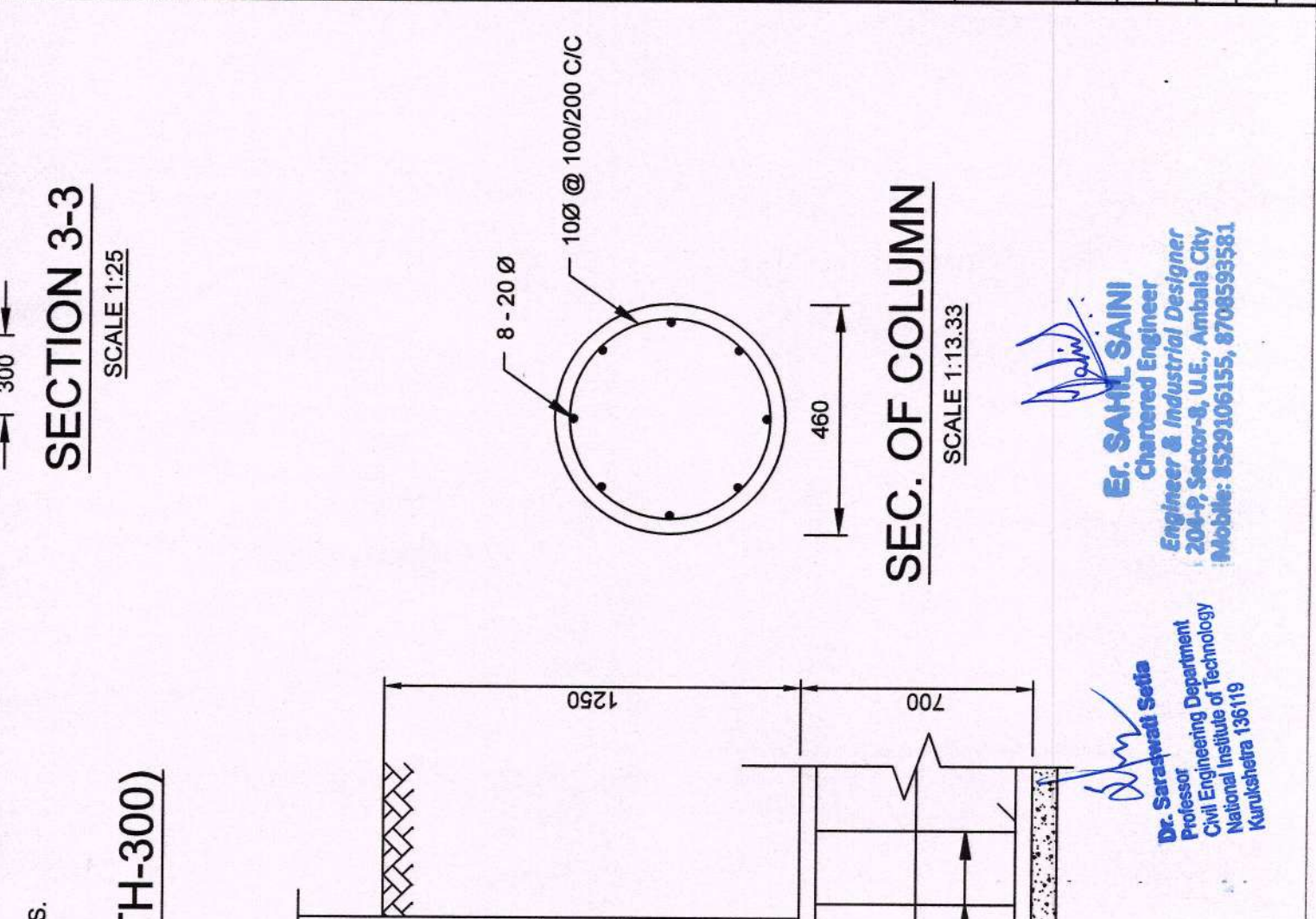
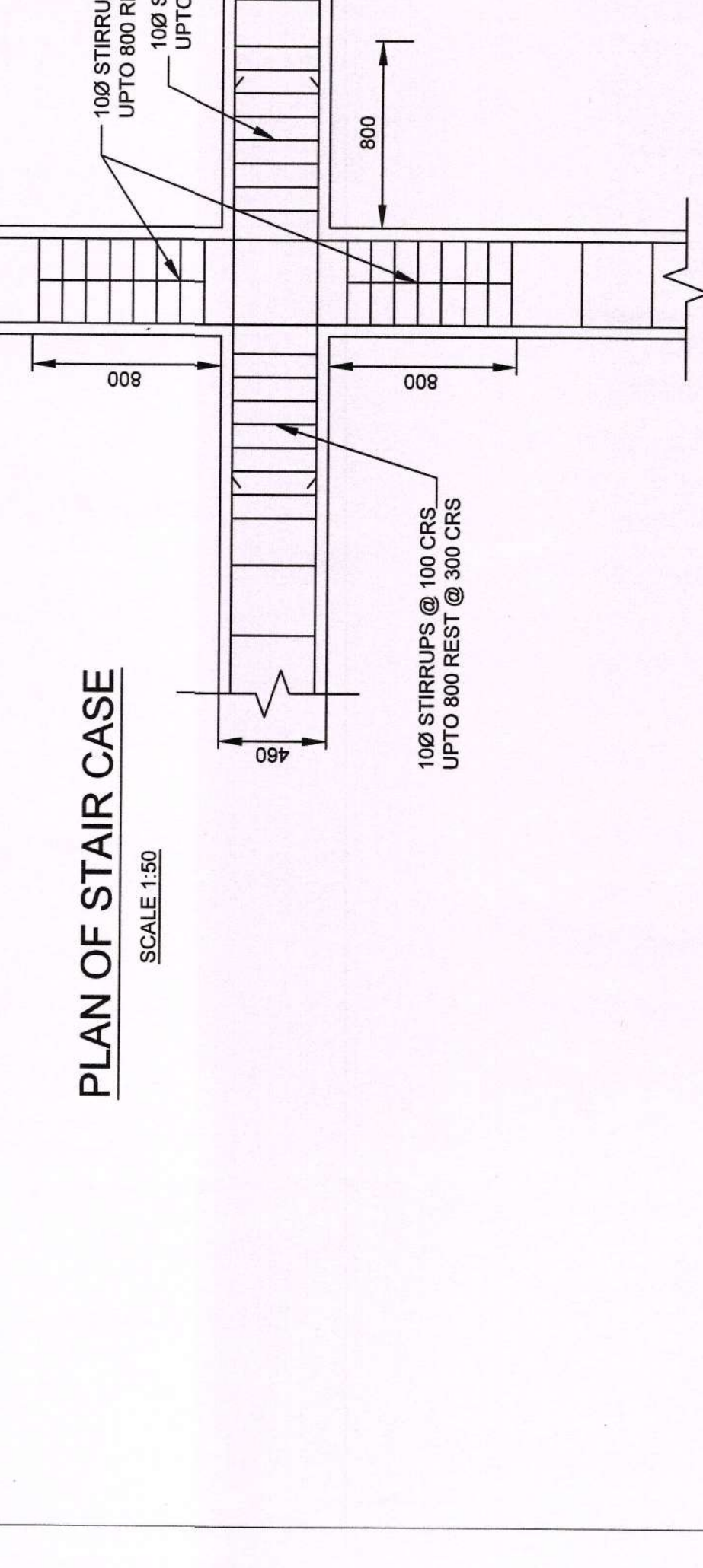
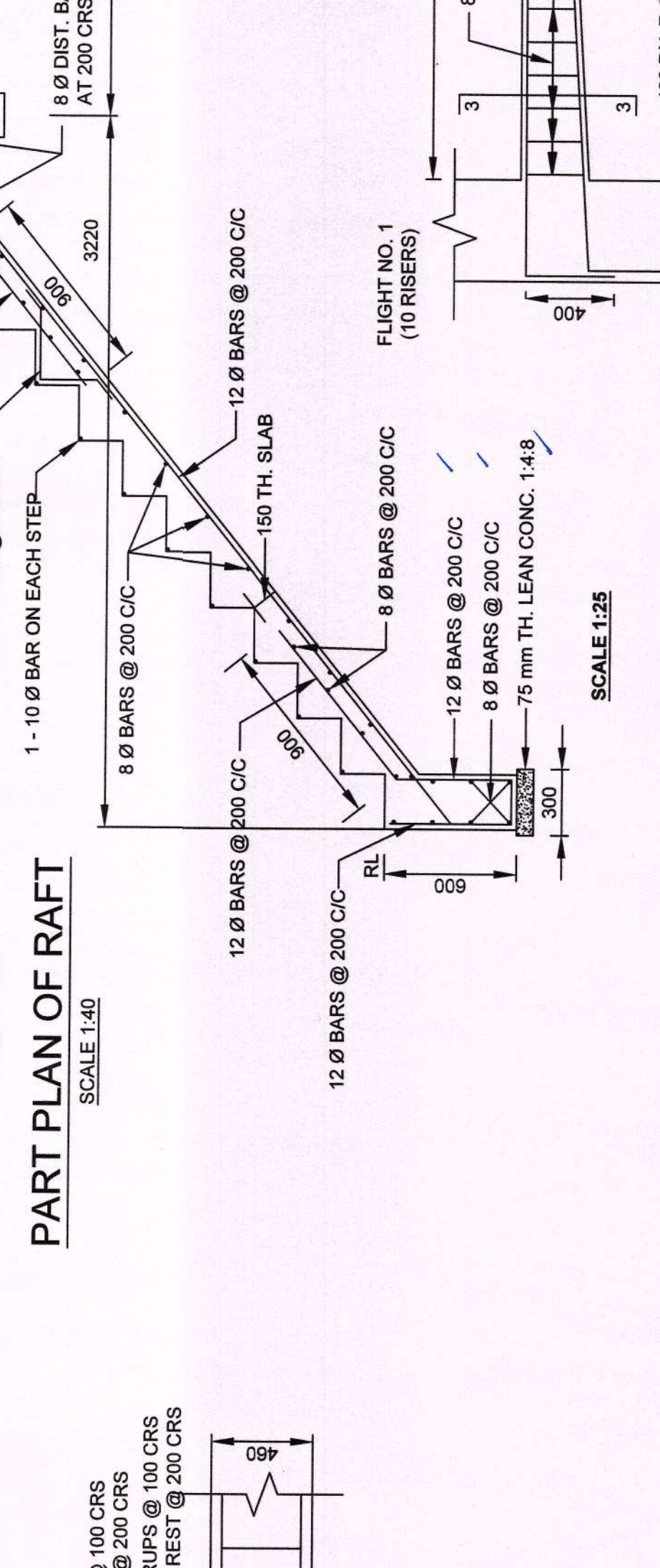
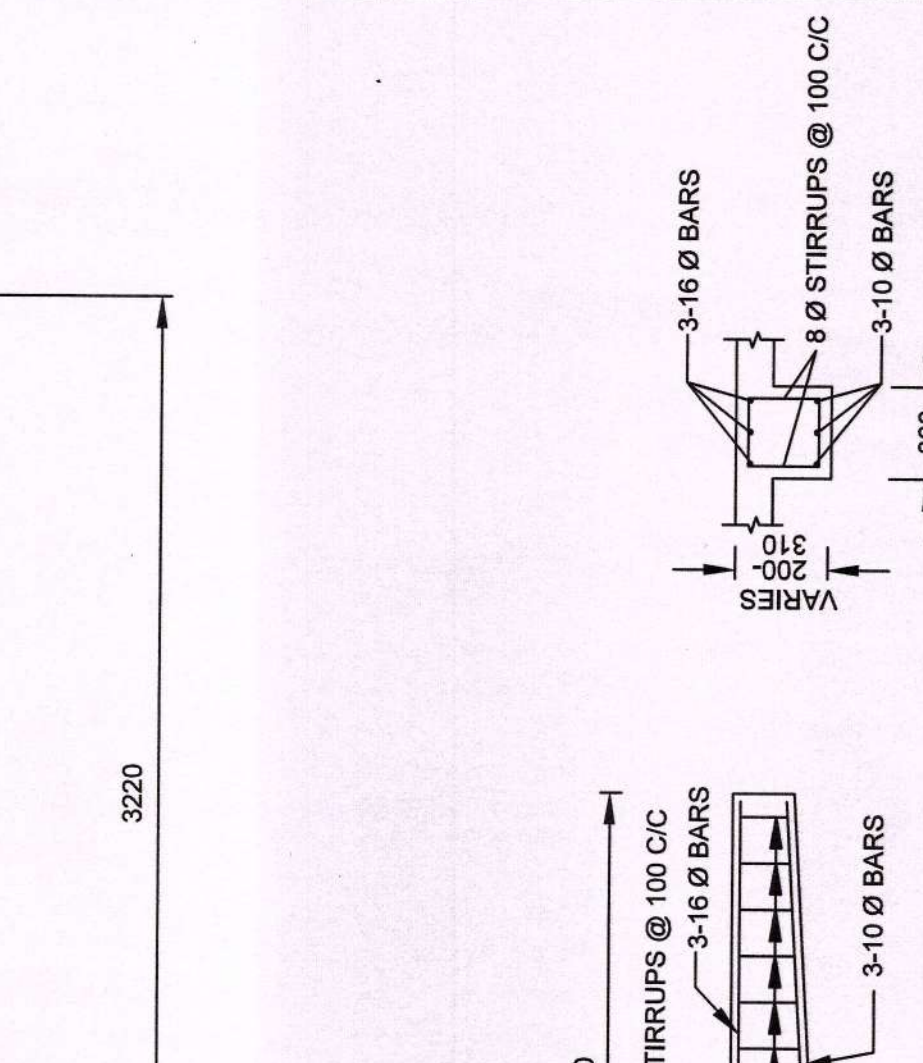
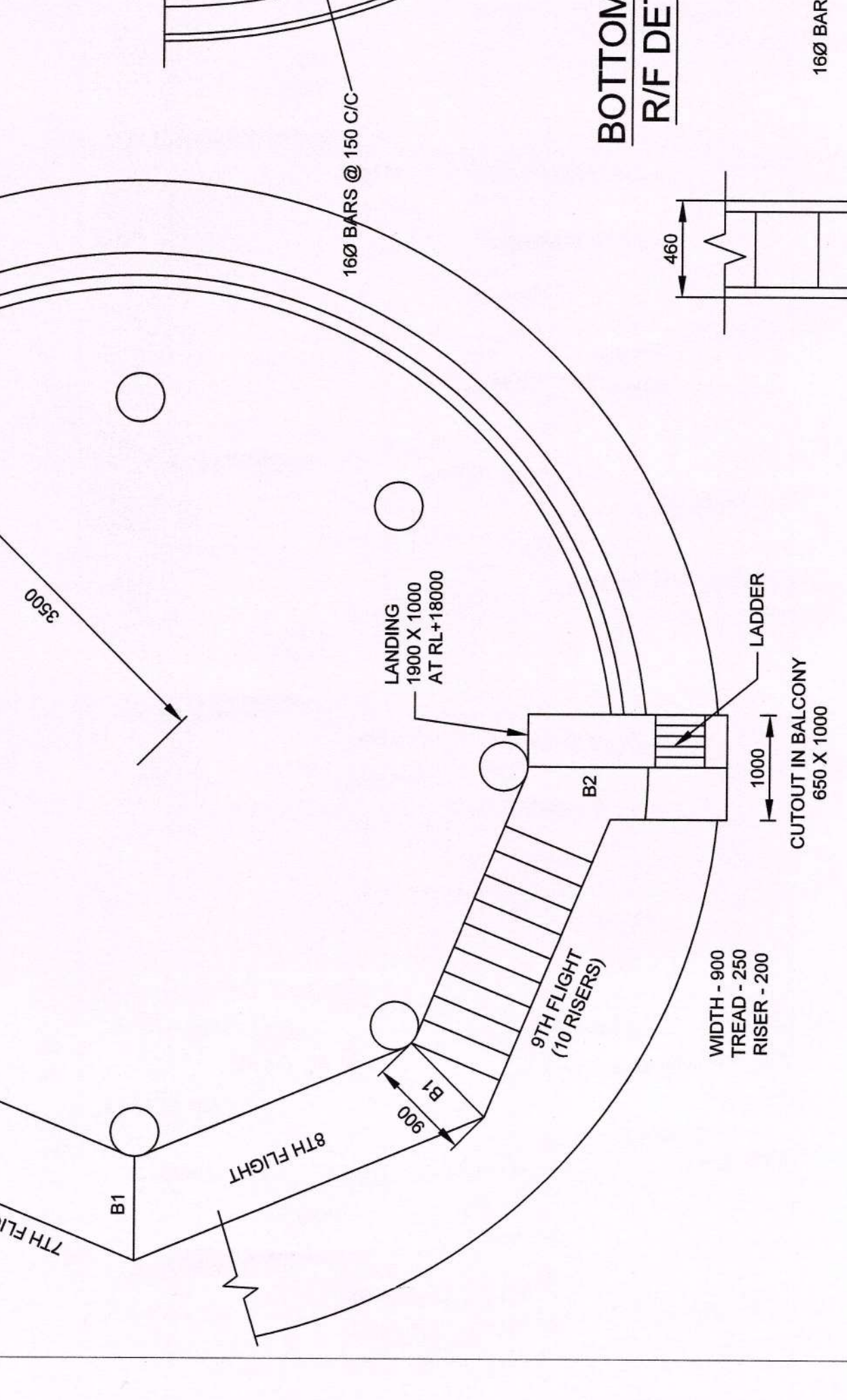
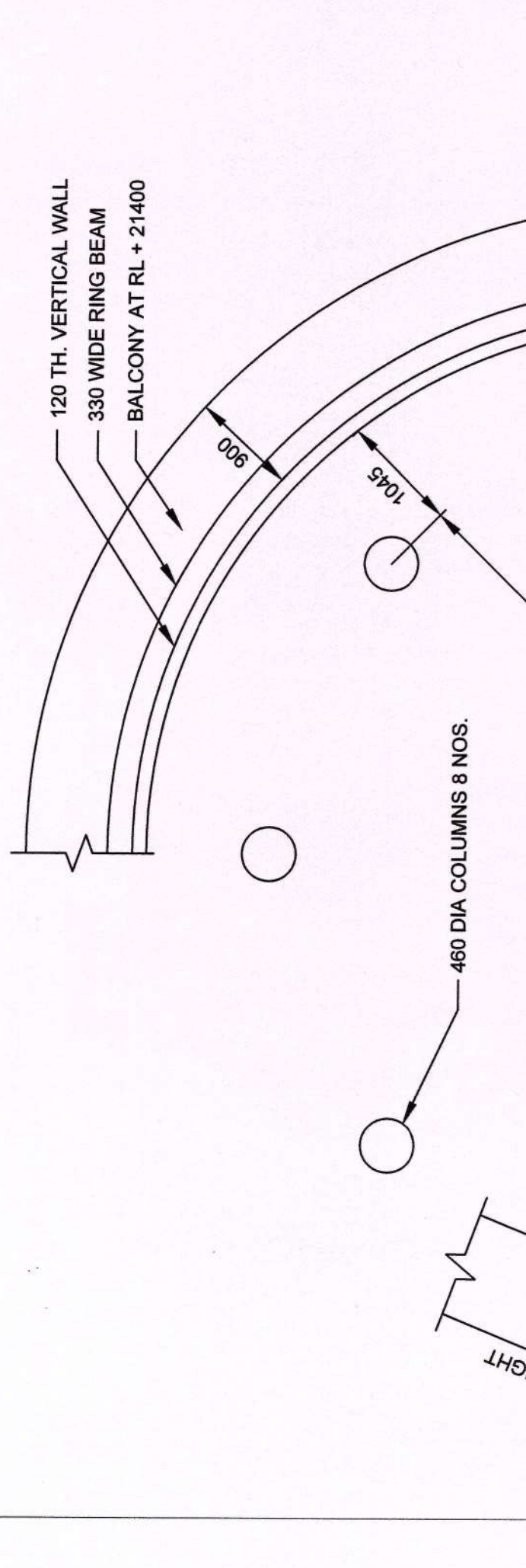
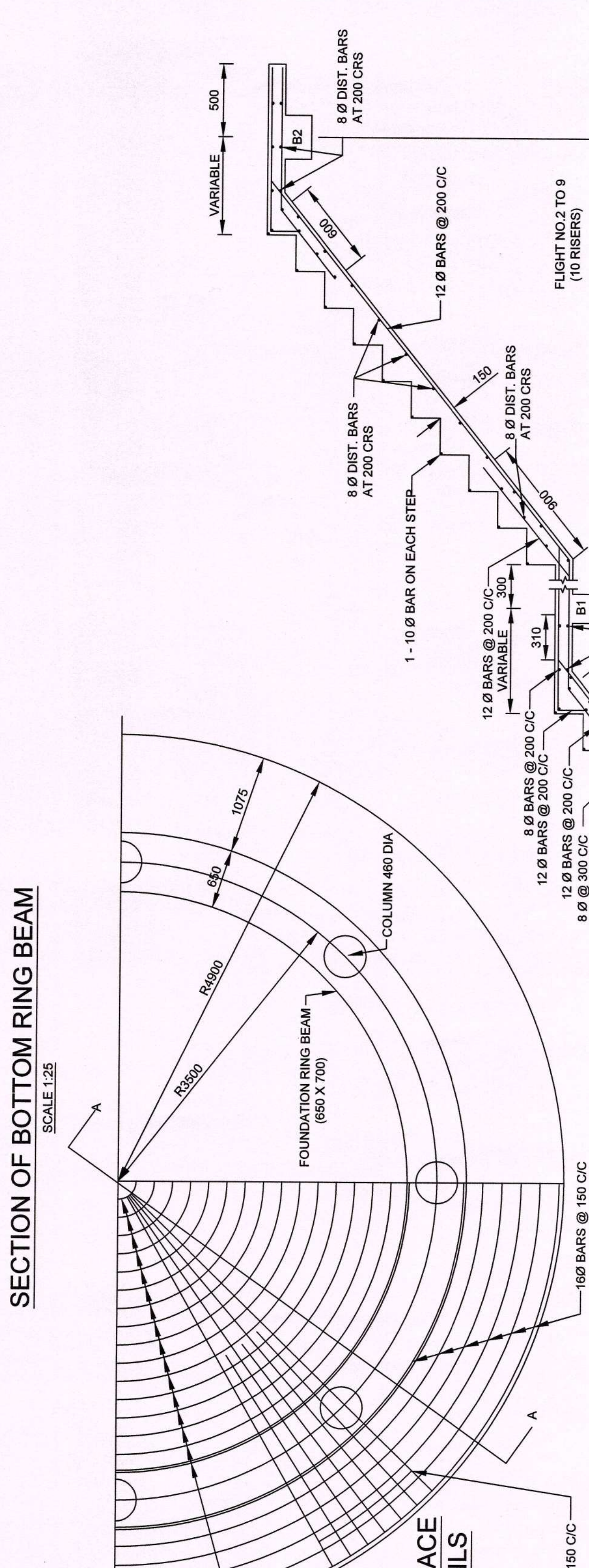
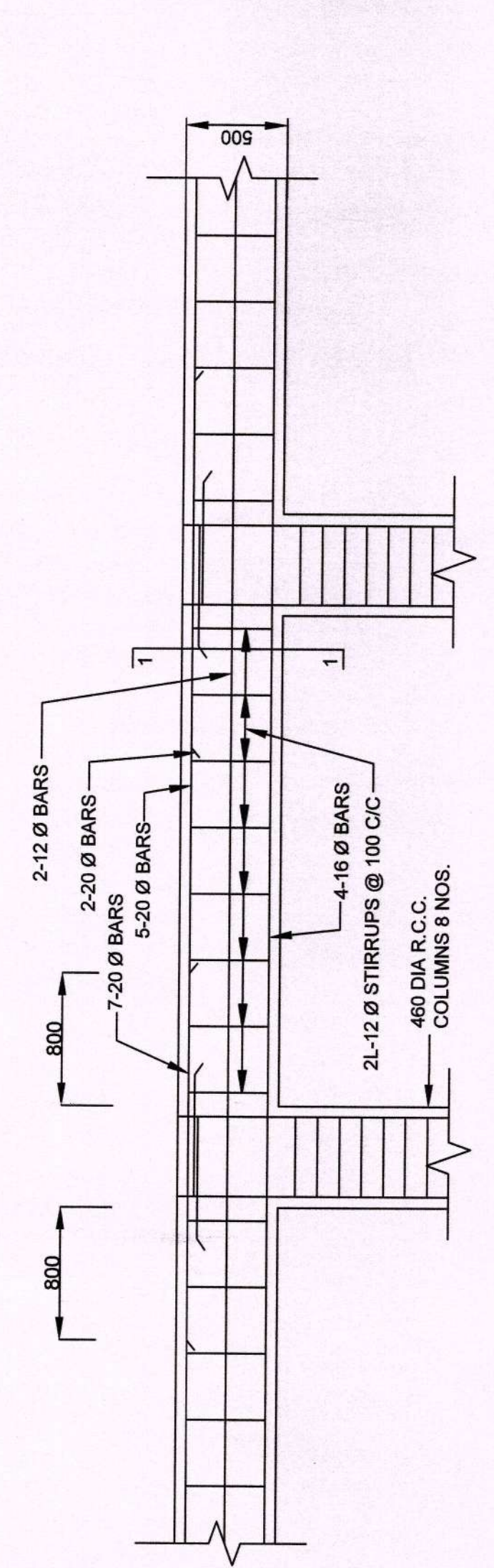
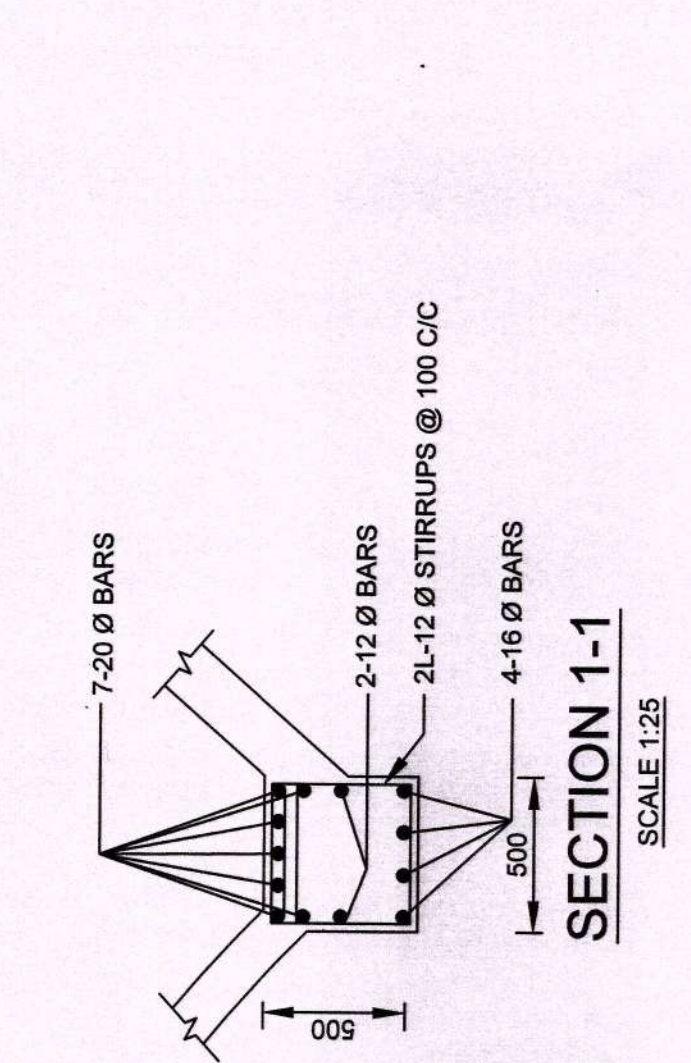


SCALE: N.T.S.
 DRAWN BY: AARTI WADHWA
 DESIGNED BY: GAGANDEEP
 CHECKED BY: SHAHE SANMI
 DATE: 08.11.2023
 DRAWING NO.: SHEET 01 OF 02

ENGINEER & INDUSTRIAL DESIGNER
 M. S. SAHNI & SONS
 CONSULTING STRUCTURAL ENGINEERS
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- NOTES :-
- FOR GENERAL ARRANGEMENT SEE SHEET NO. 1
 - ALL R.C.C. WORK SHALL BE VIBRATED & CONTROLLED CONCRETE M-30 AS PER I.S. 456-2000. CODE OF PRACTICE FOR PLAIN & REINFORCED CONCRETE SHALL BE USED.
 - CONCRETING SHALL BE DONE IN ACCORDANCE WITH THE SPECIFICATIONS LAID DOWN IN I.S. 456-2000
 - PROPER CURING OF CONCRETE TO ACQUIRE HARDNESS, STRENGTH AND OTHER PROPERTIES, ESSENTIAL FOR SATISFACTORY SERVICE, SHALL BE ENSURED.
 - ALL CONCRETE SHALL BE MECHANICALLY MIXED AND VIBRATED.
 - COVER TO REINFORCEMENT SHALL NOT BE LESS THAN THAT SHOWN ON THE PLAN OR SPECIFIED IN I.S. 456-2000
 - PARTICULAR CARE MUST BE TAKEN TO ENSURE THAT:
 - NO SAG OCCURS IN THE REINFORCING BARS DURING CONSTRUCTION.
 - STIRRUPS ARE EFFECTIVELY TIED WITH WIRE TO THE MAIN REINFORCING BARS
 - LENGTH OF SPLICES WHERE BARS OBTAINED ARE OF SHORTER LENGTH NOT BE LESS THAN 60 TIMES THE DIAMETER OF SUCH BARS.
 - SPLICES SHALL NOT BE GIVEN AT SUPPORTS OR AT CENTER OF SPAN. THESE SHALL PREFERABLY BE LOCATED AT QUARTER SPAN POINT.
 - THE NUMBER OF BARS SHALL BE DECIDED FROM THE SPACING MENTIONED ON THE DRAWING AND NOT BY COUNTING THE BARS.
 - ALL R.C.C. WORK MUST BE CARRIED OUT UNDER THE PERSONAL SUPERVISION OF AN EXPERIENCED CIVIL ENGINEER.
 - SBC IS CONSIDERED AS 8.5T/SOM AT 2000 MM DEPTH BELOW GROUND LEVEL.
 - IN CASE SOIL AT SITE IS NOT SAFE FOR THE ASSUMED SOIL PRESSURE, THE FOUNDATION MAY BE SUITABLY ALTERED UNDER ADVICE TO THE GEOTECHNICAL ENGINEER.
 - WATER TANK HAS BEEN DESIGNED FOR SEISMIC FORCES AS PER I.S. 1893 (SEISMIC ZONE IV).
 - FOR GENERAL REQUIREMENT, CONSTRUCTION JOINT AND OTHER INFORMATION I.S. 3370 PART I/JULY, CODE OF PRACTICE FOR CONCRETE STRUCTURE FOR THE STORAGE OF LIQUID, ARE TO BE FOLLOWED.
 - TWO COAT OF SNOWCEM OF APPROVED SHADE AND QUALITY SHALL GIVEN OVER ALL EXPOSED SURFACE OF TANK.
 - ALL EDGES SHALL BE ROUNDED OR CHAMFERED.
 - ALL HOLES MADE IN THE TANK SHALL BE PROVIDED WITH TRIMMING BARS AROUND AS PER I.S. 5525-1969.
 - DIAMETER OF INLET, OUTLET, OVERFLOW AND CLEANING PIPE MAY BE DECIDED DEPENDING UPON DIAMETER OF RISING MAIN, DISTRIBUTION MAIN ETC.
 - SUITABLE CLAMPING ARRANGEMENT MAY BE MADE WITH THE COLUMN AND THE PIPE DETAILS OF WATER LEVEL GAUGES MAY BE FURNISHED BY THE ENGINEER INCHARGE.
 - FOR INSTALLATION OF LIGHTNING CONDUCTOR I.S. 2309-1969 CODE OF PRACTICE OF BUILDING AND ALLIED STRUCTURES AGAINST LIGHTNING MAY BE REFERRED. DETAILS MAY BE WORKED OUT WITH THE CONSULTATION OF LOCAL ELECTRICAL OFFICE.
 - TOP HAND RAILING OF L 50 X 50 X 6 AND INTERMEDIATE PIPES OF 20 DIA NOMINAL G.I. PIPES SHOULD BE USED.
 - M.S. LADDER 400 WIDE WITH 2 L 50 X 50 X 6 AND 16 DIA RUNGS @ 300 C/C SHOULD BE USED.
 - REINFORCEMENT GRADE FE500D HIGH STRENGTH DEFORMED (TMT) BARS SHALL BE USED.

CLIENT:	HARYANA POWER GENERATION CORPORATION LTD. - PANIPAT THERMAL POWER STATION, PANIPAT
PROJECT:	STRUCTURAL DESIGN AND DRAWING FOR OVERHEAD WATER TANK OF 2,00,000 LITERS CAPACITY IN PTPS COLONY, PANIPAT
STRUCTURE CONSULTANT:	BALAJI ASSOCIATES (CONSULTING STRUCTURAL ENGINEERS) #204-P, SECTOR-8, URBAN ESTATE, AMBALA CITY. PH. NO. - 8708959591, 8629105155 EMAIL - balajiasociates19@gmail.com
TITLE:	TYPE PLAN & R.C.C. DETAILS OF R.C.C. OVERHEAD TANK 200 KL. CAPACITY WITH 20 MTR HIGH STAGING
SCALE:	N.T.S
DRAWN BY:	ARTI WAHVA
DESIGNED BY:	GAGANDEEP
CHECKED BY:	SAHIL SAHNI
DATE:	08.11.2023
DRAWING NO.:	SHEET 02 OF 02



Dr. SAKH SAINI
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