

# INVITATION FOR BIDS (IFB)

GOVERNMENT OF ARUNACHAL PRADESH  
OFFICE OF THE EXECUTIVE ENGINEER:PUBLIC HEALTH ENGINEERING &  
WS DIVISION::DAPORIJO

No. DPHE/PB-63/2023-24/(NESIDS)/

Dated Daporijo the .....

**NOTICE INVITING e-TENDER**  
**EPC (TURNKEY MODE)**

1. The Executive Engineer, PHE&WS Division, Daporijo on behalf of the Governor of Arunachal Pradesh invites online Tender on **EPC (Turnkey)** mode in **two bid system (Technical & Financial)** from interested and Eligible Bidders (Class-IA) and above (civil category) contractors enlisted under the Arunachal Pradesh PWD or contractors of equivalent category registered under other State/National Enlistment Authority for the following work:-

SL No	NIT No	Name of work & Location	Estimated cost put to tender	Earnest Money	Period of completion
1	2	3	4	5	6
1	DPHE/NIT/NESIDS / 2024-25/01	Augmentation of Water Supply System at Daporijo Township (4.20MLD) under NESIDS	Rs.4946.917 Lakhs	Rs. 49,46,920/- (for APST) Rs. 69,46,920/- (for Non APST)	36(Thirty Six) months

**2. Important event dates:**

1	Mode of Tendering	E-Tendering	
2	E-Tendering website	<a href="https://arunachaltenders.gov.in">https://arunachaltenders.gov.in</a>	
3	Date of publication in website	24/03/2025	
4	Period of downloading of bidding document	From 25/03/2025 at 1100 hrs to 08/04/2025 at 1600hrs	
5	Commencement of online bid submission	From 25/03/2025 at 1100 hrs to 08/04/2025 at 1600hrs	
6	Last date & submission of online bid	08/04/2025 at 1600hrs	15 (Fifteen) days after date of publication in website
7	Date, Time & Venue of Pre-bid meeting	29/03/2025 at 1100hrs	<b>PHE&amp;WS Division, Daporijo</b>
8	Date & Time of opening of Technical bid	11/04/2025 at 1100hrs	After 3 (three) days from last date of bid submission
9	Date & Time of opening of Financial bid	To be notified later	For Technically qualified bidders only

3. Tender shall be submitted in two bids viz. Technical Bid and & Price Bid.
4. The tenderer should prepare the Technical Bid after visiting the actual sites of construction for which they have to contact the field officers of PHE Division, Daporijo before uploading bid documents in online. Without field visit verification certificate issued by the Assistant Engineer, PHE & WS Division, Daporijo, the bid will be summarily rejected and disqualified.
5. The Technical Bid shall be opened first and evaluated to assess the Technical viability of their proposal and financial capability of the contractors and their work experience. Based on such evaluation and after adopting the post qualification procedure, a short list of selected contractor shall be made by the competent authority of PHE Department, Arunachal Pradesh. The price bids containing only the schedule of quantities with rates duly filled in of post-qualified contractors shall be opened for further evaluation.

Sl. No.	Description of works	Estimated Cost
1	Design, drawing and construction of RCC Drop-inlet head work as per specifications.	Rs. 49,46,91,710.00
2	Design, drawing and construction of Aerator, approach channel, flash mixture and parshall flume as per specifications.	
3	Design, drawing and construction of plain sedimentation tank.	
4	Design, drawing and construction of RCC circular clariflocculator tank including walk way slab, launder channel as per specifications complete.	
5	Design, Construction, supply of materials, erection, Installation & Commissioning of complete WTP pressure filtration system plant of average 2 Lakhs/hr capacity (2W+ 1S) with SCADA compatible pressure monitoring, controlling and back washing mechanism.	
6	Design, drawing and construction of Chemical house.	
7	Design, drawing and construction of RCC clear water reservoir with RCC slab ventilation, beam and column as per technical specifications.	
8	150 KVA DG set	
9	Generator shed	
10	Provision of by pass and sludge pipeline 300mm dia to disposal point including delivery necessary specials fittings complete.	
11	Design, Supply, Installation & Commissioning of SCADA system for monitoring & operation of Water Treatment Plant & Town Water distribution system with min 100" monitoring station, wireless communication systems, firewalls, LAN, switch, internet connectivity, cables and required instruments, electronics with complete trails training and handover.	
12	Design, drawing and construction of Zinc Alum distribution over head tank with RCC slab ventilation, beam and column as per technical specifications.	

13	WTP and Zonal tank inlet-outlet valves- control valves, flow meter, pressure transmitter, level transmitter, RTU, Air valves, Isolation cum drain valves and fire hydrant.	
14	Providing and supplying of S&S Centrifugally Cast (Spun)/Ductile Iron Pipes conforming to IS: 8329: 250mm dia Ductile Iron Class K-9 pipes and GI Pipes of different diameters.	
15	Providing and supplying of necessary DI fittings for Pipelines.	
16	Provision for House Service Connection.	
17	Design, drawing and construction of compound wall around WTPs as per technical specifications.	
18	Design, drawing and construction of road crossing, Valve Chamber, Anchor Blocks, Trestle Support and demolition and re-construction provision as per technical specifications.	
19	External Electrification in WTP complex including providing and fixing street light, lamp post, garden lamp, glow sign and flood lights and its inter cabling connection from the main board complete.	
20	Construction of Retaining wall around WTP site.	
21	Construction of approach to WTP and Head Work a) Soling, Metalling and Carpetting.	
	b) Formation Cutting.	
	c) Formation Cutting for laying of DI Pipes.	
22	Site Development	

6. The tender forms and other details can be obtained from the website <https://arunachaltenders.gov.in> from 25/03/2025 at 1100hrs to 08/04/2025 up to 1600 hrs. The bidders are required to pay cost of bid document for **Rs. 20,000/- (Rupees Twenty thousand)** only in the form of demand draft/ online/ RTGS/ NEFT (Non re- fundable) in favour of Executive Engineer, PHE & WS Division, Daporijo payable at SBI Daporijo IFSC Code SBIN0005818, A/C No. 38150804780, A scan copy of DD/ payment slip should also be submitted online with the bid document.
7. Earnest money (EMD) amounting to **Rs. 49,46,920.00 (for APST) Rs.69,46,920/-(for non-APST)** in the form of DCR of any scheduled Bank guaranteed by the Reserve Bank of India must accompany each tender.
8. EMD exemption is allowed for the firms registered with **MSME**. However, the registration of firm should be in the relevant works and the bidders should submit validated supporting documents.
9. The undersigned reserves the right to accept/reject any or all the tenders without assigning any reasons thereof.
10. For other details - Please refer to bid document.

Special Conditions:

1. The interested firm willing to submit tender must have executed similar **Drinking Water Supply Project/Civil Construction works of hilly terrain in the past.**
2. The firm must have adequate manpower of technical expertise and necessary infrastructure to handle such Projects.
3. The firm must have sound financial background to complete the project even on the eventuality of unavoidable delay in payment owing to such reason as financial crunch of the client department/government. No interest will however be paid for delay in payment.
4. The firm should be able to complete the project within **36 (Thirty Six) months** time from the date of commencement of work.
5. The firm must submit latest Income Tax clearance certificate at the time of submission of Tender.
6. The firm shall not from any joint venture or enter into association with other agency for execution of works.
7. No advance payment in the form of mobilization charges will be made to the successful tender.
8. Black listed firms and Construction Company against whom black listing is contemplated need not apply.
9. Any firm not fulfilling above conditions need not apply. Apart from above all documentary evidence/indicated. The interested firm should make site inspection prior to submission of the tender.

Sd/-  
Executive Engineer  
PHE&WS Division  
Daporijo

No. DPHE/PB-63/2023-24/(NESIDS)/1020-28  
Copy forwarded to:-

Dated Daporijo the 24<sup>th</sup> March,2025

1. The Commissioner, PHE&WS Department, Govt. of Arunachal Pradesh, Itanagar for information please.
2. The Chief Engineer, PHE & WS Department (CZ/WZ/EZ/D&P), Bene/Itanagar/Namsai for information please.
3. The Superintending Engineer, PHE&WS Circle, Basar for information please.
4. The Deputy Commissioner, Upper Subansiri District, Daporijo for information please.
5. The Assistant Engineer, PHE Sub-Division, Daporijo for information and display in their Notice board.
6. Notice board.
7. Office Copy.



Executive Engineer  
PHE&WS Division  
Daporijo

### DISCLAIMER

The information contained in this e-NIT or subsequently provided to Bidder (s), whether verbally or in documentary or any other form by or on behalf of the **CE (CZ) PHE&WS, AP** (hereinafter referred as the “**Authority**”) or any of its employees or advisors, is provided to bidder (s) on the terms and conditions set out in this RFP and such other terms and condition subject to which such information is provided.

This e-NIT is not an agreement and is neither an offer nor invitation by the authority to the prospective bidders or any other person. The purpose of this e-NIT is to provide interested parties with information that may be useful to them in making their financial offers (Bids) pursuant to this RFP. This RFP includes statements, which reflect various assumptions and assessments arrived at by the authority in relation to the project. Such assumptions, assessments and statements do not purport to contain all the information that each bidder may require. This RFP may not be appropriate for all persons, and it is not possible for the authority, its employees or advisors to consider the investment objectives, financial situation and particular needs of each party who read so ruses this e-NIT. The assumptions, assessments, statements and information contained in the Bidding Documents, may not be complete, accurate, adequate or correct. Each Bidder should, therefore, conduct its own investigations and analysis and should check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments, statements and information contained in this e-NIT and obtain independent advice from appropriate sources.

Information provided in this e-NIT to the Bidder(s) is on a wide range of matters, some of which may depend up on interpretation of law. The information given is no tin tended to be an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. The Authority accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on law expressed herein.

The Authority, its employees and advisors make no representation or warranty and shall have no liability to any person, including any Bidder under any law, statute, rules or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this e-NIT or otherwise, including the accuracy, adequacy, correctness, completeness or reliability of the e-NIT and any assessment, assumption, statement or information contained therein or deemed to form part of this e-NIT or arising in any way for participation in this bid stage.

The Authority also accepts no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance of any Bidder upon the statements contained in this e-NIT. The Authority may in its absolute discretion, but without being under any obligation to do so, update, amend, or supplement the information, assessment or assumption contained in this e-NIT.

The issue of this e-NIT does not imply that the Authority is bound to select a Bidder or to appoint the Selected Bidder, as the case may be, for the Project and the Authority reserves the right to reject all or any of the Bidders or Bids without assigning any reason whatsoever.

The bidder shall bear all its costs associated with or relating to the preparation and submission of its bid including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstration or presentations which may be required by the authority or any other cost incurred in connection with or relating to its bid. All such costs and expenses will remain with the bidder and the authority shall not be liable in any manner whatsoever for the same or for any other costs or expenses incurred by the bidder in preparation for submission of the bid, regardless of the conduct or outcome of the bidding process.

***SECTION 1***  
***INTRODUCTION***

## 1.1 Background.

- 1.1.1 The Executive Engineer, PHE&WS Division, Daporijo, AP hereby invites online bids from interested, qualified and eligible bidders (the “**Bidder (s)**” for the “**Augmentation of Water Supply system at Daporijo Township (4.20MLD)** under NESIDS on **(Turnkey)** basis.
- 1.1.2 The selected bidder shall be responsible for survey & investigation, designing, engineering, procurement, construction, operational and maintenance of the project under in accordance with the provisions set forth in contract agreement to be entered between the selected bidder and the authority pursuant to this e-NIT.
- 1.1.3 The estimated cost of the project (ECPT) has been projected as **Rs. 49,46,91,710/- (Forty Nine Crore Forty Six Lakhs Ninety One Thousand Seven Hundred Ten)only**. The assessment of the actual cost, however, will have to be made by the bidders but not exceeding the ECPT.
- 1.1.4 The statements and explanation contained in this e-NIT are intended to provide a better understanding to the Bidders about the subject matter of this e-NIT and should not be construed or interpreted as limiting in any way or manner, the scope of services and obligations of bidder or the Authority's rights to amend, alter, change, supplement or clarify the scope of work pursuant to this e-NIT or the terms thereof or herein contained. Consequently, any omissions, conflicts or contradictions in the Bidding Documents including this e-NIT are to be noted, interpreted and applied appropriately to give effect to this intent or the intent of the author of this bidding document, and no claims on that account shall be entertained by the Authority.
- 1.1.5 The authority shall receive bids pursuant to this e-NIT in accordance with the terms set forth in this e-NIT and other documents to be provided by the authority pursuant to this e-NIT (collectively the “**Bidding Documents**”) and all bids shall be prepared and submitted in accordance with such terms on or before the last day of bid submission date specified in Clause 2 of IFB.
- 1.1.6 The employer is not obliged to disclose reasons for acceptance or non-acceptance of any bidder whose technical bids are found to be non-responsive and shall not entertain further correspondence thereto.
- 1.1.7 The employer may use its absolute discretion in prioritizing the tender responses and in selecting the successful bidder in complete adherence to the laid down rules and guidelines. The employer will not necessarily accept the lowest price bidder as the successful tender.

## 1.2 Brief Description of Bidding Process.

- 1.2.1 The authority has adopted a single stage two envelope system for the selection of bidder to undertake the work. Prior to Bid, the bidder shall pay to the authority a sum of **Rs. 20000/- (Twenty thousand) only as the cost of e-NIT documents (Non-refundable)**.
- 1.2.2 The pre-bid conference will be organized before the bid submission date. The minutes of the pre-bid conference will be uploaded to the web portal and corrigendum if any will be issued where necessary.
- 1.2.3 The bidders shall submit their bids in two parts. The first part, called the techno-commercial bid, contains the eligibility, technical quality and performance aspects, commercial terms and conditions and documents sought in the tender, except the price bid. In the second part, called the financial bid, the price quotations along with their financial details are submitted. Both the parts are to be submitted together in web portal.



- 1.2.4 The techno-commercial bids are to be opened in the first instance on the bid opening date and time and scrutinized and evaluated by the tender committee (TC) with reference to the parameters prescribed in the tender documents and responsive, eligible and technically compliant bidders will be decided.
- 1.2.5 Thereafter, in the second instance, the financial bids of only the techno-commercially compliant offers (as decided in the first instance above) are to be opened on a pre-announced date and time for further scrutiny, evaluation, ranking and placement of contract. Generally, lowest financial offer bid shall be considered as selected bidder but the abnormally low bid, deemed unworkable and unreasonable by the tender committee may be asked to justify the offer bid with additional performance security (specified in ITB) failing which the bidder next in line may be selected.
- 1.2.6 This e-NIT document and any addenda issued subsequent to this e-NIT, will be deemed to form part of the bidding documents.
- 1.2.7 A bidder is required to deposit, along with bid, a bid security of **Rs. 49.47 lakhs (Rs. 69.47 lakhs for non-APST) (the "Bid Security")** refundable not later than **180 days (one hundred and eighty) days** from the last day of bid submission date, except in the case of the selected bidder whose bid security may be retained till it has provided a performance security. The bid shall be summarily rejected if it is not accompanied by the Bid security.
- 1.2.8 In order to prevail over the delay in execution of the work with consequent delay in the attainment of the purpose for which the tender has been invited and resulting escalation of the project cost due to such delay in award of the work, the authority with a recorded reason pursuant thereto, may consider the acceptance of single bid subject to the fulfilment of criteria outlined in procurement manual 2022.
- 1.2.9 Bidders are advised to examine the project in greater detail, and to carry out, at their own cost, such studies as may be required for submitting their respective bid. Other details of the process to be followed under this bidding process and the terms thereof are spelt out in this e-NIT.
- 1.2.10 Discretion power of the employer in the matter of tender documents and the process of evaluation and subsequent award of the contract which cannot be challenged:-

The Employer may in its absolute discretion (But shall be under no obligation to);

- a. Cancel the Tender process at any time (either in whole or in part and whether before or after the Tender Submission Date);
- b. Provide to all Tenderers any further information or addenda that has been provided to a particular Tenderer;
- c. Change the Tender Submission Date.
- d. Refuse to consider any Tender submitted in violation of these Tender Conditions.
- e. In its evaluation and assessment of Tenders apply such criteria as the employer sees fit and give such weightage to that selection criteria as may be determined by the employer (in its absolute discretion).

**1. PROJECT TOWN:-**

The project area is located at Daporijo town, Upper Subansiri District in the state of Arunachal Pradesh. The present population of the Town as per 2024 YDU is 24102 souls and design population of the project will be 39108 souls. Daporijo, a tiny hill station in a valley surrounded by the Himalayas, is the headquarters of Upper Subansiri District in the state of Arunachal Pradesh. It was created during British period and was one of the five earliest districts of the state. Daporijo borders Myanmar in the east and Assam in the south. Surrounded by panoramic views of thick forests fringed by hills, Daporijo is paradise to the visitor's eye. This town in Subansiri valley is surrounded by the majestic Himalayan range. The place is connected to Lepa Rada and Kamle District of Arunachal Pradesh, and also has international boundaries with China. Since its establishment, the Daporijo town is fast developing into a major tourism hub for its rich tradition and culture and its immense natural beauty. The township also houses various state and central government offices, large number of paramilitary and defense forces, educational institutions, small scale industries etc. it is growing into a modern town with migration of population from nearby areas. Thus the population of the Town is multiplying in exponential numbers.

**2. SOURCES:-**

A perennial source SITIN KORO having a discharge of 5.00 MLD during lean period has been surveyed and selected for the proposed scheme which is 26 km from proposed WTP at Daporijo Town.

***SECTION 2***  
***INSTRUCTIONS TO BIDDERS***  
***(ITB)***

## A.GENERAL

### 2.1 Scope of Bid.

- 2.1.1 The Employer through his authorized representative (named in Appendix to ITB) invites bids on **EPC (TURNKEY) MODE in TWO BID SYSTEM based on Standard Bidding Document with amendments and COPA (Conditions of Particular Applications)** for the project:– **“Augmentation of Water Supply system at Daporijo Township (4.20MLD) under NESIDS”**. Bid No: PHED/NIT/NESIDS/2024-25/01 (as defined in these documents and referred to as "the works"). The bidders may submit bids for the same as detailed in the table given in IFB.
- 2.1.2 The successful bidder will be expected to complete the works by the intended date specified in the Contract data.
- 2.1.3 Throughout these bidding documents, the terms 'bid' and 'tender' and their derivatives (bidder/Tenderer, bid/tender, bidding tendering, etc.) are synonymous.

### 2.2 Source of Funds.

- 2.2.1 The expenditure on this project will be met from the allocation of fund and subsequent release of fund by Central Govt. in installments basis under NESIDS.
- 2.2.2 Release of 2<sup>nd</sup> installment onwards is linked with furnishing report of effective utilization of previous allocation having direct bearing on the performance of the bidder in execution of the project. Non performance by Bidder leads to delay or stalling of fund release by Government.

### 2.3 Eligible Bidders.

- 2.3.1 This Invitation for Bids is open to eligible APST/Non-APST bidders only. (Also refer IFB).
- 2.3.2 All bidders shall provide in Section 2, Forms of Bid and Qualification Information, a statement that the Bidder is neither associated, nor has been associated, directly or indirectly, with the Consultant or any other entity that has prepared the design, specifications, and other documents for the Project or being proposed as Project Manager for the Contract. A firm that has been engaged by the Employer to provide consulting services for the preparation or supervision of the works, and any of its affiliates, shall not be eligible to bid.
- 2.3.3 Bids from Joint ventures are not acceptable.
- 2.3.4 **Criteria of Eligibility for Bidders (For APPWD as well as Non- APPWD registered contractors).**
- 2.3.5 **Enlistment status.**
- (a). Bidders should be Class-IA& above (Civil category) contractors enlisted under the Arunachal Pradesh PWD or contractors of equivalent category\* registered under other State/National Enlistment Authority.
  - (b). \*Contractors of equivalent category means bidders eligible to bid above 30.00 Crore.
  - (c). Joint-Ventures are not allowed.
  - (d). Enlistment in works department is mandatory (Registration under company Acts not allowed)

### 2.3.6 Similar Nature of Works.

- (a) The bidder should have satisfactorily completed the works as mentioned below with any of Central/State Government Department/ Central Autonomous Body/ State Autonomous body/ Central Public sector Undertaking/ State Public sector Undertaking/ City Development Authority/ Municipal Corporation etc. during the last 7 (seven) years ending previous day of last date of submission of tenders:-
- (i) 3 (three) similar works each of value not less than Rs.**1978.80** Lakhs (40% of estimated cost put to tender) or 2 (two) similar works each value not less than Rs.**2968.15** Lakhs (60% of estimated cost put to tender) or 1 (one) work of value not less than Rs.**3957.50** Lakhs (80% of estimated cost put to tender).
- (b) For the purpose of this clause 'similar work' means the works of **“Providing Drinking Water Supply works or Civil Construction works in hilly areas and above”**.
- (c) The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum, calculated from the date of completion to the previous day of last day of submission of bids.
- (d) Completion certificate with the correspondence address/e-mail id /contact number of issuing authority (in the rank of EE or above) must be uploaded while participating in the tender.
- (e) The Completion certificate/performance should indicate the scope of work/item details executed by the firm/bidder as asked in Form-D for determination of his eligibility criteria related this project.
- (f) Non submission of these details may lead to disqualification of tender and decision shall be at the discretion of accepting authority without any prejudice and cannot be challenged.
- (g) Criteria for evaluation of the performance of contractors for pre-eligibility as per Annexure-24 Performa-1 of CPWD Works Manual 2024 and clause 2.24.2 of ITB.

### 2.3.7 Financial Soundness.

- a) The bidder should have average annual financial turn-over (gross) of not less than Rs.**1484.00 Lakhs** (Fourteen Crore Eighty Four Lakhs) only on civil construction works during the last three consecutive financial year's balance sheets duly audited by Chartered Accountant.
- b) The bidder should not have incurred any loss in more than two years during the last five years as per balance sheets duly audited by Chartered Accountant.
- c) The bidding capacity of bidder shall be equal to or more than the ECPT of Rs.**4946.92** Lakhs (Forty-nine Crore forty six lakhs and ninety two Thousand) only.
- d) The bidder shall submit Solvency / Bankers Certificate of minimum 40% (Rs.**1978.80** Lakhs) of the ECPT **OR** Net worth certificate of minimum 10% (Rs.**494.69** Lakhs) of the ECPT issued by certified Chartered Accountant.
- e) The bidder shall submit existing Credit facility from Bankers for Rs.**494.69 Lakhs** [Four Crore ninety four Lakhs and sixty nine thousand only (10% of ECPT)].
- f) The bidder shall submit an affidavit to invest cash up to Rs.**1236.73 Lakhs** (25% of ECPT)].

- 2.4.4 Any agency involved/engaged in litigation with the Department at present or blacklisted with any Govt./Autonomous organization are discouraged and disqualified from participation in this tender. In the event of such disclosure at later stage even after acceptance/award of work, shall automatically lead to termination of contract including forfeiture of earnest money including security deposit.
- 2.4.5 Valid contact details of the Govt. Agency who has issued the experience certificate is mandatory. During scrutiny, if the employer or his authorized representative failed to authenticate the certificates from the issuing authority within three days, the bid submitted shall be considered non-responsive.
- 2.4.6 The bids can be submitted in electronic format in the website <https://arunachaltenders.gov.in> within the specified time by paying **Bid Fee (non-refundable)** of Rs.20000/- (**Rupees Twenty Thousand**) only. *(The copy of receipt of Bid Fee issued by the Executive Engineer shall be scanned and uploaded to the e-tendering website by the intending bidders within the specified bid submission date and time, failing which the bid is liable to be rejected).*

## 2.5 Qualification of the Bidder.

- 2.5.1 All bidders shall provide in Section 3, Forms of Bid and Qualification Information, and other prescribed details mentioned in bid document.
- 2.5.2 **List of mandatory documents to be scanned and uploaded within the period of bid submission: Also see Para 2.0 of Qualification information.**
- (a). Receipt for deposition of original EMD issued by PHE & WS Division, Daporijo, AP.
  - (b). Receipt for deposition of Bid Fee issued by PHE & WS Division, Daporijo, AP.
  - (c). Valid contractor registration certificate.
  - (d). GST registration Certificate and acknowledgement of up-to-date filed return as per Bid stipulation. (For FY 2023- 24 i.e. 31.03.2024)
  - (e). An Affidavit/Undertaking for acceptance of bid validity.
  - (f). In case of power of Attorney holder representing the firm, shall also submit an affidavit in par with the proprietor declared under Para IV separately.
  - (g). No Due Certificate from Apex Bank issued by Managing Director, Apex Bank, Itanagar/Daporijo Branch issued only after 01/04/2024. (applicable for APPWD registered contractors only)
  - (h). PAN card and Schedule Tribe certificate.
  - (i). Address of communication with mobile number, e-mail ID etc. of bidder.
  - (j). Affidavit executed before Magistrate /Notary indicating that furnished statements are true and will abide by the terms and conditions of tender
  - (k). Authorization to Seek Reference from concerned departments/bodies of which documents are uploaded.
  - (l). Undertaking regarding litigation history in the form of Affidavit executed before Magistrate/Notary.

- (m). Certificates of Work Experience issued by competent authority not below the rank of Executive Engineer and equivalent.
- (n). Certificate of annual Financial Turnover with Profit/Loss details for the last 5 (five) years from Chartered Accountant (in Form-A). (There is no need to upload entire voluminous balance sheet which shall be submitted in booklet at the time of opening of tender as mentioned in Sl. No. 18).
- (o). A letter from Chartered Accountant (CA) issuing the financial statement of the firm on Certified CA's letter head with details of working contacts viz. UDIN, mobile number, E-mail and postal address.
- (p). Solvency Certificate from Bankers (in Form-B) or Net worth Certificate from Chartered Accountant (in Form B-1).
- (q). Details of eligible similar nature of works completed during the last 5(Five) years in Form- 'C'.
- (r). Performance Report of eligible similar nature of works during the last seven years (in Form 'D').
- (s). Information in respect of his organization (in Form 'E').
- (t). Details of projects under execution or awarded (in Form 'F').
- (u). Details of Technical & Administrative personnel to be employed for the work (in Form 'G'). For details refer Annexure-II of Appendix to ITB.
- (v). Details of construction plant and equipment likely to be used in carrying out the work with supporting documents such as Affidavit/Undertaking/ Lease document certifying all the Tools and Machinery are in possession with bidder. (For details refer Annexure-I of Appendix to ITB.)
- (w). Letter of Transmittal (in prescribed format Annexure-I /Section-2).
- (x). *Worked out bidding capacity of bidder.*
- (y). Existing Credit facility from Bankers for ₹494.69 Lakhs.
- (z). Affidavit to invest cash up to ₹1236.73 Lakhs.
- (aa). Any other documents specified in the web portal/bidding documents.

2.5.3 The bidders shall have to submit duly signed **hard copies** of all documents scanned and uploaded by bidders with supporting documents, if any, and other documents as mentioned in the IFB/ITB in the form of a booklet with serial numbered pages and index in a sealed envelope at the time of opening their tender. **Unclear or illegible documents shall be treated as invalid.** In case of discrepancy of any downloaded documents and same shall be verified and tallied with the hard copy for evaluation.

2.5.4 **.(i) To qualify for award of the contract, each bidder in its name should have in the last five years as referred to in Appendix.**

Bidders who meet the minimum qualification criteria will be qualified only if their available bid capacity is more than or equal to the total bid value. The available bid capacity will be calculated as under:

**Assessed Available Bid capacity = (A\*N \*1.5 – B)**

Were

- A** = Maximum value of civil engineering works executed in any one year during the last five years (updated to the price level of the year indicated in Appendix) taking into account the completed as well as works in progress.
- N** = Number of years prescribed for completion of the works for which bids are invited.
- B** = Value (updated to the price level of the year indicated in Appendix) of existing commitments and on-going works to be completed during the next 5(five) years (period of completion of the works for which bids are invited).

ii) The bidder shall not be permitted to bid for works in the PHED Circle responsible for award and execution of contracts, in which his near relative is posted a Divisional Accountant or as an officer in any capacity between the grades of Superintending Engineer and 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 Gazetted Officer in the Public Health Engineering Department. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of this Department.

(iii) No Engineer of Gazetted Rank or other Gazetted Officer employed in Engineering or Administrative duties in an Engineering Department of the Government of Arunachal Pradesh is allowed to work as a contractor for a period of one year after his retirement from Government service, without the prior permission of the Government of Arunachal Pradesh in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found any time to be such a person who had not obtained the permission of the Government of Arunachal Pradesh as aforesaid before submission of the bid or engagement in the contractor's service.

~~(iv) In the larger interest of the public and for equitable distribution of development works amongst eligible bidder and also to ensure effective management and quality of works, a bidder shall be allowed to have only 3 (three) works in hand in any of departments under Government of Arunachal Pradesh at a time and for which he shall make a declaration to be executed in an Affidavit that he **is not engaged in more than two tender works under the State Government of Arunachal Pradesh.** (Affidavit shall be signed before Magistrate). He shall also be eligible for participation in any tender for required submitting completion certificate issued by the Engineer in charge duly countersigned by the concerned Superintending Engineer and Chief Engineer. (Refer Clause (e) Sub Rule (ii) of Rule (4) of Arunachal Pradesh District Based Entrepreneurs and Professionals (Incentives, Development & Promotional) Rule 2015 with up-to-date Amendment. DELETED~~

## 2.6 One Bid per Bidder

2.6.1 Each bidder shall submit only one bid for one package. A bidder who submits or participates in more than as a subcontractor or in cases of alternatives been permitted or requested) will cause all the proposals with the Bidder's participation to be disqualified.

## 2.7. Cost of Bidding & Bid Processing Fee

2.7.1. The bidder shall bear all costs associated with the preparation and submission of his Bid, and the Employer will in no case be responsible and liable for those costs. Cancellation/postponement of bidding process by the Employer after uploading of IFB, submission of bid or at any stage due to legal, administrative, unforeseen reasons will not yield to any compensation and refund of bid processing fee.



## 2.8 Site Visit

- 2.8.1. The Bidder, at his own responsibility and risk is encouraged to visit and examine the Site of Works and its surroundings which is mandatory and obtain all information and Geo Tagged photographs that may be necessary for preparing the Bid and entering into a contract for construction of the Works. The cost of site visit shall be borne by the bidder on his own expenses. Bidder is required to carry out preliminary assessment of the project including site visit in presence of concern AE and obtain a site visit certificate duly signed by the AE which is a mandatory document in participating in tender.
- 2.8.2 The costs of visiting the Site shall be at the Bidder's own expense. A bidder shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. The bidders shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a bid by bidders 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.
- 2.8.3 The Bidders must obtain **No Objection Certificate (NOC)** from the GPC of Lamdik village regarding accessibility of Source and the same should be uploaded in website along with e-tender.
- 2.8.3 10% Tendered amount will be withheld for maintenance of SCADA systems for **3(three) years** after completion of project against item No. 5 & 11 under **section: 7** for which payment shall be made are as follows:-
- i) 2025-26:- 25%,      2026-27:- 25% and      2027-28:- 50%

## B. BIDDING DOCUMENTS

### 2.9 Contents of Bidding Documents.

- 2.9.1. The set of bidding documents comprises the documents listed below, and addenda issued in accordance with Clause 10:

Section	Particulars
1	Invitation for Bids Instructions to Bidders
2	Qualification Information, and other forms
3	Conditions of Contract
4	Contract Data
5	Technical Specification
6	Drawings
7	Securities & other Forms
8	Form of Bid
9	Section-10: BOQ
10	Documents to be furnished by bidder

## 2.9.2.

The bidder is expected to download the bid documents from website and examine carefully all instructions, conditions of contract, contract data, forms, terms, and technical specifications, bill of quantities, forms, Annexure, drawings etc. in the Bid Document. Failure to comply with the requirements of Bid Documents shall be at the bidder's own risk. Pursuant to clause 2.27 hereof, bids which are not substantially responsive to the requirements of the Bid Documents shall be rejected.

2.10 **Clarification of Bidding Documents**

2.10.1. A prospective bidder requiring any clarification may notify the Employer or his authorized representative in writing or by e-mail at the address indicated in the invitation to bid (Refer Appendix to ITB). The Employer shall endeavor to respond to any request for clarification of queries within the period specified but not later than 10(ten) days from the deadline for submission of bids. Copies of the Employer's response will be forwarded to all purchasers of the bidding documents, including a description of the enquiry but without identifying its source.

2.10.2. The authority shall endeavor to respond to the question raised or clarifications sought by the bidders. However, the authority reserves the right not to respond to any question or provide any clarification, in its sole discretion, and nothing in this clause 2.10 shall be taken or read as compelling or requiring the authority to respond to any question or to provide any clarification.

2.10.3. The authority may also on its own motion, if deemed necessary, issue interpretations and clarifications to all bidders. All clarifications and interpretations issued by the authority shall be deemed to be part of the bidding documents. Verbal clarifications and information given by authority or its employees or representatives shall not in any way or manner be binding on the authority.

2.10.4. In the event of conflicts and contradictions, misrepresentation or misinterpretation arising out of the bidding documents including this e-NIT, without prejudice to the rights of any bidders, the interpretation or intent of the author of the documents shall prevail without overriding statutory orders of the Govt. of AP/CVC/GFR-2017/ DoE guidelines/ CPWD works manual 2024, no claim thereof or herein contained shall be entertained by the Authority.

2.11 **Pre-bid meeting**

2.11.1. The bidder or his official representative is invited to attend a pre-bid meeting indicated in appendix.

2.11.2. The purpose of the meeting will be to clarify doubts of the contractors, besides discussion on any suggestion proposed by the contractors. If found necessary, a corrigendum to the tender documents would be issued based on acceptability and thereafter no further query/condition shall be entertained.

2.11.3. The bidder is requested to submit any questions in writing or by e-mail to reach to the Bid inviting Authority at least one day before the scheduled meeting.

2.11.4. Minutes of the meeting, including the text of the questions raised and the responses given will be transmitted without delay to all purchasers of the bidding documents. Any modification of the documents listed in Sub-Clause 2.9.1 which may become necessary as a result of the pre-bid meeting shall be made by the Employer exclusively through the issue of an Addendum pursuant to Clause 2.12 and not through the minutes of the pre-bid meeting.

2.11.5. The authority shall not entertain any kind of questions or clarifications by any bidders in

the matter of bidding documents and conditions therein after the lapse of bid submission date and the authority shall not be liable in any manner thereof.

2.11.6. Non- attendance at the pre-bid meeting will not be a cause for disqualification of a bidder.

**2.12 Amendment of Bidding Documents**

2.12.1 Before the deadline for submission of bids, the Employer may modify the bidding issuing addenda.

2.12.2. Any addendum thus issued shall be part of the bidding documents and shall be in writing or e-mail to all the purchasers of the bidding documents. Prospective bidders shall acknowledge receipt of each addendum in writing or e-mail to the Employer. The Employer will assume no responsibility for postal delays.

2.12.3. To give prospective bidders reasonable time in which to take an addendum into account in preparing their bids, the Employer may, at his discretion, extend as necessary the deadline for submission of bids, in accordance with Sub-Clause 2.22.2 below.

**C. PREPARATION OF BIDS**

**2.13 Language of the Bid**

2.13.1 All documents relating to the bid shall be in the English language.

**2.14. Documents Comprising the Bid (To be uploaded by the bidder. Refer Section 2.5.2)**

2.14.1. The bid to be submitted (uploaded) by the bidder (refer Clause 2.9.1) shall be in two separate parts:

**"Technical Bid"** and shall comprise

- (i) Bid Security in the form specified in Section 8
- (ii) Qualification Information and supporting documents as specified Section 2
- (iii) Certificates, undertakings, affidavits as specified in Section 2.5.2
- (iv) Any other information pursuant to Clause 2.5.2 of these instructions
- (v) Undertaking that the bid shall remain valid for the period specified it Clause 2.18.1
- (vi) Acceptance/ non-acceptance of Dispute Review Expert proposed in Clause 2.37.1

**"Financial Bid"** and shall comprise

- (i) Form of Bid as specified in Section 9
- (ii) Priced Bill of Quantities for items specified in Section 10

2.15. Following documents, which are not submitted with the bid, will be deemed to be part of the bid.

Section	Particulars
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1	Invitation for Bids (IFB)
2	Instructions to Bidders
3	Conditions of Contract
4	Contract Data
5	Specifications
6	Drawings

## 2.16 **Bid Prices.**

- 2.16.1 The contract shall be for the whole works as described in Sub-Clause 2.1.1, based Bill of Quantities submitted by the Bidder.
- 2.16.2. The bidder shall fill in rates and prices and line-item total (both in figures and words) for all items of the Works described in the Bill of Quantities along with total bid price (both in figures and words). Items for which no rate or price is entered by the bidder will not be paid for by the Employer when executed and shall be deemed covered by the other rates and prices in the Bill of Quantities. Corrections, if any, shall be made by crossing out, initialing, dating and rewriting.
- 2.16.3 Contract amount is inclusive of GST, Labour Cess, Income Tax, Royalty for minor minerals and all incidental charges.
- 2.16.4. The rates and prices quoted by the bidder shall be fixed for the contract and no price escalation is allowed.

## 2.17. **Currencies of Bid and Payment**

- 2.17.1. The unit rates and the prices shall be quoted by the bidder entirely in Indian All payments shall be made in Indian Rupees.

## 2.18. **Bid Validity.**

- 2.18.1. Bids shall remain valid for a period not less than **75 (Seventy Five) days** after the deadline submission specified in Clause 2.22. A bid valid for a shorter period shall be rejected by the Employer as non-responsive. In case of discrepancy in bid validity period given in the undertaking pursuant to Clause 2.14.1 (v) and the Form of Bid submitted by the bidder, the latter shall be deemed to stand corrected in accordance with the former and the bidder, has to provide for any additional security that is required
- 2.18.2 In exceptional circumstances, prior to expiry of the original time limit, the Employer may request that the bidders may extend the period of validity for a specified additional period. The request and the bidders' responses shall be made in writing or e-mail. A bidder may refuse the request without forfeiting his bid security. A bidder agreeing to the request will not be required or permitted to modify his bid except as provided in 2.18.3 hereinafter but will be required to extend the validity of his bid security for a period of the extension, and in compliance with Clause 2.19 in all respects.
- 2.18.3. The Contract price shall remain fixed & no price escalation is allowed during the entire duration of contract.
- 2.18.4. Bid evaluation will be based on the bid prices only.

**2.19. Bid Security (EMD).**

2.19.1 The Bidder shall furnish, as part of his Bid, a Bid security (EMD) for amount as shown in column 4 of the table of IFB for this particular work. This bid security shall be in favour of **Executive Engineer PHE & WS Division, Daporijo, AP**, as named in Appendix and may be in one of the following forms:

- a. Demand Draft drawn on any scheduled Indian Bank located in India and payable at Daporijo.
- b. Fixed Deposit Receipt, or an irrevocable letter of credit, issued by any Scheduled Indian Bank approved by the Reserve Bank of India.

The original instrument in any form as above should be deposited in the Office of **the Executive Engineer PHE & WS Division, Daporijo, AP** at least one day before last date of online bid submission. The scanned copy of the receipt issued by the Executive Engineer or authorized official of the Division should be invariably uploaded by the bidder failing which bid is liable for rejection. Also Refer Section 2.5.2 (a).

2.19.2. Deleted.

2.19.3. Any bid not accompanied by an acceptable Bid Security (EMD) and not secured as indicated in Sub-Clauses 2.19.1 and 2.19.2 above shall be rejected by the Employer as non-responsive.

2.19.4. The Bid Security of unsuccessful bidders will be returned within 28 days of the end of the bid validity period specified in Sub-Clause 2.18.1.

2.19.5. The Bid Security of the successful bidder will be discharged when the bidder has signed the Agreement and furnished the required Performance Security.

2.19.6. The Bid Security (EMD) shall be forfeited in full

- (a) If the Bidder withdraws the Bid after Bid opening during the period of Bid validity.
- (b) If the Bidder does not accept the correction of the Bid Price, pursuant to Clause 2.28; or
- (c) In the case of a successful Bidder, if the Bidder fails within the specified time limit to
  - (i) Sign the Agreement; or
  - (ii) Furnish the required Performance Security.

**2.20 Alternative Proposals by Bidders**

2.20.1. Bidders shall submit only offers that fully comply with the requirements of the bidding including the conditions of contract, basic technical design as indicated in the drawing and specifications. Alternative offers will not be considered in the process of tender evaluation.

**D. SUBMISSION OF BIDS****2.21. Online**

2.21.1. Bids (Technical & Financial) should be submitted online. Bidders should upload duly signed documents in either JPG or PDF format.

**2.22. Deadline for Submission of the Bids**

- 2.22.1. For details refer to Table shown in IFB.
- 2.22.2. The Employer may extend the deadline for submission of bids by issuing an amendment in accordance with Clause 2.12, in which case all rights and obligations of the Employer and the bidders previously subject to the original deadline will then be subject to the new deadline.

**2.23. Late Bids****2.23. Modification and Withdrawal of Bids**

- 2.23.1 Bidders can modify or resubmit bids any number of times before the last date of submission prescribed in IFB. Bid processing fee however shall have to be paid in each time whenever any modification or resubmission is made.
- 2.23.2. No bid can be modified after the deadline for submission of Bids except in pursuance of Clause 2.24.
- 2.23.3. Withdrawal or modification of a Bid between the deadline for submission of bids and the expiration of the original period of bid validity specified in Clause 2.18.1 above or as extended pursuant to Clause 2.18.2 may result in the forfeiture of the Bid security pursuant to Clause 2.19.

**E. BID OPENING AND EVALUATION****2.24. Bid Opening:**

Bid opening (Technical & Financial Bid) and evaluation of the performance of contractors for eligibility and award shall be done by NIT approving authority or a committee constituted by him.

- 2.24.1 The authority shall open the technical bids (online) on the date specified in IFB, in presence of the authorized representatives of the bidders, who choose to attend. The authority will subsequently examine and evaluate the bids in accordance with the provisions of the section 2.27 of ITB. The Financial bids will be opened for only the technically qualified bidders.
- 2.24.2. Bid Opening Committee during the opening of Technical Bids shall verify the following documents uploaded during bid submission (original or downloaded copies) as a pre-requisite for carrying out further evaluation of technical responsiveness of bidders.
- (i) Proof of EMD.
  - (ii) Proof of payment of Bid fee of **Rs 20000/- (Rupees Twenty Thousand)**only.
  - (iii) Valid Contractor Registration Certificate as prescribed in e-NIT.
  - (iv) During the opening of Bids, no doubts, queries or questions by any bidder regarding the bidding documents or the bids of any other bidders shall be entertained, the same shall be carried out by evaluation committee as per the parameters defined in this bidding documents.
  - (v) In addition to fulfillment of requirements laid down at section 2.5.2, any Bid failing to achieve less than 80 (Eighty) marks indicated in Evaluation Criteria of: -

- a) CPWD Works Manual SOP-2024, Annexure-24/Section-8 of SOP to CPWD Works Manual-2024 **(Part-A)**

**b) Part-B**

1	Tools & Plants (Prescribed in NIT)	10	Self- owned and age of T & P below 3/5 years will be awarded 100% mark. For Leased/Hired T & P, score will we awarded in proportion.
2	Technical Staff (Prescribed in NIT)	10	

Shall **not be considered** for opening of financial bid and shall be treated as technically non-responsive and cannot be challenged by the technically non-responsive bidders.

- 2.24.2. Bid uploaded with fake or forged documents if established during evaluation/scrutiny is liable to be rejected with forfeiture of Bid Security/EMD in full submitted by the bidder without any intimation and cannot be challenged.
- 2.24.3. Any matter related to Bid if required be raised during Pre-Bid meeting only. Minutes of the proceedings/response to query shall be promptly dealt by the tender inviting authority without any delay.
- 2.24.4. No representations, complaints, allegations shall be received or entertained by the Bid accepting authority during the course of evaluation and if the situation warrants, same should be routed through tender inviting authority only. No third party other than the bidders who have participated in bidding can exercise this option. Canvassing in any form during evaluation stage is liable for rejection of bid.
- 2.24.5 Employer or his authorized representative /Tender Evaluation Committee can seek for hard copy of documents including originals uploaded by bidder during bid evaluation if downloaded document(s) found ineligible/ unreadable and bidder is required to submit the same not later than 7 (seven) days from the requisition as such. Failure to respond to these queries shall be deemed as non-responsive as the evaluation process cannot be prolonged beyond the permissible time.
- 2.24.6 The Tender Opening Committee/Board shall prepare minutes of the Bid opening, including the information disclosed to those present in accordance with Sub-Clause 2.24.1
- 2.24.7. Minutes of Bid evaluation by Tender Evaluation Committee/Board shall be issued by the Employer/Accepting Authority.
- 2.24.8 Any complaints, representations or allegation by technically non-responsive bidders about the evaluation process, including the manner in which the bidder has been rejected technically will not be entertained by the employer nor does the employer have any liability towards the rejected bidder in any way possible.

**2.25 Process to be Confidential**

- 2.25.1 Information relating to the examination, clarification, evaluation, and comparison of Bids and recommendations for the award of a contract shall not be disclosed to Bidders or any other persons not officially concerned with such process until the award to the successful Bidder has been announced. Any effort by a Bidder to influence the Employer's processing of Bids or award decisions may result in the rejection of his Bid.

- 2.25.2 Canvassing whether directly or indirectly, in connection with bid is strictly prohibited and the bid submitted by the bidder who resorts to canvassing will be liable for rejection including forfeiture of Bid Security.

**2.26. Clarification of Financial Bids**

- 2.26.1. To assist in the examination, evaluation, and comparison of Bids, the Employer may, at his discretion, ask any Bidder for clarification of his Bid, including breakdowns of unit rates. The request for clarification and the response shall be in writing or by e-mail, but no change in the price or substance of the Bid shall be sought, offered, or permitted except as required to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the Bids in accordance with Clause 2.28.
- 2.26.2. Subject to sub-clause 2.26.1, no Bidder shall contact the Employer on any matter relating to his bid from the time of the bid opening to the time of the contract is awarded. If the Bidder wishes to bring additional information to the notice of the Employer, it should do so in writing.
- 2.26.3. Any effort by the Bidder to influence the Employer in the Employer's bid evaluation, bid comparison or contract award decisions may result in the rejection of the Bidders' bid.

**2.27. Examination of Bids and Determination of Responsiveness.**

- 2.27.1. During the detailed evaluation of "Technical Bids", the Employer will determine whether each Bid (a) meets the eligibility criteria defined in Clause 2.3, 2.4 and 2.5; (b) has been properly signed; (c) is accompanied by the required securities and; (d) is substantially responsive to the requirements of the Bidding documents. During the detailed evaluation of the "Financial Bid", the responsiveness of the bids will be further determined with respect to the remaining bid conditions, i.e., priced bill of quantities, technical specifications, and drawings.
- 2.27.2. A substantially responsive "Financial Bid" is one which conforms to all the terms, conditions, and specifications of the Bidding documents, without material deviation or reservation. A material deviation or reservation is one (a) which affects in any substantial way the scope, quality or performance of the Works; (b) which limits in any substantial way, inconsistent with the Bidding documents, the Employer's rights or the Bidder's obligations under the Contract; or (c) whose rectification would affect unfairly the competitive position of other Bidders presenting substantially responsive Bids.
- 2.27.3. If a "Financial Bid" is not substantially responsive, it will be rejected by the Employer, and may not subsequently be made responsive by correction or withdrawal of the non-conforming deviation or reservation.

**2.28. Correction of Errors**

- 2.28.1. "Financial Bids" determined to be substantially responsive, it will be rejected by the Employer for any arithmetic errors. Errors will be corrected by the Employer as follows:
- (a) Where there is a discrepancy between the rates in figures and in words, the rate in words will govern; and
  - (b) Where there is discrepancy between the unit rate and the line-item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted will govern.
- 2.28.2. The amount stated in the "Financial Bid" will be corrected by the Employer in accordance with the above procedure and the bid amount adjusted with the concurrence of the Bidder in the following manner:
- (a) If the Bid price increases as a result of these corrections, the amount as stated in the bid will be the 'bid price' and the increase will be treated as rebate;



- (b) If the bid price decreases as a result of the corrections, the decreased amount will be treated as the 'bid price'

Such adjusted bid price shall be considered as binding upon the Bidder. If the Bidder does not accept the corrected amount the Bid will be rejected, and the Bid security may be forfeited in accordance with Sub-Clause 2.19.6 (b).

### **2.30 Evaluation and Comparison of Financial Bids**

- 2.30.1. The Employer will evaluate and compare only the Bids determined to be substantially responsive in accordance with Sub-Clause 2.27.2.
- 2.30.2. In evaluating the Bids, the Employer will determine for each Bid the evaluated Bid Price by adjusting the Bid Price as follows:
- (a) Making any correction for errors pursuant to Clause 2.28; or
  - (b) Making an appropriate adjustment for any other acceptable variations, deviations; and
  - (c) Making appropriate adjustments to reflect discounts or other price modifications offered in accordance with Clause 2.27.
- 2.30.3. The Employer reserves the right to accept or reject any variation or deviation. Variations and deviations and other factors, which are in excess of the requirements of the Bidding documents or otherwise result in unsolicited benefits for the Employer shall not be taken into account in Bid evaluation.
- 2.30.4. The estimated effect of the price adjustment conditions under Clause 47 of the *Conditions of Contract*, during the period of implementation of the Contract, will not be taken into account in Bid evaluation being with contract amount is fixed.
- 2.30.5. If the Bid of the successful Bidder is seriously unbalanced in relation to Engineer's estimate of the cost of work to be performed under the contract, the Employer may require the Bidder to produce detailed price analyses for any or all items of the Bill of Quantities, to demonstrate the internal consistency of those prices with the construct methods and schedule proposed. After evaluation of the price analyses, the Employer may require that the amount of the performance security set forth in Clause 2.35 be increased the expense of the successful Bidder to a level sufficient to protect the Employer against financial loss in the event of default of the successful Bidder under the Contract.
- 2.30.6. Any offer (bid value) received less than 20 (Twenty) percent of ECPT (Estimated Cost Put to Tender) shall be considered as '**ABNORMALLY LOW BID**' and referred as '**ALB**' henceforth. In such case the additional performance security shall be applicable as per Clause: 2.35.1 (performance security) with proper justification failing which the bid may be deemed non-responsive.
- 2.30.7. Bidder shall also be required to furnish additional performance security in case of acceptance of Abnormally Low Bid (ALB) which at Clause: 2.30.6 and shall be dealt as per Clause: 2.35.1 at ITB.

### **F. AWARD OF CONTRACT**

#### **2.32. Award Criteria**

- 2.32.1. Subject to Clause 2.33, the Employer will award the Contract to the Bidder whose Bid has been determined.
- (i) to be substantially technically responsive as per Bidding parameters and who has offered the lowest evaluated Bid Price; and

- ii) to be within the available bid capacity adjusted to account for his bid price which is evaluated the lowest in any of the packages opened earlier than the one under consideration.
- (iii) In no case, the contract shall be awarded to any bidder whose available bid capacity is less than the evaluated bid price, even if the said bid is the lowest evaluated bid. The contract will in such cases be awarded to the next lowest bidder at his evaluated bid price.

### **2.33. Employer's Right to accept any Bid and to reject any or all Bids**

- 2.33.1. Notwithstanding Clause 2.32, the Employer reserves the right to accept or reject, any Bids, and to cancel the Bidding process and reject all Bids, at any time prior to the award of Contract, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for the Employer's action.

### **2.34. Notification of Award and Signing of Agreement**

- 2.34.1. The Bidder whose Bid has been accepted will be notified of the award by the Employer or his authorized representative prior to expiration of the Bid validity period by mail, letter as applicable & feasible. This letter (hereinafter and in the *Conditions of Contract* called the "Letter of Acceptance") will state the sum that the Employer will pay the Contractor in consideration of the execution, completion, and maintenance of the Works by the Contractor as prescribed by the Contract (hereinafter and in the Contract called the "Contract Price").
- 2.34.2. The notification of award will constitute the formation of the Contract, subject only to the furnishing of a performance security in accordance with the provisions of Clause 2.35.
- 2.34.3. The Agreement will incorporate all agreements between the Employer and the Bidder. It will be signed by the Employer and sent to the successful Bidder, following the notification of award along with the Letter of Acceptance. Within 21 days of receipt, the successful Bidder will sign the Agreement and deliver it to Employer.
- 2.34.4. Upon the furnishing by the successful Bidder of the Performance Security, the promptly notify the other Bidders that their Bids have been unsuccessful.

### **2.35. Performance Security**

- 2.35.1. **Within 7 days of receipt of the Letter of Acceptance**, the successful Bidder shall deliver to the Employer a Performance Security in any of the forms given below for an amount equivalent to 5% (five percent) of the Contract price.
  - Bank guarantee in the form given in Section 7; or
  - Bank Draft as indicated in Appendix.
  - Fixed Deposit Receipt on any schedule Indian Bank

In case the Bid mentioned below, the selected Bidder, along with the performance security, shall also furnished to the authority an irrevocable and unconditional guarantee from a Bank in the same form given at appendix towards an **additional performance security** for an amount calculated as under:

- i. If the Bid price offered by the selected Bidder is lower than 20% of the Estimated Project cost/ cost put to tender, the additional Performance Security (APS) shall be calculated at 20% of the deference in the

- a) Estimated Project cost (as mentioned in the RFP) – 20% of the Estimated Project cost and
- b) The Bid price offered by the selected Bidder
- ii. Maximum limit of the additional performance Security (APS) shall be limited to 3(three) % of the bid price offered by the selected Bidders.
- iii. The Additional Performance Security (APS) shall be treated as part of the Performance Security.
- 2.35.2. If the performance security is provided by the successful Bidder in the form of BG it shall be issued either (a) at the Bidder's option, by a Nationalized/Indian bank with branch located at Daporijo and acceptable to the Employer.
- 2.35.3. Additional Performance Security in accordance with Clause 2.30.7 shall also be required in case of acceptance of ALBs. (For details, refer Contact Data Para- 11(ii))
- 2.35.4. Failure of the successful Bidder to comply with the requirements of Sub-Clause 2.35.1&2.35.3 shall constitute sufficient grounds for cancellation of the award and forfeiture of the Bid Security (EMD).
- 2.35.5. The Performance Guarantee including Additional Performance Guarantee shall be initially valid up to the stipulated date of completion plus **60 (sixty) 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.
- 2.35.6. In the event of the contract being determined or rescinded under provisions of any of the clause/condition of the agreement, the Performance Guarantee including Additional Performance Guarantee shall stand forfeited in full. This is also applicable in case of failure by the contractor to pay 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 Engineer-in-Charge.
- 2.36. Advance Payment and Security**
- 2.36.1. No Advance payment shall be made against this Contract.
- 2.37. Dispute Review Expert**
- 2.37.1. The name of Dispute Review Expert is to be decided by the Employer in consultation with GoAP & Bidder as and when the need arises.
- 2.38. Corrupt or Fraudulent Practices**
- 2.38.1. The Employer will reject a proposal for award if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question and will declare the firm ineligible, either indefinitely or for a stated period of time, to be awarded a contract with AP PWD and any other State /Central govt./autonomous agencies, if it at any time determines that the firm has engaged corrupt or fraudulent practices in competing for the contractor, or in execution.
- 2.38.2. Furthermore, Bidders shall be aware of the provision stated in Sub-Clause 2.24.2 and Sub-Clause 59.2 of the Conditions of Contract.
- 2.38.3. It shall be deemed that by submitting the bid, the bidder agrees and releases the authority, its employees, agent and advisers, irrevocably, unconditionally, fully and finally from any and all liability for claims, losses, damages, costs, expenses or liabilities in any way related to or arising from the exercise of any rights and/ or performance of any

obligations hereunder, pursuant hereto and/ or in connection with the bidding process and waives, to the fullest extent permitted by applicable laws, any and all rights and/ or claims it may have in this respect, whether present or in future.

### APPENDIX to ITB

#### Clause Reference with respect to Section-I (ITB) & IFB

Name of Work: - **Augmentation of Water Supply system at Daporijo Township (4.20MLD) under NESIDS.**

Bid ID: - DPHE/NIT/NESIDS/2024-25/01

1	Name of Employer: -	The Chief Engineer, Central Zone, PHE&WS Department Bene, Aalo (Camp: Itanagar)	
2a	Authorized representative of Employer	<b>The Superintending Engineer</b> PHE&WS Circle, Basar, AP	
2b	Bid Inviting Authority (Engineer-in-charge)	The Executive Engineer PHE&WS Division, Daporijo Mail id:- <a href="mailto:eepheddaporijo@gmail.com">eepheddaporijo@gmail.com</a>	
3	The Last five years  2019-20 2020-21 2021-22 2022-23 2023-24	Multiplying factor 1.28 1.21 1.14 1.07 1.00 Base Year 2019-20	
4	Minimum Annual Turn over	Rs. <b>1484.00</b> Lakhs.	
5	Value of similar nature of work executed during last 5 years	3 No – Rs.1978.80 Lakhs each 2 No - Rs. 2968.15 Lakhs each 1 No- Rs. 3957.50 Lakhs	
6	Value of any other works 100% completed during last 5 years	-	
7	Available Credit facility from Banker	10% of Contract price	
8	Minimum investment by bidder in the project	25% of Contract Price	
9	Pre-Bid Meeting	Date <b>29/03/2025 at 1100 Hours</b> Venue:- Office of The <b>Executive Engineer</b> PHE&WS Division, Daporijo	
10	Bid Processing Fee ( Non-refundable)	Rs .20,000.00(Twenty thousand)only	
11	Bid Security/EMD	Rs.49,46,920/- for APST& Rs.69,46,920/- for Non-APST	
12	Last date of submission of on-line bid	08/04/2025	
13.	Opening of Technical	11/04/2025	

	Bid		
14	Dispute Review Expert	To be intimated later when necessary	
<b>Also Refer to IFB&amp; Chapter A to F of ITB</b>			

**ANNEXURE-I**  
**List of Key Plant & Equipment to be deployed on Contract Work**

[Reference C1.4.2 (v)/ITB]

Sl. No.	Type of Equipment	Maximum age as on 01.4.2024(Years)	Quantity (No)
1	Hydraulic Excavator of 1 cum bucket.	5	1
2	TATA Hitachi	5	1
3	Tata Truck/Tipper	5	2
4	Concrete Mixture Machine of full bag capacity	5	1
5	Steel Shuttering& Scaffolding	2	30000Sqm
6	Total Station	2	1
7	Needle vibrator (15 Oil & 15 Electric)	2	4
8	Beam Vibrator	2	4
9	Slab Vibrator	2	2
10	Bar Bending Machine	5	2
11	Bar Cutting Machine	2	3
12	Diesel Generator 63KVA	2	2
13	Welding Machine	5	2
14	Water Tank 1000 Ltr Capacity	5	2

**Note:- All the T&Ps listed above ( Sl No 1 to 14) must be either owned by the bidder/Firm or taken on lease and in working conditions. Affidavits duly sworn before Magistrate on any date after the publication of IFB certifying ownership/ lease or hired basis to be uploaded during bid submission failing which the bid automatically stands rejected.**

**ANNEXURE-II**  
**List of Key Personnel to be deployed on Contract Work**

[Reference C1.4.2 (u)]

SL No	Personnel	Qualification	Requirement
1	Project Manager	B.E. Civil + 10 Years Exp. (and having experience of one similar	1 No.

		nature of work)	
2	Project/Site Engineer	B.E. Civil + 5 years Exp. or Diploma(Civil) +10 years Exp. respectively	1 +1 Nos.
3	Project Planning /Quantity /Billing Engineer	B.E. Civil + 2 years Exp. or Diploma(Civil) +5 years Exp. respectively	1+1 Nos.
<b>Total</b>			<b>5 Nos</b>

Recovery at the following rates shall be made from the Contractor in the event of non-fulfillment of above criteria based on CPWD Works Manual-2024(SOP)

- ❖ Project Manager = ₹.60,000/- PM
- ❖ Site Engineer = ₹.25,000/- PM
- ❖ Planning /Quantity /Billing Engineer = ₹. 15,000/- PM

# SECTION 3

## QUALIFICATION INFORMATION

**QUALIFICATION INFORMATION:**

1.0 The portfolio uploaded as per in the prescribed format/guidelines will be used for purposes of post qualification as provided for in Clause 4 of the Instructions to Bidders.

2.0 The prescribed information required to be furnished as under: (Check- list). Also refer CI 4.2 ITB

1	<u>Annex-I</u> ; LETTER OF TRANSMITTAL	Letter Head of the Firm /bidder
2	<u>FORM 'A'</u> ; FINANCIAL INFORMATION	-do -
	<u>FORM 'B'</u> FORM OF BANKERS' CERTIFICATE FROM A SCHEDULED BANK	Bank's letter head
3	<u>FORM 'B-1'</u> FORM FOR CERTIFICATE OF NET WORTH FROM CHARTERED ACCOUNTANT	Plain or Letter head of CA with Seal & Stamp
4	<u>FORM 'C'</u> DETAILS OF ELIGIBLE SIMILAR NATURE OF WORKS COMPLETED DURING THE LAST FIVE YEARS ENDING PREVIOUS DAY OF LAST DAY OF SUBMISSION OF TENDERS	Letter Head of the Firm / bidder
5	FORM 'D' PERFORMANCE REPORT OF WORKS REFERRED TO IN FORMS "C"	Plain or official letter head of competent authority
6	<u>FORM "E"</u> STRUCTURE & ORGANISATION	Letter Head of the Firm / bidder
7	<u>FORM 'F'</u> PROJECTS UNDER EXECUTION OR AWARDED	- do -
8	<u>FORM 'G'</u> DETAILS OF TECHNICAL & ADMINISTRATIVE PERSONNEL TO BE EMPLOYED FOR THE WORK	- do -
9	<u>FORM 'H'</u> DETAILS OF CONSTRUCTION PLANT AND EQUIPMENT LIKELY TO BE USED IN CARRYING OUT THE WORK	- do -
10	SAMPLE FORMAT FOR EVIDENCE OF ACCESS TO OR AVAILABILITY OF CREDIT FACILITIES	Bank's letter head



11	AFFIDAVITS: (i) Declaration about the correctness of the information furnished. (ii) Minimum investment of 25% (iii) Declaration of having not more than two ongoing works in hand (iv) Lease agreement/ hire of T&Ps (v) Undertaking/declaration regarding Litigation history	Non-Judicial Stamp paper sworn before Magistrate/ Notary
12	UNDERTAKINGS: (i) Bid Validity (ii) Declaration regarding no relatives /engineers as per CI 4.4(ii) ITB	Non-Judicial Stamp paper sworn before Magistrate/ Notary
13.	No Dues Certificate from Managing Director APEX Bank	Bank's letter head
14	Receipt of original Bid Security	Plain or official letter head of competent authority
15	Receipt of original Bid Processing Fee	Plain or official letter head of competent authority
16	Certificate as per CI 7.1 (ITB)	Letter Head of the concern Office with seal.
17	Certificate as per CI 7.3 (ITB)	Letter of the concern with seal.

**ANNEXURE - I**

**LETTER OF TRANSMITTAL**

From:

.....  
.....

To

The Executive Engineer  
PHE&WS Division,  
Daporijo, AP

**Subject: Submission of bids for the work :- “Augmentation of Water Supply system at Daporijo Township(4.20MLD) under NESIDS” NIT No. “DPHE/NIT/NESIDS/2024-25/01**

Sir,

Having examined the details given in press notice and bid document for the above work, I/we hereby submit the relevant information.

1. I/we hereby certify that all the statement made and information supplied in the enclosed forms A to H and accompanying statement are true and correct.
2. I/we have furnished all information and details necessary for eligibility and have no further pertinent information to supply.
3. I/we submit the requisite certified solvency certificate and authorize the **Executive Engineer, PHE&WS Division, Daporijo** to approach the Bank issuing the solvency certificate to confirm the correctness thereof. I/we also authorize **Executive Engineer, PHE&WS Division, Daporijo** to approach individuals, employers, firms and corporation to verify our competence and general reputation.
4. I/we submit the few relevant certificates in support of our suitability, technical knowledge and capability for having successfully completed the works as mentioned at Form-C.

**Certificate: It is certified that the information given in the enclosed eligibility bid are correct. It is also certified that I / We shall be liable to be debarred, disqualified / cancellation of enlistment in case any information furnished by me / us is found to be incorrect.**

Enclosures: Seal of bidder

Date of submission:

Signature(s) of Bidder(s)

**FORM 'A'**

**FINANCIAL INFORMATION**

- I. Financial Analysis – Details to be furnished duly supported by figures in balance sheet/profit & loss account for the last five financial years duly certified by the Chartered Accountant, as submitted by the applicant to the Income Tax Department (Copies to be attached).

Financial years					
-----------------	--	--	--	--	--

- (i) Gross Annual turnover on construction works.
- (ii) Profit/Loss.

- II. Financial arrangements for carrying out the proposed work.

Signature of Chartered Accountant with Seal

Signature of Bidder(s).

-----□-----

**FORM 'B'**

**FORM OF BANKERS' CERTIFICATE FROM A SCHEDULED BANK**

This is to certify that to the best of our knowledge and information that M/s./Sh .....  
 ..... having marginally noted address, a customer of our bank are/is respectable  
 and can be treated as good for any engagement upto a limit of Rs.....  
 (Rupees.....).

This certificate is issued without any guarantee or responsibility on the bank or any of the officers.

(Signature)  
 For the Bank

- NOTE (1) Bankers certificates should be on letter head of the Bank, addressed to tendering authority.  
 (2) In case of partnership firm, certificate should include names of all partners as recorded with the Bank.

-----□-----

**FORM 'B-1'****FORM FOR CERTIFICATE OF NET WORTH FROM CHARTERED ACCOUNTANT**

"It is to certify that as per the audited balance sheet and profit & loss account during the financial year ....., the net worth of M/s ..... (Name & Registered Address of individual / Firm/ Company), as on ..... (The relevant date) is ₹.....(Rupees.....) after considering all liabilities. It is further certified that the Net Worth of the company has not eroded by more than 30% in the last three years ending on .... (the relevant date)".

Name of the Chartered Accountant  
Membership No. of ICAI

Signature of Chartered Accountant

Date and Seal

-----□-----

**FORM 'C'****DETAILS OF ELIGIBLE SIMILAR NATURE OF WORKS COMPLETED DURING THE LAST FIVE YEARS ENDING PREVIOUS DAY OF LAST DAY OF SUBMISSION OF TENDERS**

S I N o .	Name of work/ projec t and locati on	Owner or sponso ring organiz ation	Cost of work in crores of rupee s	Date of comm ence ment as per contra ct	Stipul ated date of compl etion	Actual date of compl etion	Litigation /arbitratio n cases pending/i n progress with details*	Name and address/ telephone number of officer to whom reference may be made	<b>Whether the work was done on back to back basis Yes/ No</b>
1	2	3	4	5	6	7	8	9	10

\*Indicate gross amount claimed and amount awarded by the Arbitrator.

Signature of Bidder(s)

-----□-----

**FORM 'D'****PERFORMANCE REPORT OF WORKS REFERRED TO IN FORMS "C"**

1	Name of work/project & location	
2	Agreement No	
3	Estimated cost	
4	Tendered cost	
5	Date of start	
6	Date of completion	
	(i) Stipulated date of completion	
	(ii) Actual date of completion	
7	Amount of compensation levied for delayed completion, if any	
	(a) Whether case of levy of compensation for delay has been decided or not	Yes/No
	(b) If decided, amount of compensation levied for delayed completion, if any	
8	Amount of reduced rate items, if any	
9	Performance Report	
	(1) Quality of work	Outstanding /Very Good / Good / Poor
	Financial soundness	Outstanding /Very Good / Good / Poor
	Technical Proficiency	Outstanding /Very Good / Good / Poor
	Resourcefulness	Outstanding /Very Good / Good / Poor
	General Behavior	Outstanding /Very Good / Good / Poor

Dated:

Executive Engineer or Equivalent

-----□-----

**FORM "E"****STRUCTURE & ORGANISATION**

1. Name & address of the bidder
2. Telephone no./E-mailID./Fax no.
3. Legal status of the bidder (Scan & upload copies of original document defining the legal status)
  - (a) An Individual
  - (b) A proprietary firm
  - (c) A firm in partnership
  - (d) A limited company or Corporation
4. Particulars of registration with various Government Bodies (Scan & upload attested photocopy)

**Organization/Place of registration****Registration No.**

- 1.
- 2.
5. Names and titles of Directors & Officers with designation to be concerned with this work.
6. Designation of individuals authorized to act for the organization
7. Has the bidder, or any constituent partner in case of partnership firm, limited company / Joint Venture, ever been convicted by the court of Law? If so, give details
8. In which field of Civil Engineering construction, the bidder has specialization and interest?
9. Any other information considered necessary but not included above.

Signature of Bidder(s)

-----□-----

**FORM 'F'****PROJECTS UNDER EXECUTION OR AWARDED**

S I N o .	Name of work/ projec t and locati on	Owner or sponsori ng organizat ion	Cost of work in crores of rupee s	Date of commenc ement as per contract	Stipulate d date of completi on (original)	Extend ed date of complet ion	Upto date percent age progres s of work	Value of works yet to be complet ed	Re mar ks
1	2	3	4	5	6	7	8	9	10

Certified that the above list of works is complete and no work has been left out and that the information given is correct to my knowledge and belief.

Signature of Bidder (s)

**FORM 'G'**

**DETAILS OF TECHNICAL & ADMINISTRATIVE PERSONNEL TO BE EMPLOYED FOR THE WORK**

S. No.	Designation	Total number	Number available for this work	Name	Qualifications	Professional experience and details of work carried out	How these would be involved in this work	Remarks
1	2	3	4	5	6	7	8	9

Signature of Bidder(s)

-----□-----

**FORM 'H'**

**DETAILS OF CONSTRUCTION PLANT AND EQUIPMENT LIKELY TO BE USED IN CARRYING OUT THE WORK**

Sl No.	Name of equipment	No	Capacity or type	Age	Condition	Ownership status			Current location	Remarks
						Presently owned	Leased	To be purchased		
1	2	3	4	5	6	7	8	9	10	11

Signature of Bidder(s)

-----□-----

**SAMPLE FORMAT FOR EVIDENCE OF ACCESS TO OR  
AVAILABILITY OF CREDIT FACILITIES**

(CLAUSE 4.2 (i) OF ITB)

**BANK CERTIFICATE**

This is to certify that M/s. \_\_\_\_\_ is a reputed company with a good financial standing.

If the contract for the work, namely \_\_\_\_\_ is awarded to the above firm, we shall be able to provide overdraft/credit facilities to the extent of Rs. \_\_\_\_\_ to meet their working capital requirements for executing the above contract during the contract period.

\_\_\_\_\_  
(Signature)

***Name of Bank***  
***Senior Bank Manager***  
***Address of the Bank***



**AFFIDAVIT**

1. I, the undersigned, do hereby certify that all the statements made in the required attachments are true and correct.
  
2. The undersigned also hereby certifies that neither our firm M/s \_\_\_\_\_ have abandoned works on National Drinking Water Supply nor any contract awarded to us for such, last five years prior to the date of this bid.
  
4. The undersigned hereby authorize(s) and request(s) any bank, person, firm or corporation to furnish pertinent information deemed necessary and requested by the Department to verify this statement or regarding my (our) competence and general reputation.
  
5. The undersigned understand and agrees that further qualifying information may be requested, and agrees to furnish any such information at the request of the Department/Project implementing agency.

\_\_\_\_\_  
 (Signed by an Authorized Officer of the Firm)

\_\_\_\_\_  
*Title of Officer*

\_\_\_\_\_  
*Name of Firm*

\_\_\_\_\_  
*DATE*

**AFFIDAVIT**

I, the undersigned do hereby undertake that our firm M/s \_\_\_\_\_ would invest a minimum cash up to 25% (twenty-five) percent of the value of work during implementation of the Contract..

\_\_\_\_\_  
(Signed by an Authorized Officer of the Firm)

\_\_\_\_\_  
Title of Officer

\_\_\_\_\_  
Nature of Firm

\_\_\_\_\_  
DATE

**UNDERTAKING**

I, the undersigned do hereby undertake that our firm M/s \_\_\_\_\_ agree to abide by this bid for a period of **75 (Seventy five) days** for the date fixed for receiving the same and it shall be binding on us and may be accepted at any time before the expiration of that period.

\_\_\_\_\_  
(Signed by an Authorized Officer of the Firm)

\_\_\_\_\_  
Title of Officer

\_\_\_\_\_  
Nature of Firm

\_\_\_\_\_  
DATE

**Receipt of Original Bid Security**

(Receipt No...../ Date.....)

1. Name of Work : **Augmentation of Water Supply system at Daporijo Township (4.20MLD) under NESIDS**
2. NIT No. : DPHE/NIT/NESIDS/2024-25/01
3. Estimated Cost : Rs. 4946.92 Lakh
4. Amount of Bid security/EMD For APST Contractor : ₹. 49.47 Lakhs  
For Non APST Contractor : ₹. 69.47 Lakhs
5. Last Date of Submission of Bid : 08/04/2025
- .....

**(To be filled by Bid inviting authority or his authorized representative)**

1. Name of Bidder : .....
2. Form of Bid Security/EMD : .....
3. Amount of Bid Security/EMD : .....
4. Date of receipt : .....

Signature, Name and Designation of receiving officer

**Receipt of Bid Processing Fee ( Non -refundable)**

(Receipt No...../ Date.....)

- 1. Name of Work : **Augmentation of Water Supply system at Daporijo Township (4.20MLD) under NESIDS**
- 2. NIT No. : DPHE/NIT/NESIDS/2024-25/01
- 3. Estimated Cost : Rs. 4946.92 Lakh
- 4. Amount of Bid processing fee : Rs.20,000.00 (Rupees: Twenty Thousand only)
- 5. Last Date of Submission of Bid : 08/04/2024

.....

---

**(To be filled by Bid inviting authority or his authorized representative)**

- 1. Name of Bidder :  
.....
- 2. Bank Draft Ref/Cash :  
.....
- 3. Amount :  
.....
- 4. Date of receipt :  
.....

Signature, Name and Designation of receiving officer

### TECHNICAL BID EVALUATION PROCESS

1.1 Bid Opening Committee during the opening of Technical Bids shall verify the following documents uploaded during bid submission (original or downloaded copies) as a pre-requisite for carrying out further evaluation of technical responsiveness of bidders.

(i) Proof of payment of Bid fee of **Rs 20000/- (Rupees Twenty Thousand)** only.

(ii) Valid Contractor Registration Certificate of Class-IA enlisted under APPWD & of equivalent category under other State/National Enlistment Authority.

1.2 (i) In addition to fulfillment requirements laid down at Schedule-C, Technical eligibility of bidder shall be determined based on minimum score shown below:

SI No	Criteria	Maximum Marks	Weightage
	<b>PART-A</b>		
1	Experience in similar nature of work (Form-C)	20	<b>Specific</b>
2	Financial Strength (Form A & B or B1)	20	
3	Performance of Work (Form C)-Time over run	20	
4	Performance of Work (Form D)-Quality	40	
	<b>Total of part A</b>	<b>100</b>	
	<b>PART-B</b>		
5	Tools & Plant (Prescribed in NIT)	10	
6	Technical Staff (Prescribed in NIT based on Annex-20)	10	
	<b>Total of part B</b>	<b>20</b>	
	<b>A+B</b>	<b>120</b>	

**Note:** (a) For Score attributes of PART-A: Refer Proforma -1/Annexure-24 of SOP to CPWD Works Manual-2024

**(b) For Score attributes of PART-B:**

Tools & Plant (a) Self Owned and below 3/5 years age } = 100% Marks  
(b) On Leased/Hired = in proportion }

**(c) Technical Staff** (To be assigned proportionately out of Total attribute of 10 marks)

(d) Replacement of Project Manager shall be made with the approval of Employer only.

(e) To become eligible, the bidder must secure minimum score of 80 out of 120 shown in the Table above with weightage indicated thereon besides fulfillment of mandatory condition prescribed at Schedule-C

1.3 Bidder who meet the minimum qualification criteria as above will be qualified only if his available bid capacity is more than or equal to the Estimated Project Cost mentioned in RFP.

# SECTION 4

## CONDITIONS OF CONTRACT

**CONDITIONS OF CONTRACT****A. GENERAL****1. Definitions**

- 1.1 Terms which are defined in the Contract Date are not also defined in the Conditions of Contract but keep their defined meanings. Capital initials are used to identify defined terms.

The **Adjudicator** (synonymous with **Dispute Review Expert**) is the person appointed jointly by the Employer and the Contractor to resolve disputes in the first instance, as provided for in Clauses 24 and 25. The name of the Adjudicator is defined in the Contract Data.

**Bill of Quantities** means the priced and completed Bill of Quantities forming part of the Bid.

**Compensation Events** are those defined in Clause 44 hereunder.

The **Completion Date** is the date of completion of the Works as certified by the Engineer in accordance with Sub Clause 55.1.

The **Contract** is the contract between the Employer and the Contractor to execute, complete and maintain the Works. It consists of the documents listed in Clause 2.3 below.

The **Contract Data** defines the documents and other information which comprise the Contract.

The **Contractor** is a person or corporate body whose bid to carry out Works has been accepted by the Employer.

The **Contractor's Bid** is the completed Bidding document submitted by the Contractor to the Employer and include Technical and financial Bids.

The **Contract price** is the price stated in the Letter of Acceptance and thereafter as adjusted in accordance with the provision of contract.

**Days** are calendar days; **months** are calendar months.

A **Defect** is any part of the Works not completed in accordance with the Contract.

The **Defects Liability Period** is the period named in the Contract data and calculated from the Completion Date.

The **Employer** is the party who will employ the Contractor to carry out the Works. Employer also authorizes Engineer-in-charge/Engineer mentioned in Contract Data of operating the contract on his behalf.

The **Engineer** is the person named in the Contract Data (or any other competent person appointed and notified to the Contractor to act in replacement of the Engineer) who is responsible for supervising the Contractor, administering the Contract, certifying payments due to the Contractor, issuing and valuing Variations to the Contract, awarding extensions of time, and valuing the Compensation Events. **Engineer-in-charge & Engineer** of the contract is the same person.

**Equipment** is the Contractor's machinery and vehicles brought temporarily to the Site to construct the Works.

The **Initial Completion Date** is the date on which it is intended that the Contractor shall complete the Works. The Intended Completion Date is specified in the Contract Data.



The Intended Completion Date may be revised only by the Engineer by issuing an extension of time.

The **Initial Contract Price** is the Contract Price listed in the Employer's Letter of Acceptance.

**Materials** are all supplies, including consumables, used by the contractor for incorporation in the Works.

**Plant** is any integral part of the Works which is to have a mechanical, electrical, electronic or chemical or biological function.

The **Site** is the area defined as such in the Contract Data.

**Site Investigation Reports** are those which were included in the Bidding documents and are factual interpretative reports about the surface and sub-surface conditions at the site.

**Specification** means the Specification of the Works included in the Contract and any modification or addition made or approved by the Engineer.

The **Start Date** is given in the Contract Data. It is the date when the Contractor shall commence execution of the works. It does not necessarily coincide with any of the Site Possession Dates.

A **Subcontractor** is a person or corporate body who has a Contract with the Contractor to carry out a part of the works. It does not necessarily coincide with any of the Site Possession Dates.

**Temporary Works** are works designed, constructed, installed and removed by the Contractor which are needed for construction or installation of the Works.

A **Variation** is an instruction given by the Engineer, which varies the Works.

The **Works** are what the Contract requires the Contractor to construct, install and turn over to the Employer, as defined in the Contract Data.

## 2. Interpretation

- 2.1 In interpreting these Conditions of Contract, singular also means plural, male also means female or neuter, and the other way around. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Engineer will provide instructions clarifying queries about the Conditions of Contract.
- 2.2 If sectional completion is specified in the Contract Data, references in the Conditions of Contract to the Works, the Completion Date, and the Intended Completion Date apply to any Section of the Works (other than references to the Completion Date and Intended Completion date for the whole of the Works).
- 2.3 The documents forming the Contract shall be interpreted in the following order of priority:
- (1) Agreement
  - (2) Letter of Acceptance, notice to proceed with the works
  - (3) Contractor's Bid
  - (4) Contract Data
  - (5) Conditions of Contract including Special Conditions of Contract
  - (6) Specifications

- (7) Drawings
- (8) Bill of quantities and
- (9) any other document listed in the Contract Data as forming part of the Contract.

### 3. Language and Law

The language of the Contract and the law governing the Contract are stated in the Contract Data.

### 4. Engineer's Decisions

Except where otherwise specifically stated, the Engineer will decide contractual matters between the Employer and the Contractor in the role representing the Employer.

### 5. Delegation

- 5.1.1 The Engineer may delegate any of his duties and responsibilities to other people except to the Adjudicator after notifying the Contractor and may cancel any delegation after notifying the Contractor.

### 6. Communications

- 6.1. Communications between parties which are referred to in the conditions are effective only when in writing. A notice shall be effective only when it is delivered (in terms of Indian Contract Act).

### ~~7. Sub-contracting: [DELETED]~~

- ~~7.1. The Contractor may sub-contract any portion of work, up to a limit specified in Contract Date, with the approval of the Engineer but may not assign the Contract without the approval of the Employer in writing. Sub-contracting does not alter the Contractor's obligations.~~

### ~~8. Other Contractors:[DELETED]~~

- ~~8.1. The Contractor shall cooperate and share the Site with other contractors, public authorities, utilities, and the Employer between the dates given in the Schedule of other Contractors. The Contractor shall as referred to in the Contract Data, also provide facilities and services for them as described in the Schedule. The employer may modify the schedule of other contractors and shall notify the contractor of any such modification.~~

### 9. Personnel

- 9.1. The Contractor shall employ the key personnel named in the Schedule of Key Personnel as referred to in the Contract Data to carry out the functions stated in the Schedule or other personnel approved by the Engineer. The Engineer will approve any proposed replacement of key personnel only if their qualifications, abilities, and relevant experience are substantially equal to or better than those of the personnel listed in the Schedule.
- 9.2. If the Engineer asks the Contractor to remove a person who is a member of the Contractor's staff or his work force stating the reasons the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the work in the Contract.

**10. Employer's and Contractor's Risks**

- 10.1. The Employer carries the risks which this Contract states are Employer's risks, and the Contractor carries the risks which this Contract states are Contractor's risks.

**11. Employer's Risks**

- 11.1. The Employer is responsible for the excepted risks which are (a) in so far as they directly affect the execution of the Works in India, the risks of war, hostilities, invasion, act of foreign enemies, rebellion, revolution, insurrection or military or usurped power, civil war, riot commotion or disorder (unless restricted to the Contractor's employees), and contamination from any nuclear fuel or nuclear waste or radioactive toxic explosive, or (b) a cause due solely to the design of the Works, other than the Contractor's design.

**12. Contractor's Risks**

- 12.1. All risks of loss of or damage to physical property and of personal injury and death which arise during and in consequence of the performance of the Contract other than the excepted risks are the responsibility of the Contractor.

**13. Insurance**

- 13.1. The Contractor shall provide, in the joint names of the Employer and the Contractor, insurance cover from the Start Date to the end of the Defects Liability Period, in the amounts and deductibles stated in the Contract Data for the following events which are due to the Contractor's risks:

- (a) loss of or damage to the Works, Plant and Materials;
- (b) loss of or damage to Equipment;
- (c) loss of or damage of property (except the Works, Plant, Materials and Equipment) in connection with the Contract; and
- (d) personal injury or death.

- 13.2. Policies and certificates for insurance shall be delivered by the Contractor to the Engineer for the Engineer's approval before the Start Date. All such insurance shall provide for compensation to be payable in the types and proportions of currencies required to rectify the loss or damage incurred.

- 13.3. If the Contractor does not provide any of the policies and certificates required, the Employer may affect the insurance which the Contractor should have provided and recover the premiums the Employer has paid from payments otherwise due to the Contractor or, if no payment is due, the payment of the premiums shall be a debt due.

- 13.4. Alterations to the terms of insurance shall not be made without the approval of the Engineer.

- 13.5. Both parties shall comply with any conditions of the insurance policies.

**14. Site Investigation Reports**

- 14.1. The Contractor in preparing the Bid, shall rely on any site Investigation Reports referred to in the Contract Data, supplemented by any information available to the Bidder.

**15. Queries about the Contract Data**

15.1. The Engineer will clarify queries on the Contract Data.

**16. Contractor to Construct the Works**

16.1. The Contractor shall construct and install the Works in accordance with the Specification and Drawings.

**17. The Works to be completed by the Intended Completion Date**

17.1. The Contractor may commence execution of the Works on the Start Date and shall carry out the Works in accordance with the programme submitted by the Contractor, as updated with the approval of the Engineer, and complete them by the Intended Completion Date.

~~**18. Approval by the Engineer: [DELETED]**~~~~18.1. The Contractor shall submit Specification and Drawings showing the proposed Temporary Works to the Engineer, who is to approve them if they comply with the specification and Drawings.~~~~18.2. The Contractor shall be responsible for design of Temporary Works.~~~~18.3. The Engineer's approval shall not alter the Contractor's responsibility for design of the Temporary Works.~~~~18.4. The Contractor shall obtain approval of third parties to the design of the Temporary Works where required.~~~~18.5. All Drawings prepared by the Contractor for the execution of the temporary or permanent Works, are subject to prior approval by the Engineer before their use.~~**19. Safety**

19.1. The Contractor shall be responsible for the safety of all activities on the Site.

**20. Discoveries**

20.1. Anything of historical or other interest or of significant value unexpectedly discovered on the Site is the property of the Employer. The Contractor is to notify the Engineer of such discoveries and carry out the Engineer's instructions for dealing with them.

**21. Possession of the Site**

21.1. The Employer shall give possession of all parts of the Site to the Contractor. If possession of a part is not given by the date stated in the Contract Data the Employer is deemed to have delayed the start of the relevant activities and this will be Compensation Event.

**22. Access to the Site**

22.1. The contractor shall allow the Engineer and any person authorized by the Engineer access to the Site, to any place where work in connection with the Contract is being carried out or is intended to be carried out and to any place where materials or plant are being manufactured/fabricated/assembled for the works.

**23. Instructions**

23.1. The Contractor shall carry out all instructions of the Engineer pertaining to works which comply with the applicable laws where the Site is located.

- 23.2. The Contractor shall permit the Employer to inspect the Contractor's accounts and records relating to the performance of the Contractor and to have them audited by auditors appointed by the Employer, if so required by the Employer.

## 24. Disputes

- 24.1. If the Contractor believes that a decision taken by the Engineer was either outside the authority given to the Engineer by the Contract or that the decision was wrongly taken, the decision shall be referred to the Dispute Review Expert within 14 days of the notification of the Engineer's decision.

## 25. Procedure for Disputes

- 25.1. The Dispute Review Expert (Board)\* shall give a decision in writing within 28 days of receipt of a notification of a dispute.

\*Disputes Review to be provided for works costing up to Rs. 50 Crores. Dispute Review Board of three members (One from Employer, One from Contractor and One to be nominated by IRC Council and agreed by the representative members of Employer and Contractor) for works costing more than Rs. 50 Crores.

- 25.2. The Dispute Review Expert (Board)\* shall be paid daily at the rate specified in the Contract Data together with reimbursable expenses of the types specified in the Contract Data and the cost shall be divided equally between the Employer and the Contractor, whatever decision is reached by the Dispute Review Expert. Either party may give notice to the other to refer a decision of the Dispute Review Expert to an Arbitrator within 28 days of the Dispute Review Expert's written decision. If neither party refers the dispute to arbitration within the next 28 days, the Dispute Review Expert's decision will be final and binding.
- 25.3. The arbitration shall be conducted in accordance with the arbitration procedure stated Arbitration Act under Chapter-F Section-3 Sub-clause (a) to (f)

## 26. Replacement of Dispute Review Expert

- 26.1. Should the Dispute Review Expert resign or die, or should the Employer and the Contractor agree that the Dispute Review Expert is not fulfilling his functions in accordance with the provisions of the Contract, a new Dispute Review Expert will be jointly appointed by the Employer and the Contractor. In case of disagreement between the Employer and the Contractor within 30 days, the Dispute Review Expert shall be designated by the Appointing Authority designated in the Contract Data at the request of either party, within 14 days of receipt of such request.

## ***B. TIME CONTROL***

### 27. Programme

- 27.1. Within the time stated in the Contract Data the Contractor shall submit to the Engineer for approval a **Working Programme and Bar Chart** showing the general methods, agreements, order, and timing for all the activities in the Works along with monthly cash flow forecast.
- 27.2. An update of the Working Programme shall be a programme showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining work including any changes to the sequence of the activities.
- 27.3. The Contractor shall submit to the Engineer, for approval, an updated Working Programme at intervals no longer than the period stated in the Contract Data. If the Contractor does not submit an updated Working Programme within this period, the

Engineer may withhold the amount stated in the Contract Data from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Working Programme has been submitted.

- 27.4.** The Engineer's approval of the Working Programme shall not alter the Contractor's obligations. The Contractor may revise the Working Programme and submit it to the Engineer again at any time. A revised Working Programme is to show the effect of Variations and Compensation Events.

**28. Extension of the Intended Completion Date**

- 28.1. The Engineer shall extend the Intended Completion Date if a Compensation Events occurs or a Variation is issued which makes it impossible for Completion to be achieved by the Intended Completion Date without the Contractor taking steps to accelerate the remaining work and which would cause the Contractor to incur additional cost.

- 28.2 The Engineer shall decide whether and by how much to extend the Intended Completion Date within 35 days of the Contractor asking the Engineer for a decision upon the effect of a Compensation Event or Variation and submitting full supporting information. If the Contractor has failed to give early warning of a delay or has failed to cooperate in dealing with a delay, the delay by this failure shall not be considered in assessing the new Intended Completion Date.

- 28.3 The Engineer shall within 14 days of receiving full justification from the contractor for extension of Intended Completion Date refer to the Employer his decision. The Employer shall in not more than 21 days communicate to the Engineer the acceptance or otherwise of the Engineer's decision. If the Employer fails to give his acceptance, the Engineer shall not grant the extension and the contractor may refer the matter to the Dispute review Expert under Clause 24.1.

**29. Deleted**

**30. Delays Ordered by the Engineer**

- 30.1 The Engineer may instruct the Contractor to delay the start or progress of any activity within the Works.

**31. Management Meetings**

- 31.1 Either the Engineer or the Contractor may require the other to attend a management meeting. The business of a management meeting shall be to review the plans for remaining work and to deal with matters raised in accordance with the early warning procedure.

- 31.2 The Engineer shall record the business of management meetings and is to provide copies of his record to those attending the meeting and to the Employer. The responsibility of the parties for actions to be taken is to be decided by the Engineer either at the management meeting or after the management meeting and stated in writing to all who attended the meeting.

**32. Early Warning**

- 32.1 The Contractor is to warn the Engineer at the earliest opportunity of specific likely future events or circumstances that may adversely affect the quality of the work, increase the Contract Price or delay the execution of works. The Engineer may require the Contractor to provide an estimate of the expected effect of the future event or circumstance on the Contract Price and Completion Date. The estimate is to be provided by the Contractor as soon as reasonably possible.

- 32.2 The Contractor shall cooperate with the Engineer in making and considering proposals for how the effect of such an event or circumstance can be avoided or reduced by

anyone involved in the work and in carrying out any resulting instruction of the Engineer.

### **C. QUALITY CONTROL**

#### **33. Identifying Defects**

33.1 The Engineer shall check the Contractor's work and notify the Contractor of any Defects that are found. Such checking shall not affect the Contractor's responsibilities. The Engineer may instruct the Contractor to search for a Defect and to uncover and test any work that the Engineer considers may have a Defect.

#### **34. Tests**

34.1 If the Engineer instructs the Contractor to carry out a test not specified in the Specification to check whether any work has a Defect and the test shows that it does, the Contractor shall pay for the test and any samples. If there is no Defect the test shall be a Compensation Event.

#### **35. Correction of Defects**

35.1 The Engineer shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at Completion and is defined in the Contract Data. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.

35.2 Every time notice of a Defect is given; the Contractor shall correct the notified Defect within the length of time specified by the Engineer's notice.

#### **36. Uncorrected Defects.**

36.1 If the Contractor has not corrected a Defect within the time specified in the Engineer's notice, the Engineer will assess the cost of having the Defect corrected, and the Contractor will pay this amount.

### **D. COST CONTROL**

#### **37. Bill of Quantities**

37.1 The Bill of Quantities shall contain items for the construction, installation, testing, and commissioning work to be done by the Contractor.

37.2 The Bill of Quantities is used to calculate the Contract Price. The Contractor is paid for the quantity of the work done at the rate in the Bill of Quantities for each item.

#### ~~38. Changes in the Quantities :[DELETED]~~

~~38.1 If the final quantity of the work done differs from the quantity in the Bill of Quantities for the particular item by more than 25 per cent provided the change exceed 1% in initial Contract Price, the Engineer shall adjust the rate to allow for the change, duly considering-~~

~~(a) justification for rate adjustment as furnished by the contractor,~~

~~(b) economics resulting from increase in quantities by way of reduced plant, equipment, and overhead costs,~~

~~(c) entitlement of the contractor to compensation events where such events are caused by any additional work.~~

~~38.2 The Engineer shall not adjust rates from changes in quantities if thereby the Initial Contract Price is exceeded by more than 15 per cent, except with the Prior approval of~~

~~the Employer.~~

~~38.3 If requested by the Engineer, the Contractor shall provide the Engineer with a detailed cost breakdown of any rate in the Bill of Quantities.~~

### ~~39. Variations : [DELETED]~~

~~39.1 All Variations shall be included in updated Programmes produced by the Contractor.~~

### ~~40. Payments for Variations :[DELETED]~~

~~40.1 The Contractor shall provide the Engineer with a quotation (with breakdown of unit rates) for carrying out the Variation when requested to do so by the Engineer. The Engineer shall assess the quotation, which shall be given within seven days of the request or within any longer period stated by the Engineer and before the Variation is ordered.~~

~~40.2 If the work in the Variation corresponds with an item description in the Bill of Quantities and if, in the opinion of the Engineer, the quantity of work above the limit stated in Sub-Clause 38.1 or the timing of its execution do not cause the cost per unit of quantity to change, the rate in the Bill of Quantities shall be used to calculate the value of the Variation. If the cost per unit of quantity changes, or if the nature or timing of the work in the Variation does not correspond with items in the Bill of Quantities, the quotation by the Contractor shall be in the form of new rates for the relevant items of work.~~

~~40.3 If the Contractor's quotation is unreasonable, the Engineer may order the Variation and make a change to the Contract Price which shall be based on Engineer's own forecast of the effects of the Variation on the Contractor's costs.~~

~~40.4 If the Engineer decides that the urgency of varying the work would prevent a quotation being given and considered without delaying the work, no quotation shall be given and the Variation shall be treated as a Compensation Event.~~

~~40.5 The Contractor shall not be entitled to additional payment for costs which could have been avoided by giving early warning.~~

### **41.0 Cash Flow Forecasts**

41.1 When the Programme is updated, the contractor is to provide the Engineer with an updated cash flow warning.

### **42. Payment Certificates**

42.1 The Contractor shall submit to the Engineer monthly statements of the estimated value of the work completed less the cumulative amount certified previously.

42.2 The Engineer shall check the Contractor's monthly statement within 28 (Twenty-Eight) days and certify the amount to be paid to the Contractor after taking into account any credit or debit for the month in question in respect of materials for the works in the relevant amounts and under conditions set forth in sub-clause 51(3) of the Contract Data (Secured Advance).

42.3 The value of work executed shall be determined by the Engineer.

42.4 The value of work executed shall comprise the value of the quantities of the items in the Bill of Quantities completed.

42.5 The value of work executed shall include the valuation of Variations and Compensation Events.



- 42.6 The Engineer may exclude any item certified in a previous or reduce the proportion of any item previously certified in any certificate in the light of later information.
- 43. Payments: Refer Para 12 of Section-4; CONTRACT DATA**
- ~~43.1 Payments shall be adjusted for deductions for advance payments, retention, other recoveries in terms of the contract and taxes at source, as applicable under the law. The Employer shall pay the Contractor the amounts certified by the Engineer within 28 days of the date of each certificate. If the Employer makes a late payment, the Contractor shall be paid interest on the late payment in the next payment. Interest shall be calculated from the date by which the payment should have been made upto the date when the late payment is made at 12% per annum.~~
- 43.2 If an amount certified is increased in a later certificate as a result of an award by the Adjudicator or an Arbitrator, the Contractor shall be paid interest upon the delayed payment as set out in this clause. Interest shall be calculated from the date upon which the increased amount would have been certified in the absence of dispute.
- 43.3 Items of the Works for which no rate or price has been entered in will not be paid for by the Employer and shall be deemed covered by other rates and prices in the Contract.
- 44. Compensation Events**
- 44.1 The following are Compensation Events unless they are caused by the Contractor:
- (a) The Employer does not give access to a part of the Site by the Site Possession Date stated in the Contract Data.
  - (b) The Employer modifies the schedule of other contractors in a way which affects the work of the contractor under the contract.
  - (c) The Engineer orders a delay or does not issue drawings, specifications or instructions required for execution of works on time.
  - (d) The Engineer instructs the Contractor to uncover or to carry out additional tests upon work which is then found to have not Defects.
  - (e) Ground conditions are substantially more adverse than could reasonably have been assumed before issuance of Letter of Acceptance from the information issued to Bidders (including the Site Investigation Reports), from information available publicly and from a visual inspection of the site.
  - (f) The Engineer gives an instruction for dealing with an unforeseen condition, caused by the Employer, or additional work required for safety or other reasons.
  - (g) Other contractors, public authorities, utilities or the Employer does not work within the dates and other constraints stated in the Contract, and they cause delay or extra cost to the Contractor.
  - (h) The effect on the Contractor of any of the Employer's Risks.
  - (i) The Engineer unreasonably delays issuing a Certificate of Completion.
  - (j) Removal of underground utilities detected subsequently
  - (k) Restriction of access to ground imposed by civil, judicial, or military authority
  - (l) Presence of historical, archeological or religious structures, monuments interfering with the works
- 44.2 If a Compensation Event would cause additional cost or would prevent the work being completed before the Intended Completion Date, the Contract Price shall be increased and/or the Intended Completion Date is extended. The Engineer shall decide whether and by how much the Contract Price shall be increased and whether and by how much

Intended Completion Date shall be extended.

44.3 As soon as information demonstrating the effect of each Compensation Event upon the Contractor's forecast cost has been provided by the Contractor, it is to be assessed by the Engineer and the Contract Price shall be adjusted accordingly. If the Contractor's forecast is deemed unreasonable, the Engineer shall adjust the Contract Price based on Engineer's own forecast. The Engineer will assume that the Contractor will react competently and promptly to the event.

44.4 The Contractor shall not be entitled to compensation to the extent that the Employer's interests are adversely affected by the Contractor not having given early warning or not having cooperated with the Engineer

#### 45. Tax

45.1 The rates quoted by the Contractor shall be deemed to be inclusive of the sales and other taxes that the Contractor will have to pay for the performance of this Contract. The Employer will perform such duties in regard to the deduction of such taxes at source as per applicable law.

#### 46. Currencies

46.1 All payments shall be made in Indian Rupees.

#### ~~47. Price Adjustment :[DELETED]~~

~~47.1 Contract price shall be adjusted for increase or decrease in rates and price of labour, materials, fuels and lubricants in accordance with the following principles and procedures and as per formula given in the contract data:~~

~~(a) The price adjustment shall apply for the work done from the start date given in the contract data upto end of the initial intended completion date or extensions granted by the Engineer and shall not apply to the work carried out beyond the stipulated time for reasons attribute to the contractor.~~

~~(b) The price adjustment shall be determined during each month from the formula given in the contract data.~~

~~(c) Following expressions and meanings are assigned to the work done during each month:~~

~~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.~~

~~47.2 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.~~

#### 48. Retention Money

48.1 The Employer shall retain from each payment due to the Contractor the proportion stated in the Contract Data until Completion of the whole of the Works.

48.2 In Completion of the whole of the Works half the total amount retained is repaid to the Contractor and half when the Defects Liability Period has passed and the Engineer has certified that all Defects notified by the Engineer to the Contractor before the end of this period have been corrected.

48.3 On completion of the whole works, the contractor may substitute retention money with an “on demand” Bank guarantee”.

#### **49. Liquidated Damages**

49.1. The Contractor shall pay liquidated damages to the Employer at the rate per day stated in the Contract Data for each day that the Completion Date is later than the Intended Completion Date (for the whole of the works or the milestone as stated in the contract data). The total amount of liquidated damages shall not exceed the amount defined in the Contract Data. The Employer may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages does not affect the Contractor’s liabilities.

49.2. If the Intended Completion Date is extended after liquidated damages have been paid, the Engineer shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment certificate. The Contractor shall be paid interest on the over payment calculated from the date of payment the date of repayment at the rates specified in Sub Clause 43.1.

49.3. If the contractor fails to comply with the time for completion as stipulated in the tender, then the contractor shall pay to the employer the relevant sum stated in the Contract Data as Liquidated damages for such default and not as penalty for everyday or part of day which shall elapse between relevant time for completion and the date stated in the taking over certificate of the whole of the works on the relevant section, subject to the limit stated in the contract data.

The employer may, without prejudice to any other method of recovery deduct the amount of such damages from any monies due or to become due to the contractor. The payment or deduction of such damages shall not relieve the contractor from his obligation to complete the works on from any other of his obligations and liabilities under the contract.

49.4. If, before the Time for Completion of the whole of the Works or, if applicable, any Section, a Taking-Over Certificate has been issued for any part of the Works or of a Section, the liquidated damages for delay in completion of the remainder of the Works or of that Section shall, for any period of delay after the date stated in such Taking-Over Certificate, and in the absence of alternative provisions in the Contract, be reduced in the proportion which the value of the part so certified bears to the value of the whole of the Works or Section, as applicable. The provisions of this Sub-Clause shall only apply to the rate of liquidated damages and shall not affect the limit thereof.

#### **50. When contract can be Determined:**

50.1 Subject to other provisions the Engineer-in-charge 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 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 Engineer-in-charge a notice in writing to rectify, reconstruct or replace any defective work or that the work 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 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.

iii) 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 Engineer-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 Engineer-in-charge.

iv) 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 Engineer-in-charge.

v) 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 Engineer-in-charge.

vi) If the contractor commits any acts construed as breach of contract,

(vii) If the work is not started by the contractor within 1/8th of the stipulated time When the contractor has made himself liable for action under any of the cases aforesaid, the Engineer-in-Charge on behalf of the Governor of Arunachal Pradesh of India shall have powers:

a) To determine or rescind the contract as aforesaid (of which termination or rescission notice in writing to the contractor under the hand of Engineer-in-Charge shall be conclusive evidence). Upon such determination or rescission, the Bid security (EMD), Retention Money already recovered and Performance Guarantee under the contract shall be liable to be forfeited and shall be absolutely at the disposal of the Government.

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 or rescinded as above, shall not be allowed to participate in the tendering process for the balance work.

In the event of above course(s) being adopted by the Engineer-in-Charge, the contractor shall have no claim to compensation for any loss sustained by him by reasons of his having purchases 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 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 Engineer-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

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 of the contractor shall be refunded, but no payment on account of interest, loss of profit or damages etc. shall be payable at all.

## 51. **Bonus**

~~51.1. If the contractor achieves completion of the whole of the works prior to the Intended Completion Date prescribed in Contract Data the Employer shall pay to the contractor a sum stated in Contract Data as bonus for completion of all items of works as stipulated in the contract, including variations ordered by the Engineer and the time prescribed in Clause 17. For the purpose of calculating bonus payments, the time given in the Bid for completion of the whole of the works is fixed and unless otherwise agreed, no adjustments of the time by reason of granting an extension of time pursuant to Clause 28 or any other clause of these conditions will be allowed. Any period falling short of a complete month shall be ignored for the purpose of computing the period relevant for the payment of bonus.~~

**52. ~~Advance Payment : [DELETED]~~**

~~52.1 The Employer shall make advance payment to the Contractor of the amount stated in the Contract Data by the date stated in the Contract Data, against provision by the Contractor of an Unconditional Bank Guarantee in a form and by a bank acceptable to the Employer in amounts and currencies equal to the advance payment. The guarantee shall remain effective until the advance payment has been repaid, but the amount of the guarantee shall be progressively reduced by the amounts repaid by the Contractor. Interest will not be charged on the advance payment.~~

~~52.2 The Contractor is to use the advance payment only to pay for Equipment, Plant and Mobilization expenses required specifically for execution of the Works. The Contractor shall demonstrate that advance payment has been used in this way by supplying copies of invoices or other documents to the Engineer.~~

~~52.3 The advance payment shall be repaid by deducting proportionate amounts from payments otherwise due to the Contractor, following the schedule of completed percentages of the Works on a payment basis. No account shall be taken of the advance payment or its repayment in assessing valuations of work done, Variations, price adjustments, Compensation Events, or Liquidated Damages.~~

**52.4 ~~Secured Advance:~~**

~~52.5 The Engineer shall make advance payment in respect of materials instead for but not yet incorporated in the Works in accordance with conditions stipulated in the Contract Data.~~

**53. Securities**

53.1 The Performance Security (including additional security for unbalanced bids) shall be provided to the Employer no later than the date specified in the Letter of Acceptance and shall be issued in an amount and form and by a bank or surety acceptable to the Employer, and denominated in Indian Rupees. The Performance Security shall be valid until a date 28 days from the date of expiry of Defects Liability Period and the additional security for unbalanced bids shall be valid until a date 28 days from the date of issue of the certificate of completion.

**54. Deleted****55. Cost of Repairs**

55.1 Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the Defects Correction periods shall be remedied by the Contractor at the Contractor's cost if the loss or damage arises from the Contractor's acts or omissions.

**E. FINISHING THE CONTRACT****56. Completion**

56.1 The Contractor shall request the Engineer to issue a Certificate of Completion of the Works and the Engineer will do so upon deciding that the Work is completed.

**57. Taking over**

57.1 The Employer shall take over the Site and the Works within seven days of the Engineer issuing a certificate of Completion.

**58. Final Account**

58.1 The Contractor shall supply to the Engineer a detailed account of the total amount that the Contractor considers payable under the Contract before the end of the Defects Liability Period. The Engineer shall issue a Defect Liability Certificate and certify any

final payment that is due to the Contractor within 56 days of receiving the Contractor's account if it is correct and complete. If it is not, the Engineer shall issue within 56 days a schedule that states the scope of the corrections or additions that are necessary. If the Final Account is still unsatisfactory after it has been resubmitted, the Engineer shall decide on the amount payable to the Contractor and issue a payment certificate, within 56 days of receiving the Contractor's revised account.

## **59. Operating and Maintenance Manuals**

- 59.1 If "as built" Drawings and /or operating and maintenance manuals are required, the Contractor shall supply them by the dates stated in the Contract Data.
- 59.2 If the Contractor does not supply the Drawing and/or manuals by the dates stated in the Contract Data, or they do not receive the Engineer's approval, the Engineer shall withhold the amount stated in the Contract Data from payments due to the Contractor.

## **60. Termination**

- 60.1 The Employer or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract.
- 60.2 Fundamental breaches of Contract include, but shall not be limited to the following:
- (a) The Contractor stops work for 28 days when no stoppage of work is shown on the current Programme and the stoppage has not been authorized by the Engineer;
  - (b) The Engineer instructs the Contractor to delay the progress of the Works and the instruction is not withdrawn within 28 days.
  - (c) The Employer or the Contractor is made bankrupt or goes into liquidation other than for a reconstruction or amalgamation;
  - (d) The Engineer gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Engineer.
  - (e) The Contractor does not maintain a security which is required.
  - (f) The Contractor has delayed the completion of works by the number of days for which the maximum amount of liquidated damages can be paid as defined in the Contract data; and
  - (g) If the Contractor, in the judgment of the Employer has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

For the purpose of this paragraph; "corrupt practice" means the offering giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution. "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition."

- 60.3 When either party to the Contractor gives notice of a breach of contract of the Engineer for a cause other than those listed under Sub Clause 59.2 above the Engineer shall decide whether the breach is fundamental or not.

- 60.4 Notwithstanding the above, the Employer may terminate the Contract for convenience.
- 60.5 If the Contract is terminated the Contractor shall stop work immediately, make the Site safe and secure and leave the Site as soon as reasonably possible.
- 60.6 The Engineer- in-Charge without prejudice to any other right or remedy against the contractor which have either accrued or accrue thereafter to Government, 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 Engineer-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 Government because of action under this clause shall not exceed 20% of the tendered value of the work.

## **61. Payment upon Termination**

- 61.1 If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Engineer shall issue a certificate for the value of the work done less advance payments received upto the date of the issue of the certificate, less other recoveries due in terms of the contract, less taxes due to be deducted at source as per applicable law and less the percentage to apply to the work not completed as indicated in the Contract Data. Additional Liquidated Damages shall not apply. If the total amount due to the Employer exceeds any payment due to the Contractor the difference shall be a debt payable to the Employer.
- 61.2 If the Contract is terminated at the Employer's convenience or because of a fundamental breach of Contract by the Employer, the Engineer shall issue a certificate for the value of the work done, the cost of balance material brought by the contractor and available at site, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works and the Contractor's costs of protecting and securing the Works and less advance payments received up to the date of the certificate, less other recoveries due in terms of the contract and less taxes due to be deducted at source as per applicable law.

## **62. Property**

- 62.1 All materials on the Site, Plant, Equipment, Temporary Works and Works are deemed to be the property of the Employer, if the Contract is terminated because of a contractor's default.

## **63. Release from Performance**

- 63.1 If the Contract is frustrated by the outbreak of war, act of God or by any other event entirely outside the control of either the Employer or the Contractor the Engineer shall certify that the Contract has been frustrated. The Contractor shall make the Site safe and stop work as quickly as possible after receiving this certificate and shall be paid for all work carried out before receiving it and for any work carried out afterwards to which commitment was made.

## F. ADDITIONAL CONDITIONS OF CONTRACT

### 1. LABOUR:

The Contractor shall, unless otherwise provided in the Contract, make his own arrangements for the engagement of all staff and labour, local or other and for their payment, housing, feeding and transport.

The Contractor shall, if required by the Engineer, deliver to the Engineer a return in detail, in such form and at such intervals as the Engineer may prescribe, showing the staff and the number of the several classes of labour from time to time employed by the Contractor on the Site and such other information as the Engineer may require.

### 2. COMPLIANCE WITH LABOUR REGULATIONS:

During continuance of the contract, the Contractor and his sub-contractors shall abide at all times by all existing labour enactments and rules made there under, regulations, notifications and bye laws of the State or Central Government or local authority and any other labour law (including rules), regulations, bye laws that may be passed or notification that may be issued under any labour law in future either by the State or the Central Government or the local authority. Salient features of some of the major labour laws that are applicable to construction industry are given below. The Contractor shall keep the Employer indemnified in case any action is taken against the Employer by the competent authority on account of contravention of any of the provisions of any Act or rules made there under, regulations or notifications including amendments. If the Employer is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications/bye laws/Acts/Rules/regulations including amendments, if any, on the part of the Contractor, the Engineer/Employer shall have the right to deduct any money due to the Contractor including his amount of performance security. The Employer/Engineer shall also have right to recover from the Contractor any sum required or estimated to be required for making good the loss or damage suffered by the Employer.

The employees of the Contractor and the Sub-Contractor in no case shall be treated as the employees of the Employer at any point of time.

#### **SALIENT FEATURES OF SOME MAJOR LABOUR LAWS APPLICABLE TO ESTABLISHMENTS ENGAGED IN BUILDING AND OTHER CONSTRUCTION WORK.**

- a) **Workmen Compensation Act 1923:** The Act provides for compensation in case of injury by accident arising out of and during the course of employment.
- b) **Payment of Gratuity Act 1972:** Gratuity is payable to an employee under the Act on satisfaction of certain conditions on separation if an employee has completed 5 years' service or more on death, the rate of 15 days wages for every completed year of service. The Act is applicable to all establishments employing 10 or more employees.
- c) **Employees P.F. and Miscellaneous Provision Act 1952:** The Act Provides for monthly contributions by the employer plus workers @10% or 8.33%. The benefits payable under the Act are:
  - (i) Pension or family pension on retirement or death, as the case may be.
  - (ii) Deposit linked insurance on the death in harness of the worker.
  - (ii) Payment of P.F. accumulation on retirement/death etc.
- d) **Maternity Benefit Act 1951-** The Act provides for leave and some other benefits to women employees in case of confinement or miscarriage etc.



- e) **Contract Labour (Regulation & Abolition) Act 1952:** The Act provides for certain welfare measures to be provided by the Contractor to contract labour and in case the Contractor fails to provide, the same are required to be provided, by the Principal Employer by Law. The Principal Employer is required to take Certificate of Registration and the Contractor is required to take license from the designated Officer. The Act is applicable to the establishments or Contractor of Principal Employer, if they employ 20 or more contract labour.
- f) **Minimum Wages Act 1948:** The Employer is supposed to pay not less than the Minimum Wages fixed by appropriate Government as per provisions of the Act, if the employment is a scheduled employment. Constructions of Buildings, Roads, and Runways are scheduled employments.
- g) **Payment of Wages Act 1936:** It lays down as to by what date the wages are to be paid, when it will be paid and what deductions can be made from the wages of the workers.
- h) **Equal Remuneration Act 1979:** The Act provides for payment of equal wages for work of equal nature to Male and Female workers and for not making discrimination against Female employees in the matters of transfers, training and promotions etc.
- i) **Payment of Bonus Act 1965:** The Act is applicable to all establishments employing 20 or more employees. The Act provides for payments of annual bonus subject to a minimum of 8.33% of wages and maximum of 20% of wages to employees drawing Rs.3500/- per month or less. The bonus to be paid to employees getting Rs.2500/- per month or above up to Rs.3500/- per month shall be worked out by taking wages as Rs.2500/- per month only. The Act does not apply to certain establishments. The newly set up establishments are exempted for five years in certain circumstances. Some of the State Governments have reduced the employment size from 20 to 10 for the purpose of applicability of this Act.
- j) **Industrial Disputes Act 1947:** The Act lays down the machinery and procedure for resolution of Industrial disputes, in what situations a strike or lock-out becomes illegal and what are the requirements for laying off or retrenching the employees or closing down the establishment.
- k) **Industrial Employment (Standing Orders) Act 1946:** It is applicable to all establishments employing 100 or more workmen (employment size reduced by some of the State and Central Government to 50). The Act provides for laying down rules governing the conditions of employment by the Employer on matters provided in the Act and gets the same certified by the designated Authority.
- l) **Trade Union Act 1926:** The Act lays down the procedure for registration of trade unions of workmen and employers. The Trade Unions registered under the Act have been certain immunities from civil and criminal liabilities.
- m) **Child Labour (Prohibition & Regulation) Act 1986:** The Act prohibits employment of children below 14 years of age in certain occupations and processes and provides for regulation of employment of children in all other occupations and processes. Employment of Child Labour is prohibited in Building and Construction Industry.
- n) **Inter-State Migrant workmen's (Regulation of Employment & Conditions of Service) Act 1979:** The Act is applicable to an establishment which employs 5 or more inter-state migrant workmen through an intermediary (who has recruited workmen in one state for employment in the establishment situated in another state). The Inter-State migrant workmen, in an establishment to which this Act becomes applicable, are required to be provided certain facilities such as housing, medical aid, traveling expenses from home upto the establishment and back, etc.
- o) **The Building and Other Construction workers (Regulation of Employment and Conditions of Service) Act 1996 and the Cess Act of 1996:** All the establishments who carry on any

building or other construction work and employs 10 or more workers are covered under this Act. All such establishments are required to pay cess at the rate of exceeding 1% of the cost of construction as may be modified by the Government. The Employer of the establishment is required to provide safety measures at the Bidding or construction work and other welfare measures, such as Canteens, First Aid facilities, Ambulance, Housing accommodations for workers near the work place etc. The Employer to whom the Act has to obtain a registration certificate from the Registering Officer appointed by the Government.

- p) **Factories Act 1948:** The Act lays down the procedure for approval of plans before setting up a factory, health and safety provisions, welfare provisions, working hours, annual earned leave and rendering information regarding accidents or dangerous occurrences to designated authorities. It is applicable to premises employing 10 persons or more with aid of power or 20 or more persons without the aid of power engaged in manufacturing process.

### 3. **ARBITRATION (GCC clause 25.3)**

The procedure for arbitration will be as follows: -

#### **Sub-clause 25.3 (See CI-25)**

- (a) In case of Dispute or difference arising between the Employer and a domestic contractor relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Arbitration and Conciliation Act, 1996. The parties shall make efforts to agree on a sole arbitrator and only if such an attempt does not succeed and the Arbitral Tribunal consisting of 3 arbitrators one each to be appointed by the Employer and the Contractor and the third Arbitrator to be chosen by the two Arbitrators so appointed by the Parties to act as Presiding Arbitrator shall be considered. In case of failure of the two arbitrators appointed by the parties to reach upon a consensus within a period of 30 days from the appointment of the arbitrator appointed subsequently, the Presiding Arbitrator shall be appointed by the \*Council, Indian Roads Congress.
- (b) The Arbitral Tribunal shall consist of three Arbitrators one each to be appointed by the Employer and the Contractor. The third arbitrator shall be chosen by the two Arbitrators so appointed by the Parties, and shall act a presiding arbitrator. In case of failure of the two arbitrators appointed by the parties to reach upon a consensus within a period of 30 days from the appointment of the arbitrator appointed subsequently, the Presiding Arbitrator shall be appointed by the \*Council, Indian Roads Congress.
- (c) If one of the parties fails to appoint its arbitrator in pursuance of sub-clause (a) and (b) above within 30 days after receipt of the notice of the appointment of its arbitrator by the other party, then the \*Council, Indian Roads Congress shall appoint the arbitrator. A certified copy of the order of the Council, Indian Roads Congress, making such an appointment shall be furnished to each of the parties.
- (d) Arbitration proceedings shall be held in India, and the language of the arbitration proceedings and that of all documents and communications between the parties shall be English.
- (e) The decision of the majority of arbitrators shall be final and binding upon both parties. The cost and expenses of Arbitration proceedings will be paid as determined by the arbitral tribunal. However, the expenses incurred be party in connection with the

preparation, presentation etc. of its proceedings as also the fees and expenses paid to the arbitrator appointed by such party or on its behalf shall be borne by each party itself.

- (f) Performance under the contract shall continue during the arbitration proceedings and payments due to the contractor by the owners shall not be withheld, unless they are the subject matter of the arbitration proceedings.

SECTION 4-A  
CONDITIONS OF PARTICULAR  
APPLICATION  
(COPA)

**CONDITIONS OF PARTICULAR APPLICATION (COPA)**

1. Bidders are requested to pay adequate attention to the following conditions which are to be read along with the all-conditions inscribed under **Section-3- CONDITIONS OF CONTRACT**, for participation and shall form the essence of the contract. Since the project is intended to be executed in **EPC (TURNKEY MODE)**, certain conditions of Section-3 shall stand deleted/modified/amended as indicated/inserted upon in NIT, thus having significance in this Contract and cannot be disputed or challenged. In case of any other intra-conflicting interpretation arising out of conditions/clauses of the bid document, the decision of Employer shall prevail and binding to the bidder(s).
2. The BID Price shall be inclusive of all components involved in the project and nothing extra shall be applicable.
3. Since the project is **Turnkey Mode** and funded under **NESIDS**, no fluctuation in cost due to price increase is allowed. Adequate provision must be factored in while evaluating the BID value for absorption of such variation during the tenure of Project implementation but a fixed price.
4. Bidders are required to submit Work-Plan & Bar Chart after signing of agreement indicating the completion schedule of each activity of 'Physical Mile-Stone' of the Project for effective monitoring in accordance with contract data.
5. Payment shall be made on pro-rata basis in percentage of Contract Price on completion of each distinct sub-head/component of work as detailed at 'Section-4/Contract Data'
6. Fees to be paid for proof checking & vetting of Design & drawings if required shall be borne by the Bidder.
7. 30 (Thirty) days' time shall be allowed for proof- checking, vetting of design & drawings and approval by the Employer, if necessity arises during the execution of project.
8. Contractor shall arrange all materials to be consumed in the Project. The Engineer-in-Charge or his authorized subordinates (AE/JE) reserve the right to reject any materials including minor minerals like aggregates, sand etc. if not conforming to specification and Contractor shall have to remove and replace the consignment at his own risk and cost. Noncompliance of this on the part of Contractor shall be treated as breach of contract and may lead to termination and rescind of work. Being a full rate contract, the Contractor shall arrange all materials including Cement and Steel etc. required for the work. Stone aggregates of different size to be consumed in the project should be obtained from approved stone crusher only. No hand broken metals or Riverbed materials (RBM), pebbles shall be allowed. Compromising with quality of work is liable to attract penalty besides termination of the contract if deemed necessary and recommended by Engineer-in-charge.
  - B. All Samples be approved by Engineer-in-Charge/Consultant before Bulk procurement and execution.

Contractor must produce the Test Certificate of the **Cement and Steel** used by him and issued by a Govt approved accredited Institute/Laboratory, AEC/IIT failing which any claim for payment shall not be entertained. The Test Certificate is mandatory for every consignment. As a matter of safety, Contractor shall ensure that adequate all-party insurance is made and covered against the T&Ps, Machineries, Men Power etc. engaged by him in the work for compensation in the event of loss, accident, breakdown, death etc. and Employer is not responsible in any and such circumstances.

9. Contractor shall ensure that administrative and public activities are not disturbed during execution and maintain a peaceful conducive working environment. He shall be responsible to make settlement of local dispute arising between him or his staff with local public on any issue.
10. Payment shall be made as per availability of Fund. No interest shall be payable for such delay in payment of bills.
11. No claim for payment shall be entertained unless the following documents are submitted by the Contractor along with the bill.
  - I Invoice/Cash Memos (in original) in favour of Contractor issued by the dealer showing the sale of Cement and Steel quantity brought to the site of work. All such document must invariably bear the Name of Dealer, Brand of Cement & Steel Quantity.  
Date of Sale/dispatch etc clearly indicated on it and not to be tampered with in any form.
  - II. Test report of Cement and Steel (of each lot of supply) issued by an accredited Institution/Laboratory in original should be produced by the Contractor.
  - III. Cube test report issued by Quality Control Laboratory must be produced by the Contractor of all Concrete works.
12. Employer shall not be responsible for providing power at the site of work. In case power is required for construction, the contractor shall make his own arrangement. If required Engineer-in-charge may help and liaise with the Department of Power for the purpose.
13. No labourers without valid inner line pass shall be engaged by the Contractor. The inner line passes shall have to be obtained by the contractor himself. If required, the Department may provide necessary help.
14. The following documents shall be submitted to the District Labour and Employment Officer, Govt of Arunachal Pradesh as per prescribed application form and get registered independently complying with the Labour Laws as enforced in Assam.
  - a. Name and situation of place where the construction work is proposed.
  - b. Name and address of the person who is undertaking the construction
  - c. Address to which communications relating the construction work may be sent.
  - d. Nature of the work involved and facilities, including any plant and machinery provided.
  - e. Number of workers likely to be employed during the various stage of construction.
  - f. Arrangement for storage of explosive, if any, to be used in construction work
  - g. Name and designation of the person who will in overall charge of construction
  - h. Approximate duration of work.

15. Any agency involved / engaged in litigation / arbitration with the Department at present or blacklisted with any Govt. / Autonomous organization are discouraged and disqualified from participation in this tender. In the event of such disclosure at later stage even after acceptance / award of work, shall automatically lead to termination of contract including forfeiture of earnest money including security deposit.
16. The contractor or his authority representatives should always be available at the site of work to take instruction from department officers and ensure proper execution of work. No work should be done in the absence of such authorized representatives.
17. No additional payment or compensation will be made to the contractor for damages caused by rains, of other natural calamities during the execution of the project and any such claims on this account will not be entertained.
18. Bidder intending to make any correspondences after award and signing of agreement and during project implementation shall be addressed to Engineer-in-charge only. Employer or any other authority in PHED (Zone & Circle) is not liable to respond to any such correspondences/letters/e-mails sent by bidder without routing through Engineer-in-charge of the project.

# SECTION 5

## CONTRACT DATA



**CONTRACT DATA**

**Name of Work:** Augmentation of Water Supply system at Daporijo Township (4.20MLD) under NESIDS.

**BID ID :** DPHE/NIT/NESIDS/2024-25/01

<b>1</b>	<b>Employer</b>	<b>The Chief Engineer, Central Zone, PHE&amp;WS Department, AP, Bene, Aalo</b>	
<b>2a</b>	<b>Authorized Representative &amp; Engineer</b>	<b>The Superintending Engineer PHE&amp;WS Circle, Basar, AP</b>	To monitor the project during execution till final take-over and exercise authority under Contract Management Framework in accordance with CPWD Works Manual-2024 & delegation of financial power vested upon him and other Govt. directives time to time.
<b>2b</b>	<b>Engineer-in-charge</b>	<b>The Executive Engineer PHE&amp;WS Division, Daporijo, AP, Mail Id: eepheddaporijo@gmail.com</b>	<b>Tender Inviting authority &amp; represents on behalf of Employer &amp; Engineer</b>
<b>3</b>	<b>ECPT</b>	Rs. 49,46,91,710/-	
<b>4</b>	<b>Date of Start</b>	<b>From the 15<sup>th</sup> Day of Notice to proceed with the work.</b>	
<b>5</b>	<b>Stipulated Completion period</b>	<b>36(Thirty Six) months</b>	
<b>6</b>	<b>Defect Liability Period (DLP)</b>	<b>12 (Twelve) months from the date of completion</b>	

**7. Scope of Work: EPC (TURNKEY) MODE – 1 (One Job)**

Project scope given in Contract Data is for rough guidance only. Any variation up to 10 (ten) percent in physical component shall be covered within the Bid price without any additional cost. Actual project requirement shall be finalized after detailed survey, investigation, design and drawings undertaken by the bidder after award of contract as per TOR including work program approved by the competent authority. Milestones and Weightage for pro-rata payment prescribed for each physical event in Contract Data, however, shall remain unchanged.

The works consist of items as per items of B.O.Q. the works shall, inter alia, include the following, as specified below:

Sl.No	Description of Item	Quantity
1	2	3
1	Design, drawing and construction of RCC Drop-inlet head work as per specifications.	1 Job
2	Design, drawing and construction of Aerator, approach channel, flash mixture and parshall flume as per specifications.	1 Job
3	Design, drawing and construction of plain sedimentation tank	1 Job
4	Design, drawing and construction of RCC circular Clariflocculator tank including walk way slab, launder channel as per specifications complete.	1 Job
5	Design, Construction, supply of materials, erection, Installation & Commissioning of complete WTP pressure filtration system plant of average 2 Lakhs/hr capacity (2W+ 1S) with SCADA compatible pressure monitoring, controlling and back washing mechanism.	1 Job
6	Design, drawing and construction of Chemical house.	1 Job
7	Design, drawing and construction of RCC clear water reservoir with RCC slab ventilation, beam and column as per technical specifications.	1 Job
8	150 KVA DG set	1 Job
9	Generator shed	1 Job
10	Provision of by pass and sludge pipeline 300mm dia to disposal point including delivery necessary specials fittings complete.	1 Job
11	Design, Supply, Installation & Commissioning of SCADA system for monitoring & operation of Water Treatment Plant & Town Water distribution system with min 100" monitoring station, wireless communication systems, firewalls, LAN, switch, internet connectivity, cables and required instruments, electronics with complete trails training and handover.	1 Job
12	Design, drawing and construction of Zinc Alum distribution over head tank with RCC slab ventilation, beam and column as per technical specifications.	1 Job
13	WTP and Zonal tank inlet-outlet valves- control valves, flow meter, pressure transmitter, level transmitter, RTU, Air valves, Isolation cum drain valves and fire hydrant.	1 Job
14	Providing and supplying of S&S Centrifugally Cas (Spun)/Ductile Iron Pipes conforming to IS: 8329: 250mm dia Ductile Iron Class K-9 pipes and GI Pipes of different diameters.	1 Job
15	Providing and supplying of necessary DI fittings for Pipelines.	1 Job
16	Provision for House Service Connection.	1 Job
17	Design, drawing and construction of compound wall around WTPs as per technical specifications.	1 Job

18	Design, drawing and construction of road crossing, Valve Chamber, Anchor Blocks, Trestle Support and demolition and re-construction provision as per technical specifications.	1 Job
19	External Electrification in WTP complex including providing and fixing street light, lamp post, garden lamp, glow sign and flood lights and its inter cabling connection from the main board complete.	1 Job
20	Construction of Retaining wall around WTP site.	1 Job
21	Construction of approach to WTP and Head Work a) Soling, Metalling and Carpetting.	1 Job
	b) Formation Cutting.	1 Job
	c) Formation Cutting for laying of DI Pipes.	1 Job
22	Site Development	1 Job

### 8. Mile stone:

Sl. No.	Description of Milestone (Physical)	Time Allowed in months (from date of start)	Amount to be with-held in case of non-achievement of milestone
1	C/o Approach Road to WTP including formation cutting, Soling, metalling and carpeting and site Development	5 months	1% of tender value
2	C/o RCC drop-Inlet type Head work, Procurement of 150KVA DG Set and C/o Generator shed	9 months	1% of tender value
3	Procurement and laying of main pipe line(DI) including formation cutting for laying	13 months	1% of tender value
4	C/o WTP including Plain Sedimentation tank, Aerator, flash mixer and parshall flume, RCC Circular Clariflocculator, Chemical House, Clear Water Reservoir including supply of materials, erection, installation & commissioning etc. complete.	25 months	1% of tender value
5	Design, drawing and construction of Zinc Alum distribution over head tank with RCC ventilation, beams and column, Procurement and laying of distribution pipe lines(GI), procurement & laying of Sludge pipeline 300mm dia (DI)	29 months	1% of tender value
6	C/o Compound wall around WTP, Road crossing, valve chamber, Anchor Block, Trestle support and House service connection	32 months	1% of tender value
7	External Electrification in WTP complex, including providing and fixing street light, lamp post, garden lamp, glow sign and	34 months	1% of tender value

	flood lights and its inter cabling etc.		
8	Design, Supply, Erection, Installation & Commissioning of SCADA system for monitoring & operation of Water Treatment Plant & Town Water distribution system including WTP Pressure filtration system all complete	36 months	1% of tender value

**9. Weightage (in %) for each distinct component of scope with respect to Contract Price**

SI No	Scope of work	Linear unit	Weightage (in %)
1	C/o Approach Road to WTP including formation cutting, Soling, metalling and carpeting and site Development	Job work	15(Twenty) %
2	C/o RCC drop-Inlet type Head work, Procurement of 150KVA DG Set and C/o Generator shed	Job work	15 (Fifteen)%
3	Procurement and laying of main pipe line (DI) including formation cutting	Job work	8 (Eight)%
4	C/o WTP including Plain Sedimentation tank, Aerator, flash mixer and parshall flume, RCC Circular Clariflocculator, Chemical House, Clear Water Reservoir including supply of materials, erection, installation & commissioning etc. complete.	Job work	35 (Thirty five) %
5	Design, drawing and construction of Zinc Alum distribution over head tank with RCC ventilation, beams and column, Procurement and laying of distribution pipe lines(GI), procurement & laying of Sludge pipeline 300mm dia (DI)	Job work	10 (Ten) %
6	C/o Compound wall around WTP, Road crossing, valve chamber, Anchor Block, Trestle support and House service connection	Job work	6 (Six) %
7	External Electrification in WTP complex, including providing and fixing street light, lamp post, garden lamp, glow sign and flood lights and its inter cabling etc.	Job work	6 (Six) %
8	Design, Supply, Erection, Installation & Commissioning of SCADA system for monitoring & operation of Water Treatment Plant & Town Water distribution system including WTP Pressure filtration system all complete	Job work	5 (Five) %
		<b>Total</b>	<b>100%</b>

**10. Schedule of Payment**

- (i) Shall be made on pro-rata basis against the value of work done and measured/quantified in linear unit with respect to given weightage as above.
- (ii) ~~See illustration below to workout payment for assuming a contract amount of Rs.50.00 Cr.~~

**11 Payment Certificate [CI- 43]**

**Contract price is fixed as Lumpsum for the whole project as one job.**

**Contractor can submit running bills for work executed as per his convenience. However, only one running bill is admissible in a month. Payment if delayed due to non-release of fund from the Govt. shall not attract any interest. Final payment shall be made on completion of the work and rectification of noticeable defects if any and fulfillment of other contractual obligations by the bidder to the acceptance and satisfaction of Engineer-in-charge. Contractor shall be required to submit in writing to Engineer-in-charge for 'RFI' (Request For joint Inspection) before raising final bill.**

**12. Tax [ CI- 45]**

**The Contract Price is inclusive of following tax & incidental charges to be deducted from any payment due to contractor as 'TDS' unless exemption sought by producing valid certificate of payment by the Contractor against the elements included in the value of work.**

- a) **GST = Shall be Deducted as applicable and amendment up to date.**
- b) **Income Tax = 2% (Two percent)**
- c) **Labour Cess = 1% (One percent)**
- d) **Royalty /monopoly as applicable**
- e) **Fees/charges for carrying out any test during execution shall be borne by the bidder and deemed to be covered in the contract price.**

**13. Price Escalation:(CI-47)**

**DELETED.** The Contract price is fixed without any escalation.

**14. Retention Money: (CI-48)**

Shall be deducted/retained from each running payment @ 2.5% (two & half percent) of the gross value of the bill subject to maximum of 5% (five percent) of contract price.

**15. Liquidated Damages (LD) :CI - 49**

(1/2000)th of the initial contract price, rounded off to the nearest Thousand per day. Maximum limit - 10% (Ten percent of contract price).

**16. Bonus for early completion within stipulated period. (CI- 51)**

**1 % (ONE) Percent of Contract Price as BONUS shall be admissible if the project is completed within the stipulated completion period of 36(Thirty Six) months or earlier and without any time extension. Payment on this account shall be released after completion of Defect Liability Period and Taking over Certificate (TOC) issued by the Employer.**

**17. Advance Payment: CI- 52**

- (i) Sub CI 52.2 – Mobilization & Equipment Advance not admissible
- (ii) Sub CI 52.4 - The materials brought to site and subject to following:
  - (a) The materials are in accordance with the specification for works.
  - (b) Such materials have been delivered to site and are properly stored and protected against damage or deterioration to the satisfaction of the engineer. The contractor shall store to bulk material in measurable stacks.
  - (c) Contractor's records of the requirements, orders, receipt and use of materials are kept in a form approved by the Engineer and such records shall be available for inspection by the Engineer.
  - (d) Submitted with his monthly statement the estimated value of the materials on site together with such documents as may be required by the Engineer for the purpose of valuation of the materials and providing evidence of ownership and payment thereof.
  - (e) Ownership of such materials shall be deemed to vest in the Employer for which the Contractor has submitted an Indemnity
  - (f) Bond in an acceptable format; and
  - (g) The quantities of materials are not excessive and shall be used within a reasonable time as determined by the Engineer-in-charge
  - (h) Dealer's Invoices issued in the name of firm/bidder of purchase is submitted during claim for secured advance.

**18 . ~~Repayment of secured advance~~**

~~The secured advance shall be deducted/adjusted from each succeeding running payments to the extent materials [for which advance was previously paid pursuant to Sub Clause 52.4 have been incorporated into the Works.~~

**19. Risk & Cost of Contractor (Sub Clause – 60.6)**

Employer's additional cost for completion of works limited to 20% of tendered amount.

**20 Dispute Resolution:**

To be in accordance with Clause 24, 25, & 26 as applicable.

**21. Contract Management:**

The execution of project on Lump-sum contract (fixed price) in accordance with CPWD works Manual-2022, GFR-2017 and other statutory conditions shall be applicable concurrently without overriding any provisions of contract document.

**22. Legal Jurisdiction:**

Shall be within jurisdiction of Hon'ble Itanagar Bench of Guwahati High Court.

23. Extension of time if required shall be given by the Engineer-in- Charge with prior approval from the Superintending Engineer, PHE&WS Circle, Basar.
24. Re- Schedule of Mile-Stone shall be approved by Superintending Engineer in consultation with the employer.

# SECTION 6

# TECHNICAL SPECIFICATIONS



1. The work shall be carried out in general as per CPWD Works Manual and CPWD Specification (with up-to-date correction slips).
2. The Structural Design should confirm related IS Codes with up-to-date corrections as circulated by CPWD, IS Codes and BIS Specifications.
3. The Structural Design shall be done in consideration of Soil Investigation Report duly undertaken and submitted by an Agency which should be Government approved.
4. Since the Foundation of Structure shall be on Piles, it is recommended to design the Piles in accordance with Soil Investigation reports and expert consultant and design vetted IIT/AEC.
5. Bidders are requested to be conversant with all relevant features and specifications required for execution of works of this magnitude.
6. Obtaining approval of structural drawings, design time to time and as and when required during execution from the Employer is a pre-requisite for the project implementation.
7. Relevant books on IS Codes, BIS Specifications, CPWD Works Manual etc be referred to.
8. For understanding & evaluation of items of work to be executed, latest CPWD Specifications be followed mentioning Reference of Item and Page clearly indicated in remarks.
9. Detailed scope is seen from Contract Data. Working drawings and plans are furnished in bid document.
10. **Scope of tender at a glance:**
  1. Soil Investigation, Structural Design
  2. Complete execution of work in prescribed time Ref Cl : 7 under Section: 5.

Soil Investigation, Design & Drawing and BOQ.	=	1 Job	<b>For details, refer Section – 5 Contract Data 7</b>
Site Clearance, Camp and Lab Setup	=	1 job	
Submission of Structural Drawings	=	1 job.	
Design Approval	=	1 Job	
Execution of Project	=	1 job	

# SECTION 7

## SECURITIES & OTHER FORMS

**BID SECURITY (BANK GUARANTEE)**

WHEREAS, \_\_\_\_\_ [name of Bidder] (hereinafter called "the Bidder") has submitted his Bid dated \_\_\_\_\_ [date] for the construction of \_\_\_\_\_ [name of Contract hereinafter called "the Bid"].

KNOW ALL PEOPLE by these presents that We \_\_\_\_\_ [name of Bank] of \_\_\_\_\_ [name of country] having our registered office at (hereinafter called "the Bank") are bound unto \_\_\_\_\_ [name of Employer] (hereinafter called "the Employer") in the sum of \_\_\_\_\_ \*for which payment well and truly to be made to the said Employer the Bank itself, his successors and assigns by these presents.

SEALED with the Common Seal of the said Bank this \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_.

THE CONDITIONS of this obligation are :

- (1) If after Bid opening the Bidder withdraws his bid during the period of Bid validity specified in the Form of Bid;
- (2) If the Bidder having been notified to the acceptance of his bid by the Employer during the period of Bid validity:
  - (a) fails or refuses to execute the Form of Agreement in accordance with the Instructions to Bidders, if required; or
  - (b) fails or refuses to furnish the Performance Security, in accordance with the Instructions to Bidders; or
  - (c) does not accept the correction of the Bid Price pursuant to Clause 27.

We undertake to pay to the Employer up to the above amount upon receipt of his first written demand, without the Employer having to substantiate his demand, provided that in his demand the Employer will note that the amount claimed by him is due to him owing to the occurrence of one or any of the three conditions, specifying the occurred condition or conditions.

This Guarantee will remain in force up to and including the date \_\_\_\_\_\*\* days after the deadline for submission of Bids as such deadline is stated in the Instructions to Bidders or as it may be extended by the Employer, notice of which extension(s) to the Bank is hereby waived. Any demand in respect of this guarantee should reach the Bank not later than the above date.

DATE \_\_\_\_\_  
\_\_\_\_\_

SIGNATURE

WITNESS \_\_\_\_\_  
\_\_\_\_\_

SEAL

(Signature, name and address )

\* The Bidder should insert the amount of the guarantee in words and figures denominated in Indian Rupees. This figure should be the same as shown in Clause 16.1 of the Instructions to Bidders.

\*\* 45 days after the end of the validity period of the Bid. Date should be inserted by the Employer before the Bidding documents are issued.

**PERFORMANCE BANK GUARANTEE**

To

\_\_\_\_\_ (Name of Employer)

\_\_\_\_\_ (Address of Employer)

WHEREAS \_\_\_\_\_ [name and address of Contractor] (hereafter called "the Contractor") has undertaken, in pursuance of Contract NO. \_\_\_\_\_ dated \_\_\_\_\_ to execute \_\_\_\_\_ [name of Contract and brief description of Works] (hereafter called "the Contract").

AND WHEREAS it has been agreed to give the Contractor such a Bank Guarantee:

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you on behalf of the Contractor, up to a total of \_\_\_\_\_ [amount of guarantee]\* \_\_\_\_\_ (in words), such sum being payable in the types of proportions of currencies in which the Contract Price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of \_\_\_\_\_ [amount of guarantee] as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the contractor before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or the Works to be performed there-under or of any of the Contract documents which may be made between your and the Contractor shall in way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid until 60 days from the date of completion of the project.

Signature and Seal of the guarantor \_\_\_\_\_

Name of Bank \_\_\_\_\_

Address \_\_\_\_\_

Date \_\_\_\_\_

\* An amount shall be inserted by the Guarantor, representing the percentage the Contract Price specified in the Contract including additional security for unbalanced Bids, if any and denominated in Indian Rupees.

**INDENTURE FOR SECURED  
ADVANCES**

**FORM 31**

(for use in cases in which the contract is for finished work and the contractor has entered into an agreement for the execution of a certain specified quantity of work in a given time)

This indenture made the \_\_\_\_\_ day of \_\_\_\_\_  
20\_\_\_\_\_ BETWEEN \_\_\_\_\_ (hereinafter called the contractor  
which expression shall where the context so admits or implies be deemed to include his executors,  
administrators and assigns) or the one part and the Employer of the other part.

Whereas by an agreement dated \_\_\_\_\_ (hereinafter called the  
said agreement) the contractor has agreed.

AND WHEREAS the contractor has applied to the Employer that he may be allowed advanced on  
the security of materials absolutely belonging to him and brought by him to the site of the works the  
subject of the said agreement for use in the construction of such of the works as he has undertaken  
to executive at rate fixed for the finished work (inclusive of the cost of materials and labour.

AND WHEREAS the Employer has agreed to advance to the Contractor the sum of Rupees  
\_\_\_\_\_ on the security of materials the quantities and other particulars  
of which are detailed in Accounts of Secured Advances attached to the Running Account bill for the  
said works signed by the Contractor on \_\_\_\_\_ and the Employer has reserved to himself  
the option of making any further advance or advances on the security of other materials brought by  
the Contractor to the site of the said works.

Now THIS INDENTURE WITNESSETH that in pursuance of the said agreement and in  
consideration of the sum of Rupees \_\_\_\_\_ on or before the execution of  
these presents paid to the Contractor by the Employer (the receipt where of the Contractor doth  
hereby acknowledge) and of such further advances (if any) as may be made to him as a for said the  
Contractor doth hereby covenant and agree with the President and declare as follows:

- (1) That the said sum of Rupees \_\_\_\_\_ - so advanced by the Employer  
to the Contractor as aforesaid and all or any further sum of sums advanced as aforesaid shall  
be employed by the Contractor in or towards expending the execution of the said works and  
for no other purpose whatsoever.
- (2) That the materials details in the said Account of Secured Advances which have been offered  
to and accepted by the Employer as security are absolutely the Contractor's own propriety and

free from encumbrances of any kind and the contractor will not make any application for or receive a further advance on the security of materials which are not absolutely his own property and free from encumbrances of any kind and the Contractor indemnified the Employer 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 account of Secured Advances and all other materials on the security of which any further advance or advances may hereafter be made as aforesaid (hereafter called the said materials) shall be used by the Contractor solely in the execution of the said works in accordance with the directions of the Engineer.
- (4) That the Contractor shall make at his own cost. All necessary and adequate arrangements 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 his own responsibility and shall at all times be open to inspection by the Engineer or any officer authorized by him. In the event of the said materials or any part thereof being stolen, destroyed or damaged or becoming deteriorated in a greater degree than is due to reasonable use and wear thereof the Contractor will forthwith replace the same with other materials of like quality or repair and make good the same required by the Engineer.
- (5) That the said materials shall not be any account be removed from the site of the said works except with the written permission of the Engineer or an officer authorized by him on that behalf.
- (6) That the advances shall be repayable in full when or before the Contractor receives payment from the Employer of the price payable to him for the said works under the terms and provisions of the said agreement. Provided that if any intermediate payments are made to the Contractor on account of work done than on the occasion of each such payment the Employer will be at liberty to make a recovery from the Contractor's bill for such payment by deducting there from the value of the said materials than actually used in the construction and in respect of which recovery has not been made previously, the value for this purpose being determined in respect of each description of materials at the rates at which the amounts of the advances 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 provisions of the said agreement or of these presents the total amount of the advance or advances that may still be owing of the Employer shall immediately on the happening of such default be re-payable by the Contractor to be the Employer together with interest thereon at twelve per cent per annum from the date or respective dates of such advance or advances to the date of repayment and with all costs, charges, damages and expenses incurred by the **Employer** in or for the recovery thereof or the enforcement of this security or otherwise by reason of the default of the Contractor and

the Contractor hereby covenants and agrees with the **Employer** to repay and pay the same respectively to him accordingly.

- (8) That the Contractor hereby charges all the said materials with the repayment to the Employer of the said sum of Rupees \_\_\_\_\_ and any further sum of 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 power contained therein if and whenever the covenant for payment and repayment here-in-before contained shall become enforceable and the money owing shall not be paid in accordance there with the **Employer** may at any time thereafter adopt all or any of the following courses as he may deem best:
- (a) Seize and utilize the said materials or any part thereof in the completion of the said works on behalf of the contractor in accordance with the provisions in that behalf contained in the said agreement debiting the contractor with the actual cost of effecting such completion and the amount due to the contractor with the value of work done as if he had carried it out in accordance with the said agreement and at the rates thereby provided. If the balance is against the contractor, he is to pay same to the **Employer** on demand.
  - (b) Remove and sell by public auction the seized materials or any part thereof and out of the moneys arising- from the sale retain all the sums aforesaid repayable or payable to the **Employer** under these presents and pay over the surplus (if any) to the Contractor.
  - (c) Deduct all or any part of the moneys owing out of the security deposit or any sum due to the Contractor under the said agreement.
- (9) That except in the event of such default on the part of the contractor as aforesaid interest on the said advance shall not be payable.
- (10) That in the event of any conflict between the provisions of these presents and the said agreement the provisions of these presents shall prevail and in the event of any dispute or difference arising over the construction or effect of these presents the settlement of which has not been here-in-before expressly provided for the same shall be referred to the Employer whose decision shall be final and the provision of the Indian Arbitration Act for the time being in force shall apply to any such reference.

**Letter of Acceptance**  
**(Letter head paper of the Employer)**

\_\_\_\_\_ (Date)

To

\_\_\_\_\_ (Name and address of the Contractor)

\_\_\_\_\_

\_\_\_\_\_

Dear Sirs,

This is to notify you that your Bid date \_\_\_\_\_ for execution of the  
\_\_\_\_\_ (name of the contract and  
identification  
number, as given in the Instructions to Bidders) for the Contract Price of Rupees )  
\_\_\_\_\_  
\_\_\_\_\_(amount in words and figures), as corrected and  
Modified in accordance with the Instructions to Bidders is hereby accepted by our agency.

We accept/do not accept that \_\_\_\_\_ be appointed as the Adjudicator.  
You are hereby requested to furnish Performance Security, in the form detailed in Para 34.1 of **ITB**  
for an amount equivalent to Rs \_\_\_\_\_ within 21 days of the receipt of this letter of  
acceptance valid up to 28 days from the date of expiry of defects Liability Period i.e. up to  
\_\_\_\_\_ and sign the contract, failing which action as stated in Para 34.3 of  
**ITB** will be taken.

Yours faithfully,

Authorized Signature

Name and title of Signatory

Name of Agency



**Issue of Notice to proceed with the work**  
(Letter head of the Employer)

\_\_\_\_\_ (Date)

To

\_\_\_\_\_ (Name and address of the Contractor)

\_\_\_\_\_

\_\_\_\_\_

Dear Sirs,

Pursuant to your furnishing the requisite security as stipulated in ITB Clause 34.1 and signing  
of the Contract for the construction of

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

at a Bid Price of Rs. \_\_\_\_\_.

You are hereby instructed to proceed with the execution of the said works in accordance with  
the contract documents.

Yours faithfully,

(Signature, name and title of signatory  
authorized to sign on behalf of Employer)

### Agreement Form

This agreement, made the \_\_\_\_\_ day of \_\_\_\_\_ between \_\_\_\_\_ (name and address of Employer) [hereinafter called "the Employer] and \_\_\_\_\_ (name and address of contractor) hereinafter called "the Contractor" of the other part.

Whereas the Employer is desirous that the Contractor execute

\_\_\_\_\_ (name and identification number of Contractor) (hereinafter called "the Works") and the Employer has accepted the Bid by the Contractor for the execution and completion of such Works and the remedying of any defects therein, at a cost of Rs. \_\_\_\_\_

NOW THIS AGREEMENT WITNESSETH as follows:

1. In this Agreement, words and expression shall have the same meanings as are respectively assigned to them in the conditions of contract hereinafter referred to and they shall be deemed to form and be read and constructed as part of this Agreement.
2. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy any defects therein in conformity in all aspects with the provisions of the contract.
3. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying the defects wherein Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.
4. The following documents shall be deemed to form and be ready and constructed as part of this Agreement viz.
  - (i) Letter of Acceptance
  - (ii) Notice to proceed with the works;
  - (iii) Contractor's Bid
  - (iv) ITB
  - (v) Condition of Contract: General and COPA
  - (vi) Contract Data
  - (viii) Specification & Drawings
  - (ix) Bill of Quantities
  - (x) Any other documents listed in the Contract Data as forming part of the Contract.

In witnessed whereof the parties there to have caused this Agreement to be executed the day and year first before written.

The Common Seal of \_\_\_\_\_ was hereunto affixed in the presence of :

Signed, Sealed and Delivered by the said \_\_\_\_\_

In presence of :

Binding Signature of Employer \_\_\_\_\_

Binding Signature of Contractor \_\_\_\_\_

**UNDERTAKING**

I, the undersigned do hereby undertake that our firm M/s \_\_\_\_\_ agree to abide by this bid for a period \_\_\_\_\_ days for the date fixed for receiving the same and it shall be binding on us and may be accepted at any time before the expiration of that period.

\_\_\_\_\_  
(Signed by an Authorized Officer of the Firm)

Title of Officer

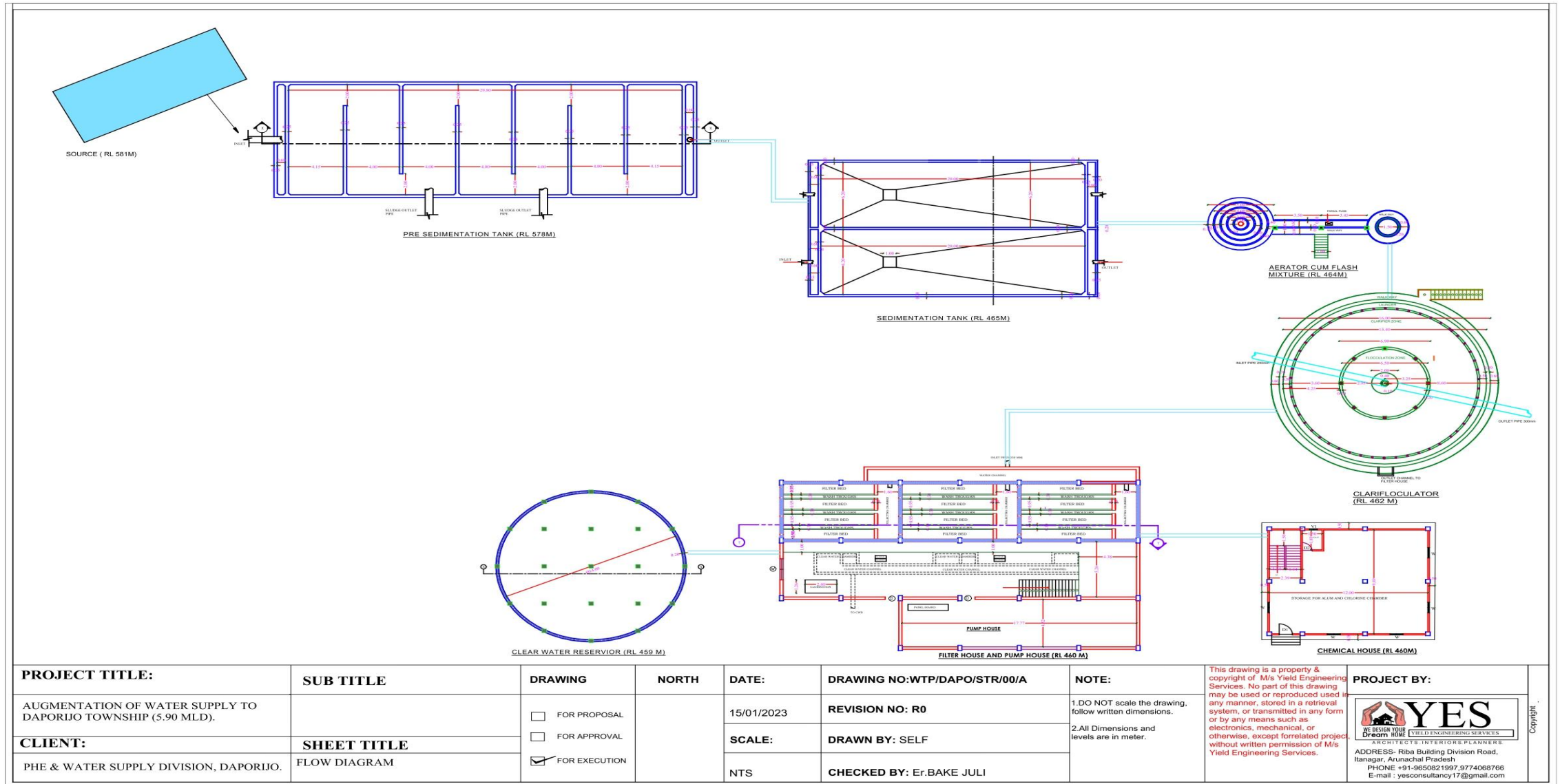
Nature of Firm


DATE

# SECTION 8

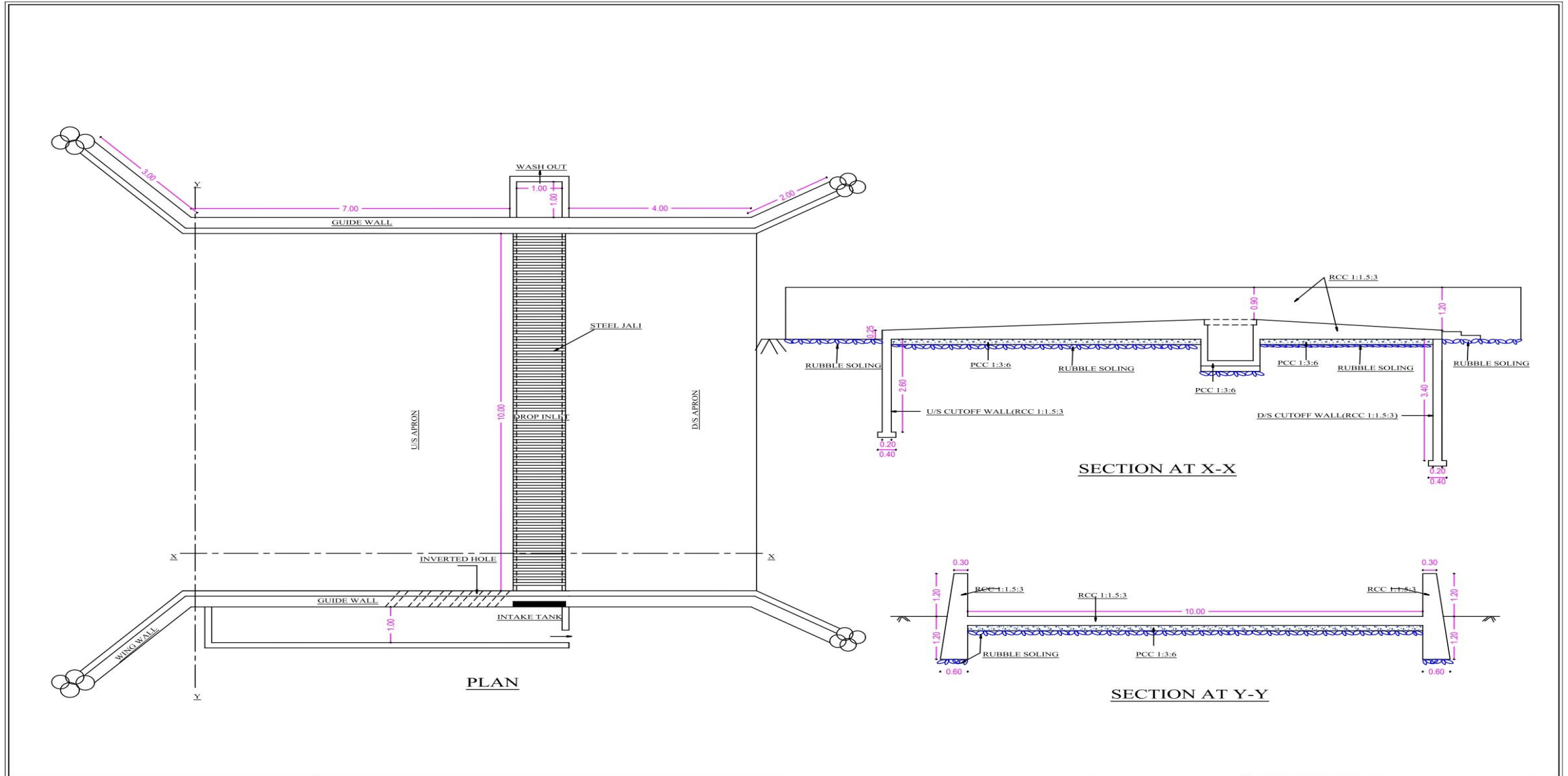
# DRAWINGS

NESIDS-DRJ

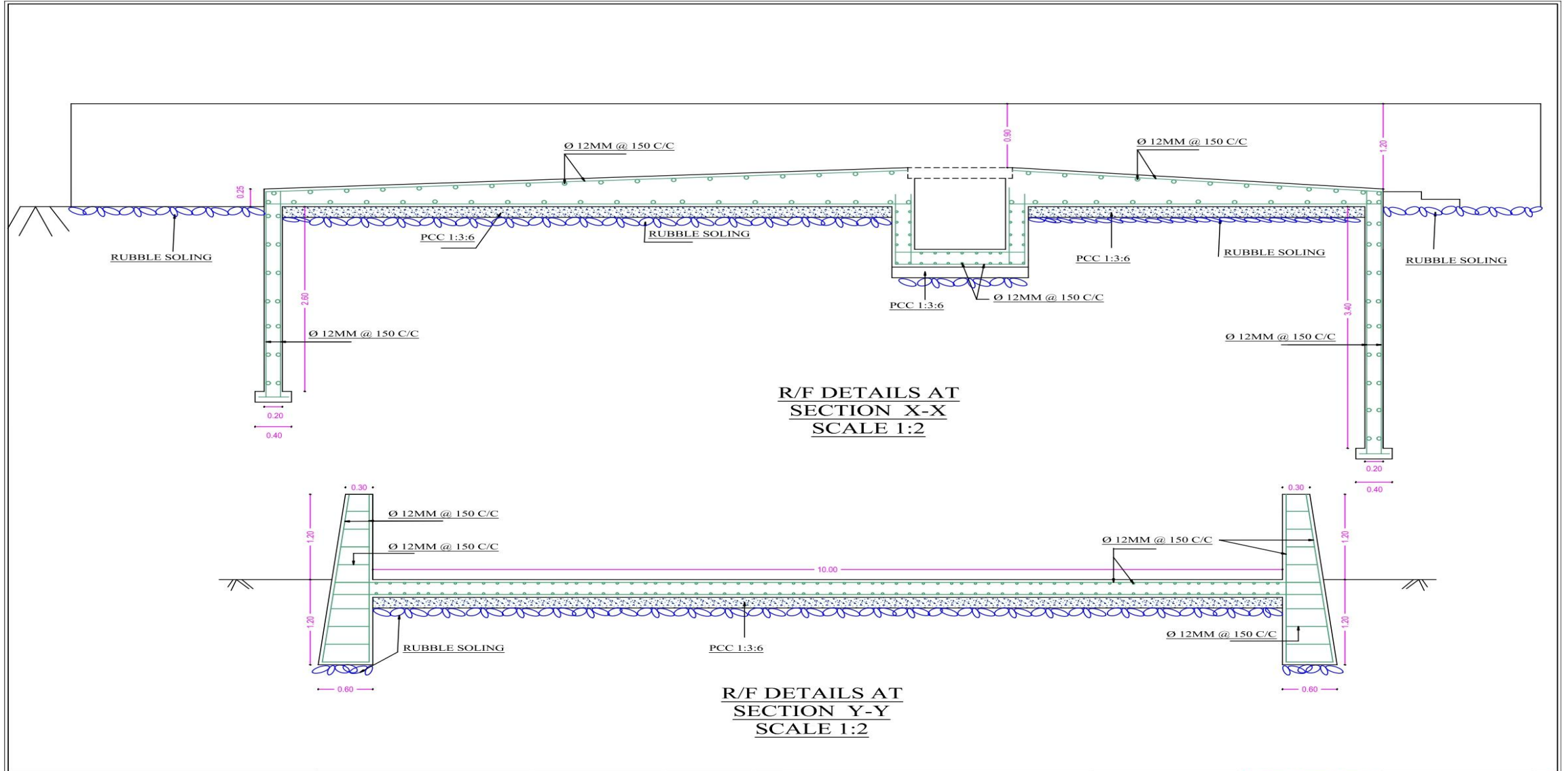


<b>PROJECT TITLE:</b> AUGMENTATION OF WATER SUPPLY TO DAPORIJO TOWNSHIP (5.90 MLD).	<b>SUB TITLE</b>	<b>DRAWING</b> <input type="checkbox"/> FOR PROPOSAL <input type="checkbox"/> FOR APPROVAL <input checked="" type="checkbox"/> FOR EXECUTION	<b>NORTH</b>	<b>DATE:</b> 15/01/2023	<b>DRAWING NO:</b> WTP/DAPO/STR/00/A	<b>NOTE:</b> 1. DO NOT scale the drawing, follow written dimensions. 2. All Dimensions and levels are in meter.	This drawing is a property & copyright of M/s Yield Engineering Services. No part of this drawing may be used or reproduced used in any manner, stored in a retrieval system, or transmitted in any form or by any means such as electronics, mechanical, or otherwise, except for related project, without written permission of M/s Yield Engineering Services.	<b>PROJECT BY:</b>  ARCHITECTS INTERIORS PLANNERS ADDRESS- Riba Building Division Road, Itanagar, Anusachal Pradesh PHONE +91-9650821997, 9774068766 E-mail : yesconsultancy17@gmail.com
<b>CLIENT:</b> PHE & WATER SUPPLY DIVISION, DAPORIJO.	<b>SHEET TITLE</b> FLOW DIAGRAM			<b>SCALE:</b> NTS	<b>REVISION NO:</b> R0 <b>DRAWN BY:</b> SELF <b>CHECKED BY:</b> Er.BAKE JULI			

NESIDS-DRJ

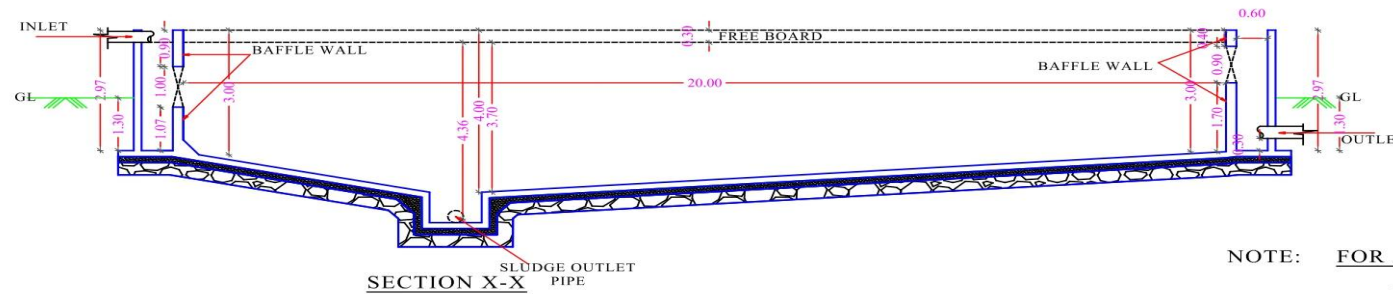
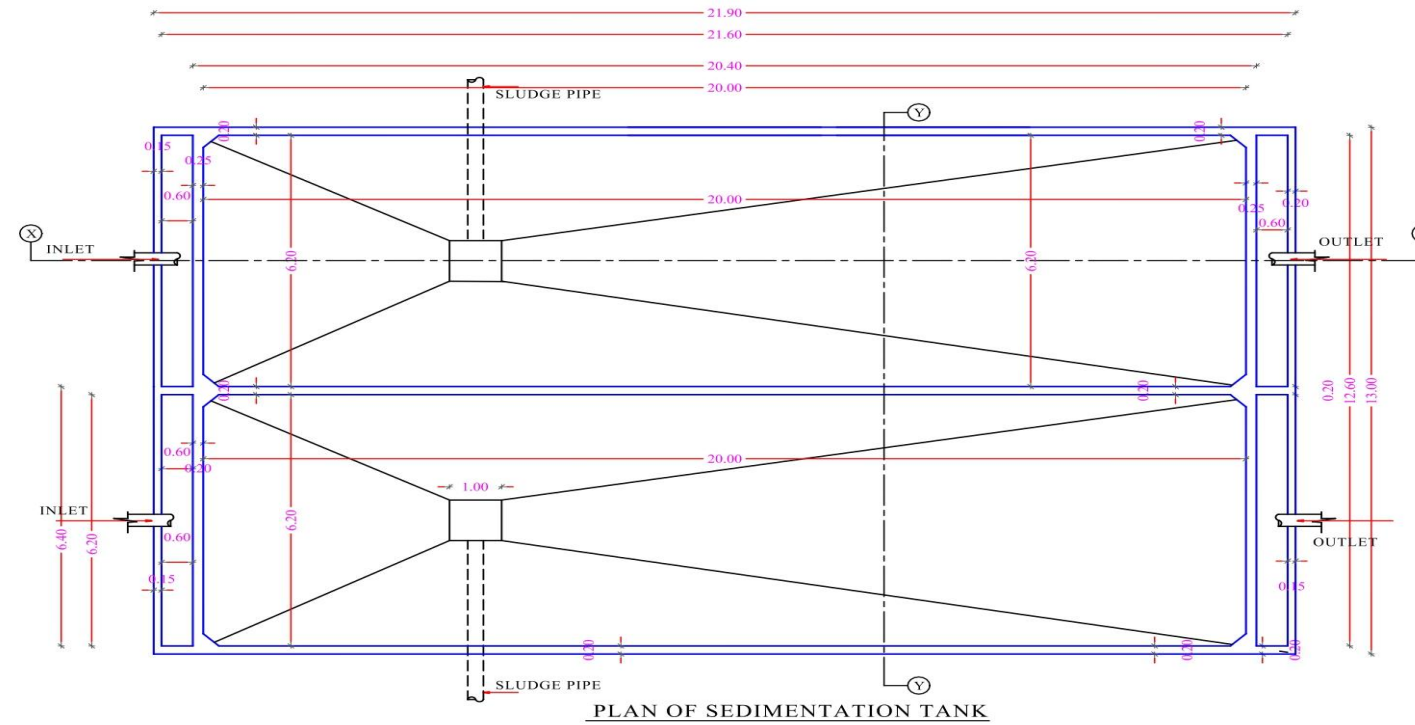


<b>PROJECT TITLE:</b> AUGMENTATION OF WATER SUPPLY AT DAPORIJO TOWNSHIP (5.90 MLD)	<b>TITLE</b> ARCHITECTURAL PLAN	<b>DRAWING</b> <input type="checkbox"/> FOR PROPOSAL <input type="checkbox"/> FOR APPROVAL <input checked="" type="checkbox"/> FOR EXECUTION	<b>NORTH</b> 	<b>DATE:</b> 13/1/2023	<b>DRAWING NO:</b> WTP/DAPO/ARC/01/A	<b>NOTE:-</b> 1. Do not Scale the Drawing. Follow Written Dimensions. 2. All Dimensions and Levels in Metre.	<small>This drawing is a property &amp; copyright of M/s Yield Engineering Services. No part of this drawing may be used or reproduced used in any manner, stored in a retrieval system, or transmitted in any form or by any means such as electronic, mechanical, or otherwise, except for related project, without written permission of M/s Yield Engineering Services.</small>
<b>CLIENT:</b> PHE & WATER SUPPLY DIVISION, DAPORIJO.	<b>SHEET TITLE</b> HEAD WORK (DROP INLET TYPE)			<b>SCALE:</b> NTS	<b>REVISION NO:</b> R0	 ADD- RIBA BUILDING DIVISION ROAD, PH +91-9650821997.9774068766 E-mail : yesconsultancy17@gmail.com	Copyright Yield Engineering Services
				<b>DRAWN BY:</b> Bake Juli <b>CHECKED BY:</b> M.SAIWALA			



<b>PROJECT TITLE:</b> AUGMENTATION OF WATER SUPPLY AT DAPORIJO TOWNSHIP (5.90 MLD)	<b>TITLE</b> STRUCTURAL DETAIL	<b>DRAWING</b> <input type="checkbox"/> FOR PROPOSAL <input type="checkbox"/> FOR APPROVAL <input checked="" type="checkbox"/> FOR EXECUTION	<b>NORTH</b> 	<b>DATE:</b> 13/01/2023	<b>DRAWING NO:</b> WTP/DAPO/STR/01/1 <b>REVISION NO:</b> R0	<b>NOTE:-</b> 1. Do not Scale the Drawing. Follow Written Dimensions. 2. All Dimensions and Levels in Metre.  <i>This drawing is a property &amp; copyright of M/s Yield Engineering Services. No part of this drawing may be used or reproduced used in any manner, stored in a retrieval system, or transmitted in any form or by any means such as electronics, mechanical, or otherwise, except for related project, without written permission of M/s Yield Engineering Services.</i>	 YES YIELD ENGINEERING SERVICES ADD: RBA BUILDING DIVISION ROAD, PH +91-9650821997, 9774068766 E-mail: yesconsultancy17@gmail.com
<b>CLIENT:</b> PHE & WATER SUPPLY DIVISION, DAPORIJO.	<b>SHEET TITLE</b> HEAD WORK (DROP INLET TYPE)			<b>SCALE:</b> NTS	<b>DRAWN BY:</b> Bake Juli <b>CHECKED BY:</b> M.SAIWALA		

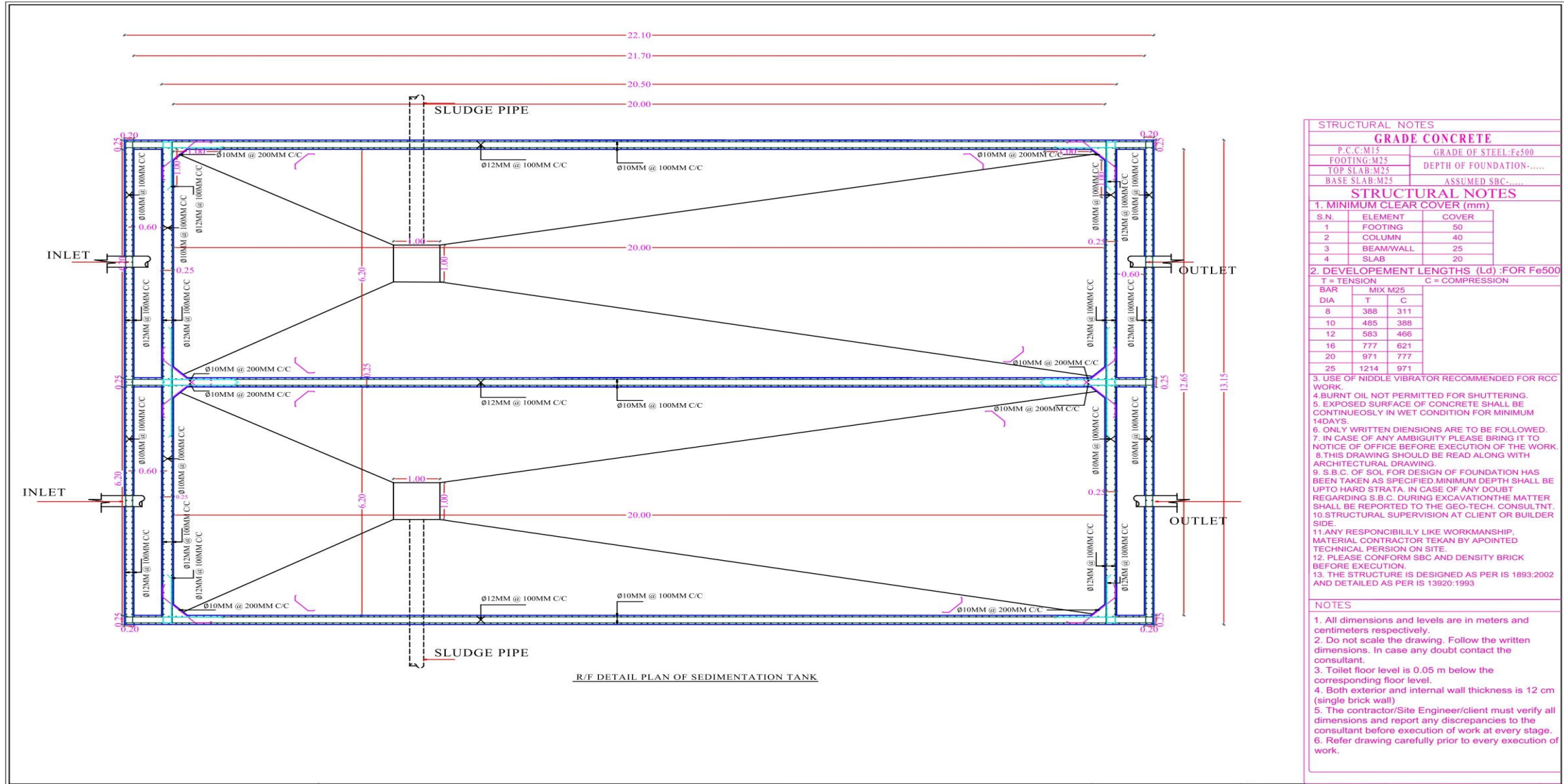
NESIDS-DRJ



NOTE: FOR ALL WALL THICKNESS REFER STRUCTURAL DWG.

<b>PROJECT TITLE:</b> AUGMENTATION OF WATER SUPPLY AT DAPORJO TOWNSHIP (5.90 MLD)	<b>TITLE</b> ARCHITECTURAL DWG	<b>DRAWING</b> <input type="checkbox"/> FOR PROPOSAL <input type="checkbox"/> FOR APPROVAL <input checked="" type="checkbox"/> FOR EXECUTION	<b>NORTH</b> 	<b>DATE:</b> 18/01/2023	<b>DRAWING NO:</b> WTP/DAPO/ARC/05/A	<b>NOTE:-</b> 1. Do not Scale the Drawing ,Follow Written Dimensions. 2. All Dimensions and Levels in Metre.	<i>This drawing is a property &amp; copyright of Ms Yield Engineering Services. No part of this drawing may be used or reproduced used in any manner, stored in a retrieval system, or transmitted in any form or by any means such as electronics, mechanical, or otherwise, except for related project, without written permission of Ms Yield Engineering Services.</i>	<b>PROJECT BY:</b>  YIELD ENGINEERING SERVICES ADD: REBA BUILDING DIVISION ROAD, PH +91-9650821997,9774068766 E-mail : yesconsultancy17@gmail.com
<b>CLIENT:</b> OFFICE OF PHE & WS DEPARTMENT,DAPORJO.	<b>SHEET TITLE</b> SEDIMENTATION TANK			<b>REVISION NO:</b> R0	<b>DRAWN BY:</b> Bake Juli			
				<b>CHECKED BY:</b>				





R/F DETAIL PLAN OF SEDIMENTATION TANK

**STRUCTURAL NOTES**

**GRADE CONCRETE**

P.C.C:M15	GRADE OF STEEL:Fe500
FOOTING:M25	DEPTH OF FOUNDATION:.....
TOP SLAB:M25	ASSUMED SBC:.....
BASE SLAB:M25	

**STRUCTURAL NOTES**

1. MINIMUM CLEAR COVER (mm)

S.N.	ELEMENT	COVER
1	FOOTING	50
2	COLUMN	40
3	BEAM/WALL	25
4	SLAB	20

2. DEVELOPEMENT LENGTHS (Ld) :FOR Fe500

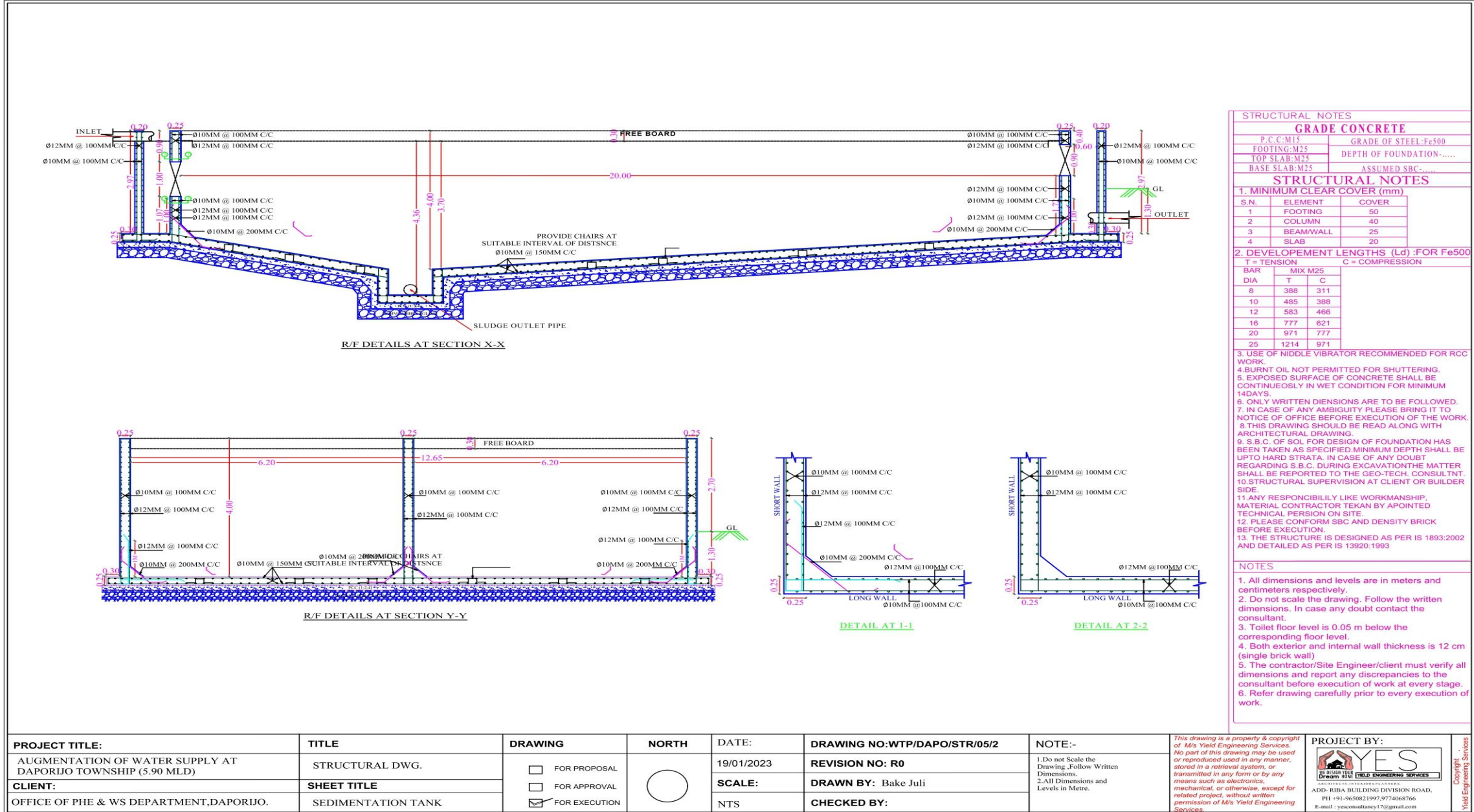
BAR	MIX M25	T = TENSION	C = COMPRESSION
DIA	T	C	
8	388	311	
10	485	388	
12	583	466	
16	777	621	
20	971	777	
25	1214	971	

3. USE OF MIDDLE VIBRATOR RECOMMENDED FOR RCC WORK  
 4. BURNT OIL NOT PERMITTED FOR SHUTTERING.  
 5. EXPOSED SURFACE OF CONCRETE SHALL BE CONTINUOUSLY IN WET CONDITION FOR MINIMUM 14 DAYS.  
 6. ONLY WRITTEN DIENSIONS ARE TO BE FOLLOWED.  
 7. IN CASE OF ANY AMBIGUITY PLEASE BRING IT TO NOTICE OF OFFICE BEFORE EXECUTION OF THE WORK.  
 8. THIS DRAWING SHOULD BE READ ALONG WITH ARCHITECTURAL DRAWING.  
 9. S.B.C. OF SOL FOR DESIGN OF FOUNDATION HAS BEEN TAKEN AS SPECIFIED. MINIMUM DEPTH SHALL BE UPTO HARD STRATA. IN CASE OF ANY DOUBT REGARDING S.B.C. DURING EXCAVATION THE MATTER SHALL BE REPORTED TO THE GEO-TECH. CONSULTNT.  
 10. STRUCTURAL SUPERVISION AT CLIENT OR BUILDER SIDE.  
 11. ANY RESPONSIBILLY LIKE WORKMANSHIP, MATERIAL CONTRACTOR TEKAN BY APOINTED TECHNICAL PERSION ON SITE.  
 12. PLEASE CONFORM SBC AND DENSITY BRICK BEFORE EXECUTION.  
 13. THE STRUCTURE IS DESIGNED AS PER IS 1893:2002 AND DETAILED AS PER IS 13920:1993.

**NOTES**

- All dimensions and levels are in meters and centimeters respectively.
- Do not scale the drawing. Follow the written dimensions. In case any doubt contact the consultant.
- Toilet floor level is 0.05 m below the corresponding floor level.
- Both exterior and internal wall thickness is 12 cm (single brick wall)
- The contractor/Site Engineer/client must verify all dimensions and report any discrepancies to the consultant before execution of work at every stage.
- Refer drawing carefully prior to every execution of work.

<b>PROJECT TITLE:</b> AUGMENTATION OF WATER SUPPLY AT DAPORJO TOWNSHIP (5.90 MLD)	<b>TITLE</b> STRUCTURAL DWG.	<b>DRAWING</b> <input checked="" type="checkbox"/> FOR PROPOSAL <input type="checkbox"/> FOR APPROVAL <input type="checkbox"/> FOR EXECUTION	<b>NORTH</b> 	<b>DATE:</b> 19/01/2023	<b>DRAWING NO:WTP/DAPO/STR/05/1</b> <b>REVISION NO: R0</b>	<b>NOTE:-</b> 1. Do not Scale the Drawing. Follow Written Dimensions. 2. All Dimensions and Levels in Metre.	<i>This drawing is a property &amp; copyright of M/s Yield Engineering Services. No part of this drawing may be used or reproduced used in any manner, stored in a retrieval system, or transmitted in any form or by any means such as electronics, mechanical, or otherwise, except for related project, without written permission of M/s Yield Engineering Services.</i>	<b>PROJECT BY:</b>  ADD- RIBA BUILDING DIVISION ROAD, PH +91-9650821997,9774068766 E-mail : yesconsultancy17@gmail.com
<b>CLIENT:</b> OFFICE OF PHE & WS DEPARTMENT, DAPORJO.	<b>SHEET TITLE</b> SEDIMENTATION TANK			<b>SCALE:</b> NTS	<b>DRAWN BY:</b> Bake Juli <b>CHECKED BY:</b>			



**STRUCTURAL NOTES**

<b>GRADE CONCRETE</b>	
P.C.C:M15	GRADE OF STEEL:Fe500
FOOTING:M25	DEPTH OF FOUNDATION:.....
TOP SLAB:M25	ASSUMED SBC:.....
BASE SLAB:M25	

**STRUCTURAL NOTES**

1. MINIMUM CLEAR COVER (mm)

S.N.	ELEMENT	COVER
1	FOOTING	50
2	COLUMN	40
3	BEAM/WALL	25
4	SLAB	20

2. DEVELOPMENT LENGTHS (Ld) :FOR Fe500

BAR DIA	MIX M25	
	T	C
8	388	311
10	485	388
12	583	466
16	777	621
20	971	777
25	1214	971

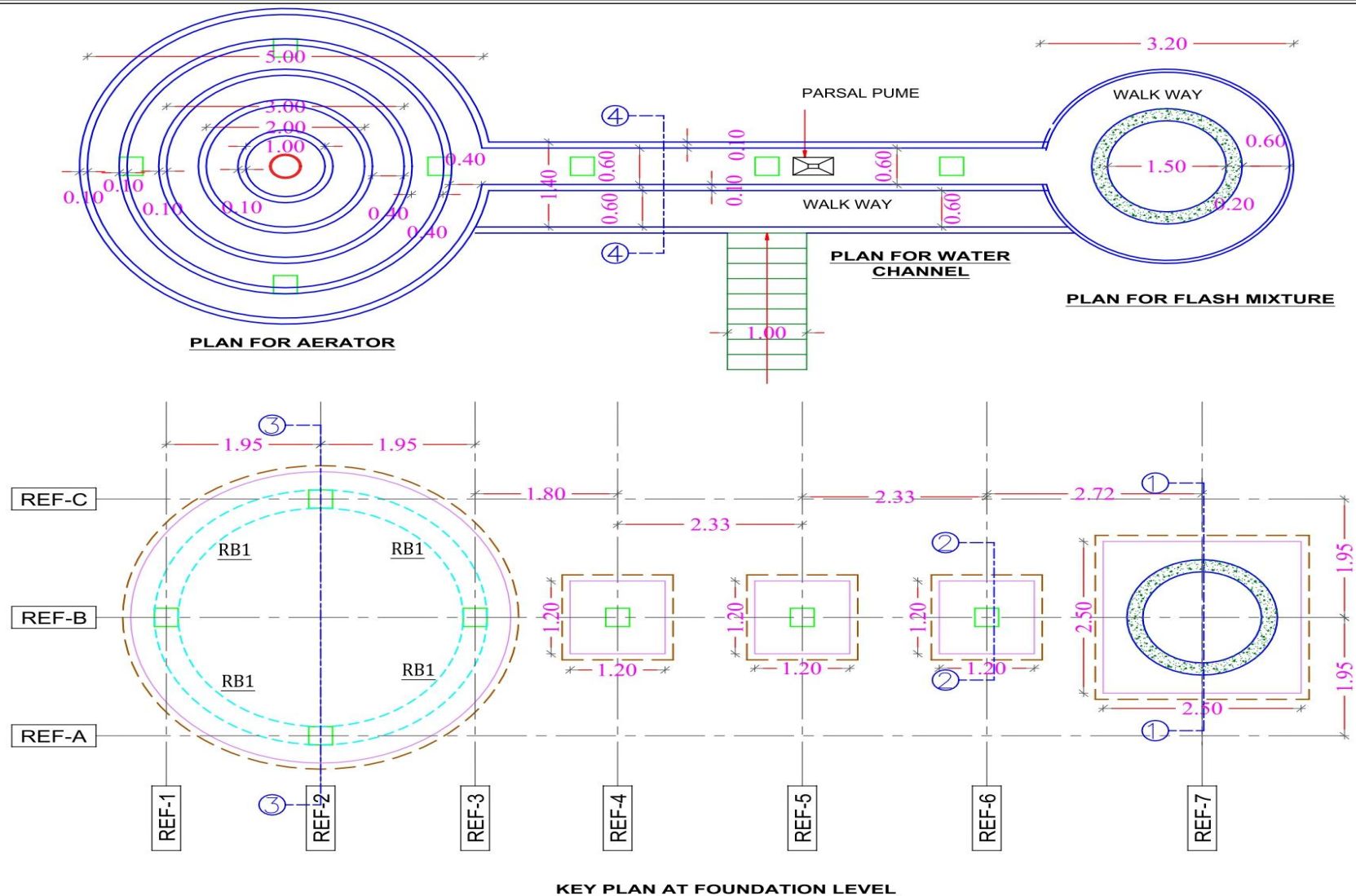
3. USE OF MIDDLE VIBRATOR RECOMMENDED FOR RCC WORK.  
 4. BURNT OIL NOT PERMITTED FOR SHUTTERING.  
 5. EXPOSED SURFACE OF CONCRETE SHALL BE CONTINUOUSLY IN WET CONDITION FOR MINIMUM 14DAYS.  
 6. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED.  
 7. IN CASE OF ANY AMBIGUITY PLEASE BRING IT TO NOTICE OF OFFICE BEFORE EXECUTION OF THE WORK.  
 8. THIS DRAWING SHOULD BE READ ALONG WITH ARCHITECTURAL DRAWING.  
 9. S.B.C. OF SOL FOR DESIGN OF FOUNDATION HAS BEEN TAKEN AS SPECIFIED MINIMUM DEPTH SHALL BE UPTO HARD STRATA. IN CASE OF ANY DOUBT REGARDING S.B.C. DURING EXCAVATION THE MATTER SHALL BE REPORTED TO THE GEO-TECH. CONSULTANT.  
 10. STRUCTURAL SUPERVISION AT CLIENT OR BUILDER SIDE.  
 11. ANY RESPONSIBILITY LIKE WORKMANSHIP, MATERIAL CONTRACTOR TEKAN BY APPOINTED TECHNICAL PERSON ON SITE.  
 12. PLEASE CONFORM SBC AND DENSITY BRICK BEFORE EXECUTION.  
 13. THE STRUCTURE IS DESIGNED AS PER IS 1893:2002 AND DETAILED AS PER IS 13920:1993

**NOTES**

- All dimensions and levels are in meters and centimeters respectively.
- Do not scale the drawing. Follow the written dimensions. In case any doubt contact the consultant.
- Toilet floor level is 0.05 m below the corresponding floor level.
- Both exterior and internal wall thickness is 12 cm (single brick wall)
- The contractor/Site Engineer/client must verify all dimensions and report any discrepancies to the consultant before execution of work at every stage.
- Refer drawing carefully prior to every execution of work.

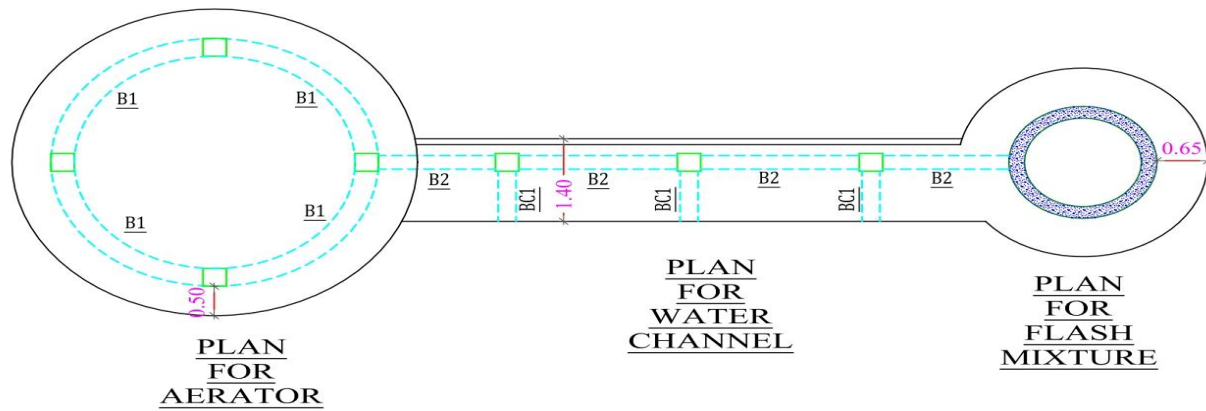
<b>PROJECT TITLE:</b> AUGMENTATION OF WATER SUPPLY AT DAPORJO TOWNSHIP (5.90 MLD)	<b>TITLE</b> STRUCTURAL DWG.	<b>DRAWING</b> <input type="checkbox"/> FOR PROPOSAL <input type="checkbox"/> FOR APPROVAL <input checked="" type="checkbox"/> FOR EXECUTION	<b>NORTH</b> 	<b>DATE:</b> 19/01/2023	<b>DRAWING NO:</b> WTP/DAPO/STR/05/2	<b>NOTE:-</b> 1. Do not Scale the Drawing. Follow Written Dimensions. 2. All Dimensions and Levels in Metre.	<i>This drawing is a property &amp; copyright of M/s Yield Engineering Services. No part of this drawing may be used or reproduced used in any manner, stored in a retrieval system, or transmitted in any form or by any means such as electronics, mechanical, or otherwise, except for related project, without written permission of M/s Yield Engineering Services.</i>	<b>PROJECT BY:</b>  ADD: RIBA BUILDING DIVISION ROAD, PFI - 91-96582197-977468766 E-mail : yesconsultancy17@gmail.com
<b>CLIENT:</b> OFFICE OF PHE & WS DEPARTMENT, DAPORJO.	<b>SHEET TITLE</b> SEDIMENTATION TANK			<b>SCALE:</b> NTS	<b>REVISION NO:</b> R0			
					<b>DRAWN BY:</b> Bake Juli			
					<b>CHECKED BY:</b>			

NESIDS-DRJ

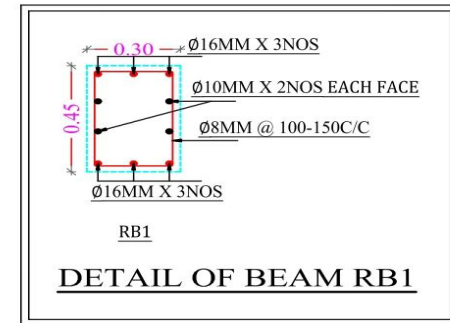
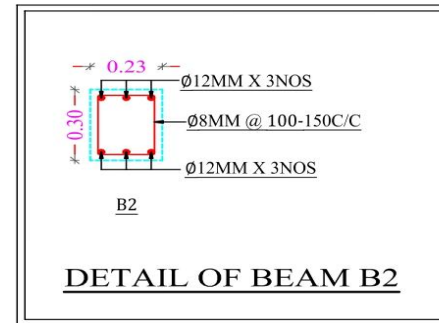
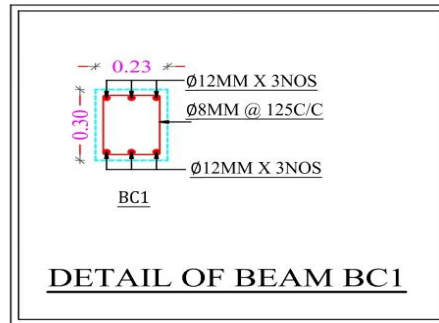
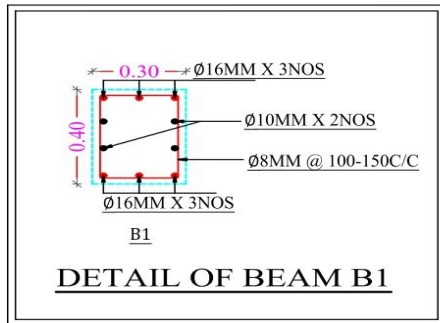
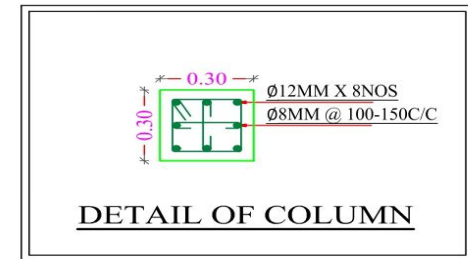


KEY PLAN AT FOUNDATION LEVEL

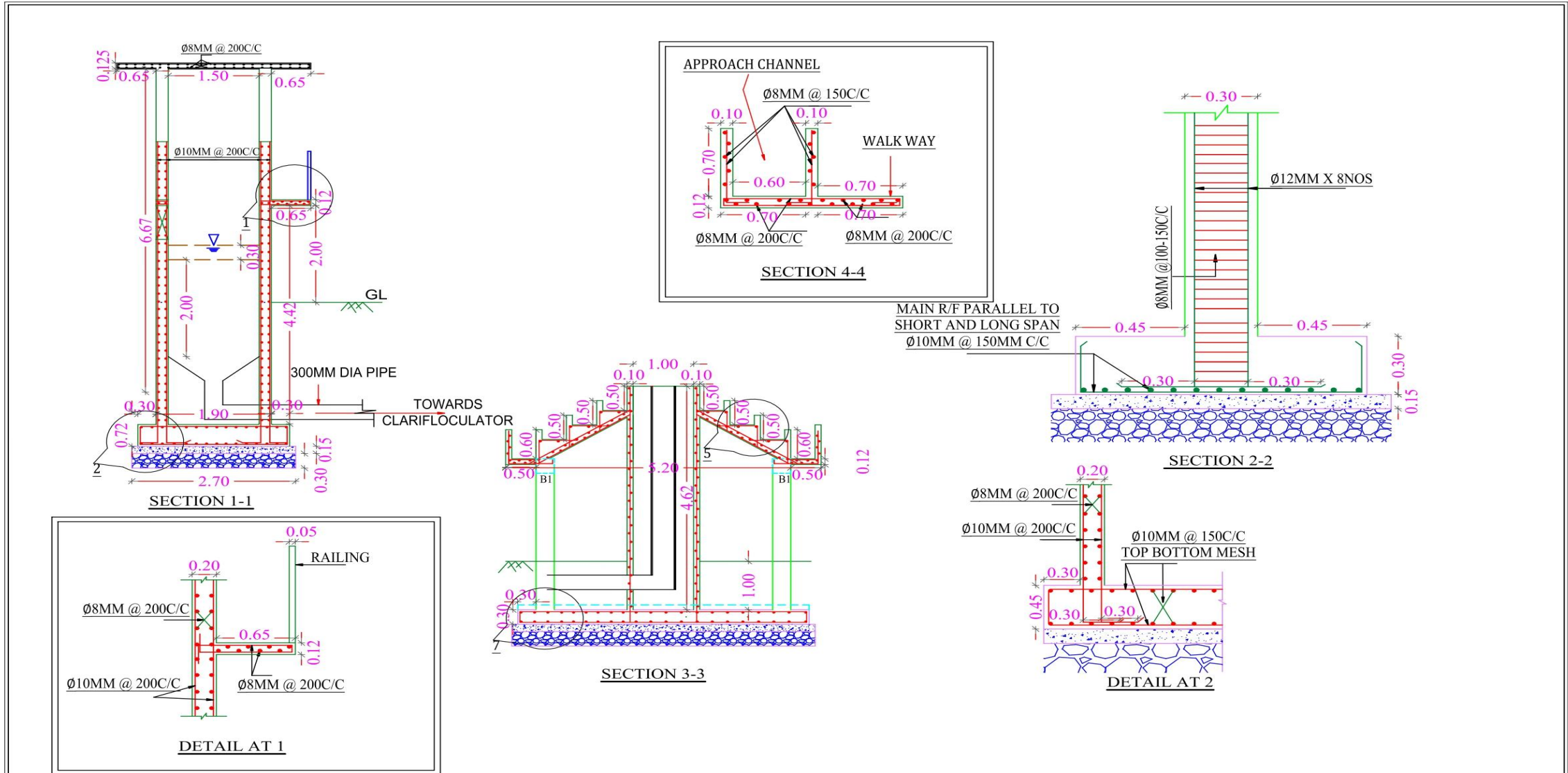
<b>PROJECT TITLE:</b> AUGMENTATION OF WATER SUPPLY AT DAPORIJO TOWNSHIP (5.90MLD)	<b>TITLE</b> STRUCTURAL DWG.	<b>DRAWING</b> <input type="checkbox"/> FOR PROPOSAL <input type="checkbox"/> FOR APPROVAL <input checked="" type="checkbox"/> FOR EXECUTION	<b>NORTH</b> 	<b>DATE:</b> 25/01/2023	<b>DRAWING NO:</b> WTP/DAPO/STR/06/1	<b>NOTE:-</b> 1. Do not Scale the Drawing. Follow Written Dimensions. 2. All Dimensions and Levels in Metre.	<small>This drawing is a property &amp; copyright of M/s Yield Engineering Services. No part of this drawing may be used or reproduced used in any manner, stored in a retrieval system, or transmitted in any form or by any means such as electronic, mechanical, or otherwise, except for related project, without written permission of M/s Yield Engineering Services.</small>
<b>CLIENT:</b> PHE & WATER SUPPLY DIVISION, DAPORIJO.	<b>SHEET TITLE</b> AERATOR CUM FLASH MIXTURE			<b>SCALE:</b> NTS	<b>REVISION NO:</b>		
				<b>DRAWN BY:</b> Bake Juli	<b>CHECKED BY:</b> SELF		



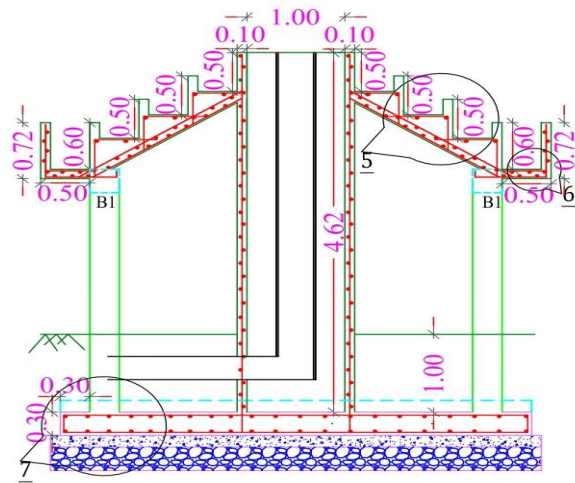
**KEY PLAN AT BEAM LEVEL**



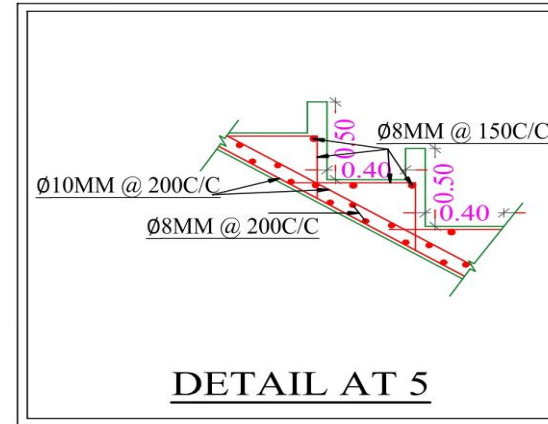
<b>PROJECT TITLE:</b> AUGMENTATION OF WATER SUPPLY AT DAPORIJO TOWNSHIP (5.90MLD)	<b>TITLE:</b> STRUCTURAL DETAILING AT BEAM LEVEL	<b>DRAWING:</b> <input type="checkbox"/> FOR PROPOSAL <input type="checkbox"/> FOR APPROVAL <input checked="" type="checkbox"/> FOR EXECUTION	<b>NORTH:</b> 	<b>DATE:</b> 25/01/2023	<b>DRAWING NO:</b> WTP/DAPO/STR/06/2	<b>NOTE:-</b> 1. Do not Scale the Drawing. Follow Written Dimensions. 2. All Dimensions and Levels in Metre.	This drawing is a property & copyright of M/s Yield Engineering Services. No part of this drawing may be used or reproduced in any manner, stored in a retrieval system, or transmitted in any form or by any means such as electronics, mechanical, or otherwise, except for related project, without written permission of M/s Yield Engineering Services.	 ARCHITECTS, INTERIOR PLANNERS ADD- PBEA BUILDING DIVISION ROAD, PH - 91-9650821997, 9774068766. E-mail : yesconsultancy17@gmail.com
<b>CLIENT:</b> PHE & WATER SUPPLY DIVISION, DAPORIJO.	<b>SHEET TITLE:</b> AERATOR CUM FLASH MIXTURE			<b>SCALE:</b> NTS	<b>REVISION NO:</b>			
				<b>DRAWN BY:</b> Bake Juli	<b>CHECKED BY:</b> Self			



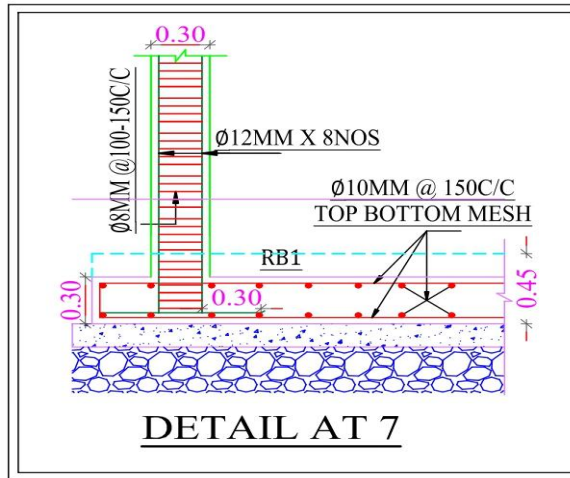
<b>PROJECT TITLE:</b> AUGMENTATION OF WATER SUPPLY AT DAPORJO TOWNSHIP (5.90MLD)	<b>TITLE</b> STRUCTURAL DWG.	<b>DRAWING</b> <input type="checkbox"/> FOR PROPOSAL <input type="checkbox"/> FOR APPROVAL <input checked="" type="checkbox"/> FOR EXECUTION	<b>NORTH</b> 	<b>DATE:</b> 25/01/2023	<b>DRAWING NO:</b> WTP/DAPO/STR/06/3	<b>NOTE:-</b> 1 Do not Scale the Drawing ,Follow Written Dimensions. 2.All Dimensions and Levels in Metre.	<p><i>This drawing is a property &amp; copyright of M/s Yield Engineering Services. No part of this drawing may be used or reproduced used in any manner, stored in a retrieval system, or transmitted in any form or by any means such as electronics, mechanical, or otherwise, except for related project, without written permission of M/s Yield Engineering Services.</i></p> ADD- RIBA BUILDING DIVISION ROAD, PH +91-9650821997,9774068766 E-mail : yesconsultancy17@gmail.com
<b>CLIENT:</b> PHE & WATER SUPPLY DIVISION, DAPORJO.	<b>SHEET TITLE</b> AERATOR CUM FLASH MIXTURE			<b>SCALE:</b> NTS	<b>REVISION NO:</b>		
				<b>DRAWN BY:</b> Bake Juli	<b>CHECKED BY:</b> SELF		



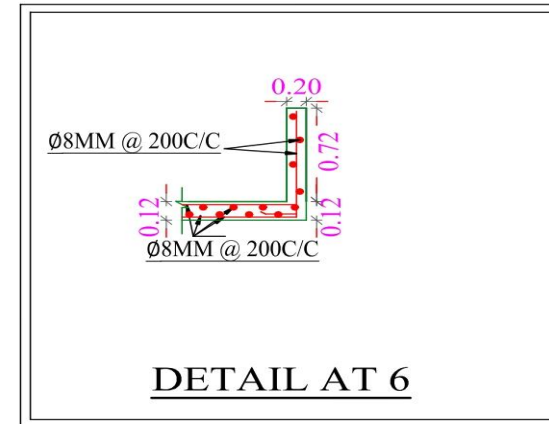
**SECTION 3-3**



**DETAIL AT 5**

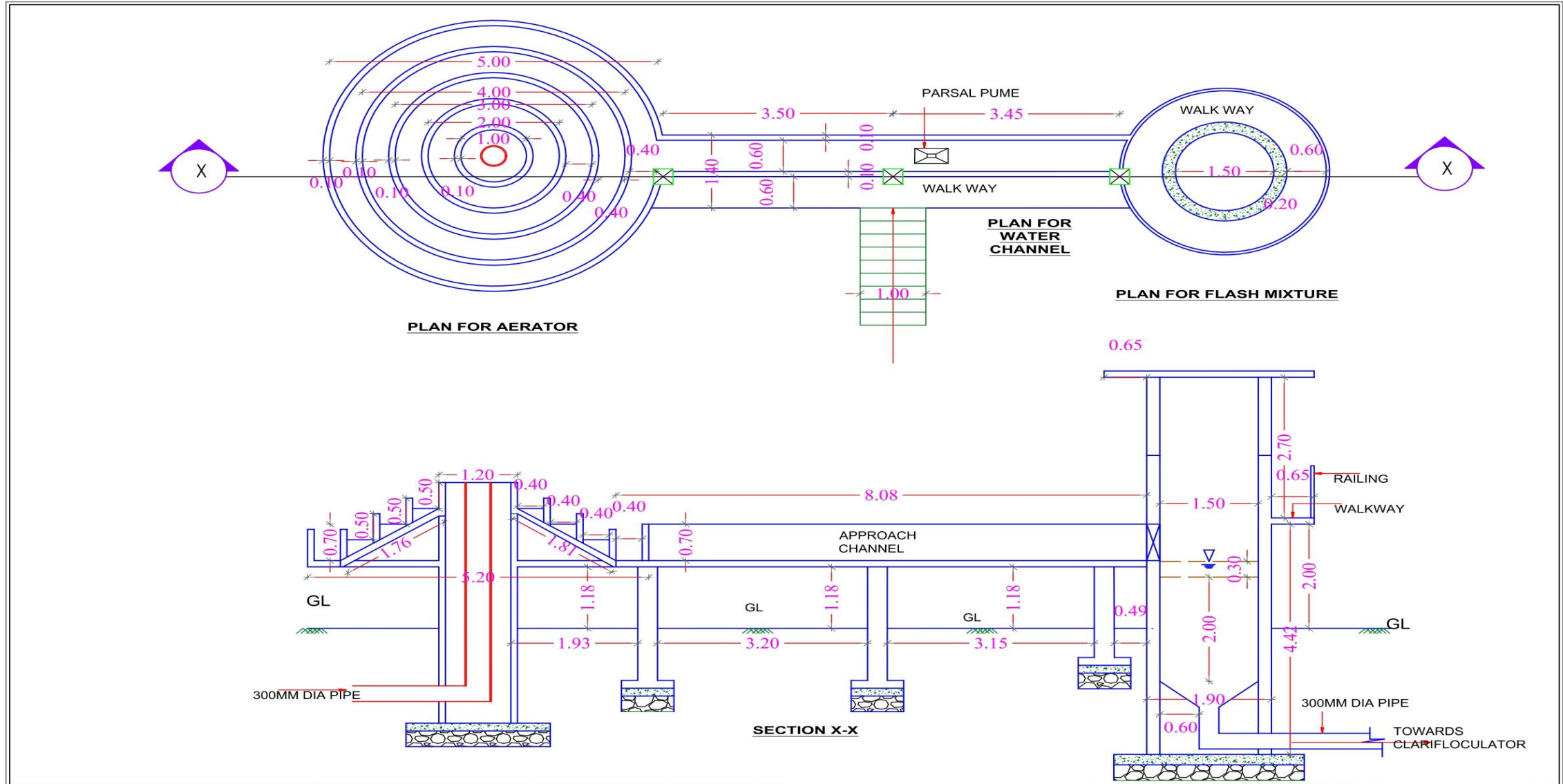


**DETAIL AT 7**



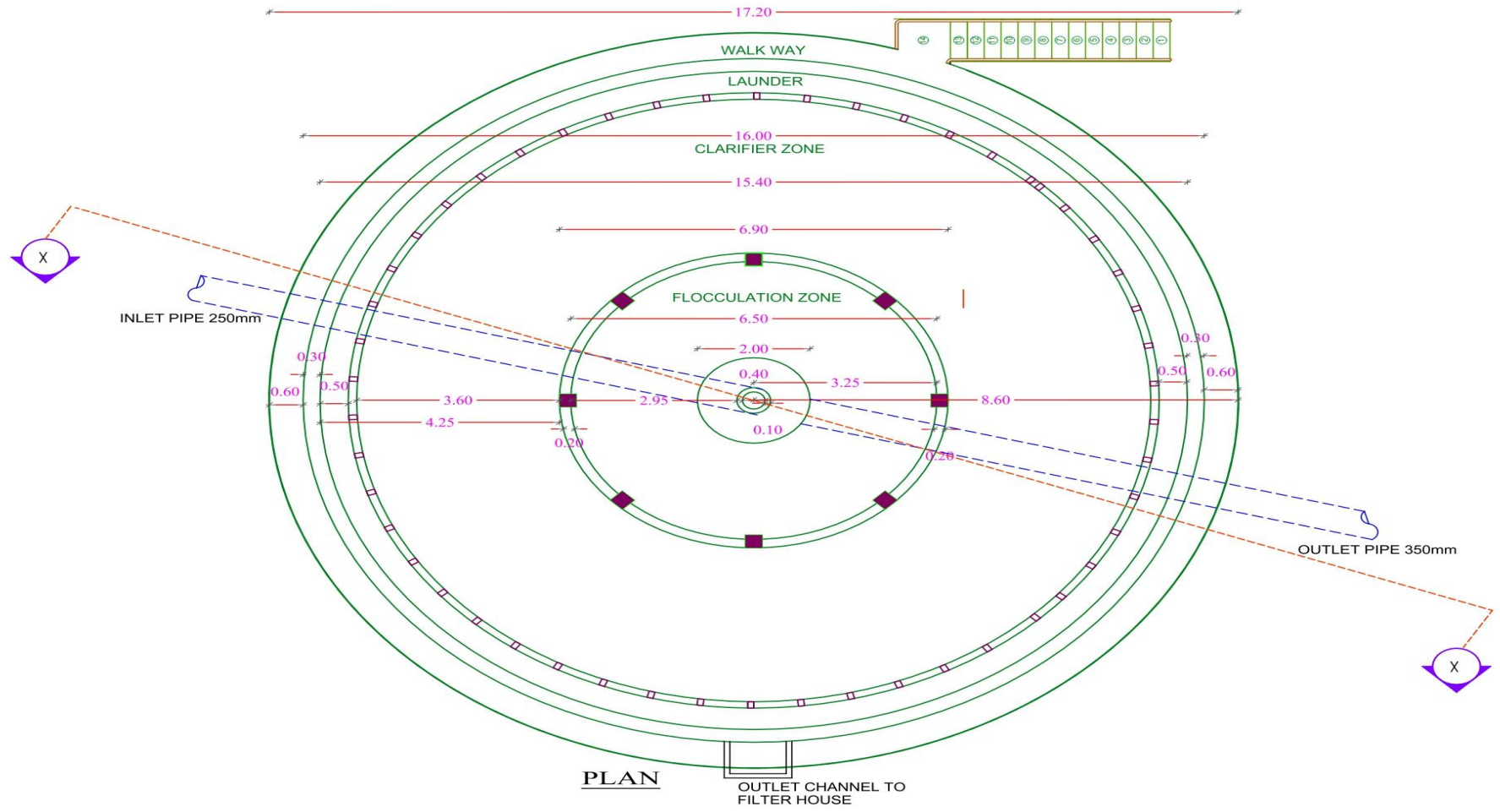
**DETAIL AT 6**

<b>PROJECT TITLE:</b> AUGMENTATION OF WATER SUPPLY AT DAPORIJO TOWNSHIP (5.90MLD)	<b>TITLE</b> STRUCTURAL DWG.	<b>DRAWING</b> <input type="checkbox"/> FOR PROPOSAL <input type="checkbox"/> FOR APPROVAL <input checked="" type="checkbox"/> FOR EXECUTION	<b>NORTH</b> 	<b>DATE:</b> 25/01/2023	<b>DRAWING NO: WTP/DAPO/STR/06/4</b>	<b>NOTE:-</b> 1. Do not Scale the Drawing. Follow Written Dimensions. 2. All Dimensions and Levels in Metre.	This drawing is a property & copyright of M/s Yield Engineering Services. No part of this drawing may be used or reproduced used in any manner, stored in a retrieval system, or transmitted in any form or by any means such as electronics, mechanical, or otherwise, except for related project, without written permission of M/s Yield Engineering Services.	 YIELD ENGINEERING SERVICES ADD- RIBA BUILDING DIVISION ROAD, PH - 91-9650621997, 9774068706 E-mail : yesconsultancy17@gmail.com
<b>CLIENT:</b> PHE & WATER SUPPLY DIVISION, DAPORIJO.	<b>SHEET TITLE</b> AERATOR CUM FLASH MIXTURE			<b>SCALE:</b> NTS	<b>REVISION NO:</b>			
				<b>DRAWN BY:</b> Bake Juli	<b>CHECKED BY:</b> SELF			



<b>PROJECT TITLE:</b> AUGMENTATION OF WATER SUPPLY AT DAPORIJO TOWNSHIP (5.90MLD)	<b>TITLE:</b> ARCHITECTURAL DWG.	<b>DRAWING:</b> <input type="checkbox"/> FOR PROPOSAL <input type="checkbox"/> FOR APPROVAL <input checked="" type="checkbox"/> FOR EXECUTION	<b>NORTH:</b> 	<b>DATE:</b> 25/01/2023	<b>DRAWING NO:</b> WTP/DAPJO/ARC/06/A	<b>NOTE:-</b> 1. Do not Scale the Drawing. Follow Written Dimensions. 2. All Dimensions and Levels in Metre.	This drawing is a property & copyright of M/s Yield Engineering Services. No part of this drawing may be used or reproduced used in any manner, stored in a retrieval system, or transmitted in any form or by any means such as electronic, mechanical, or otherwise, except for related project, without written permission of M/s Yield Engineering Services.	 ADD: RIBA BUILDING DIVISION ROAD, PH +91-9650821997.9774068766 E-mail : yesconsultancy17@gmail.com
<b>CLIENT:</b> PHE & WATER SUPPLY DIVISION, DAPORIJO.	<b>SHEET TITLE:</b> AERATOR CUM FLASH MIXTURE			<b>SCALE:</b> NTS	<b>REVISION NO:</b>			

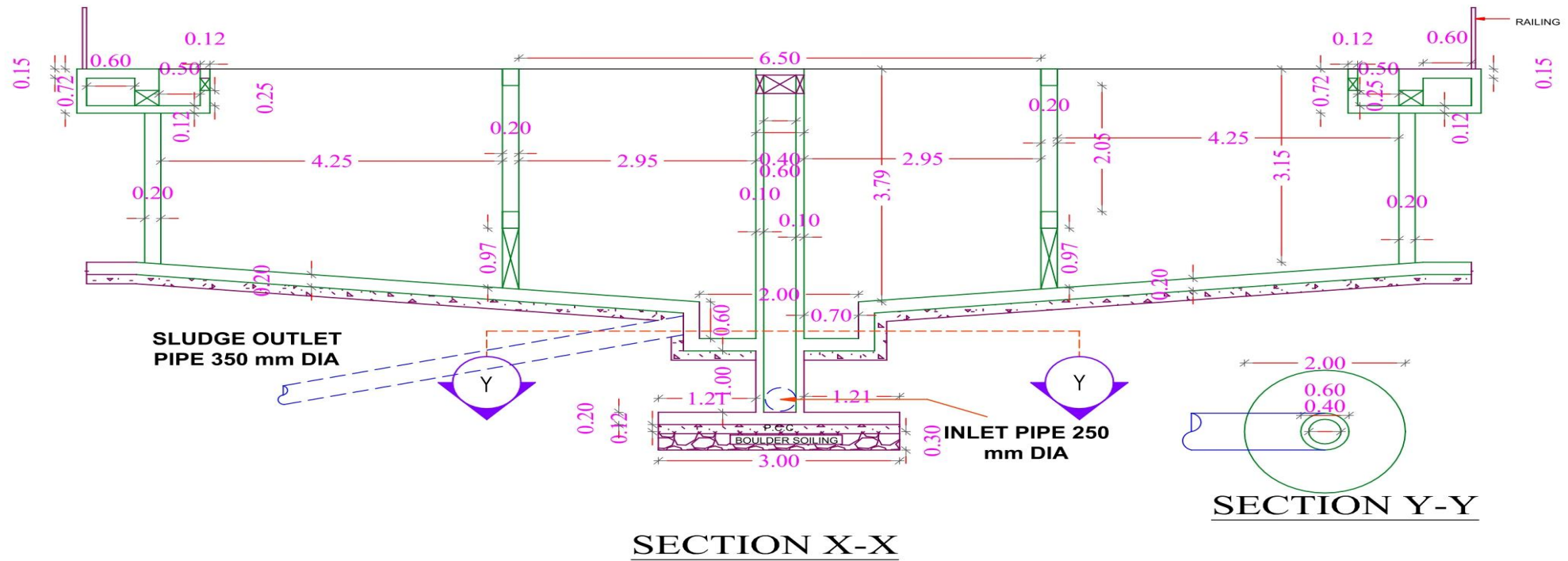
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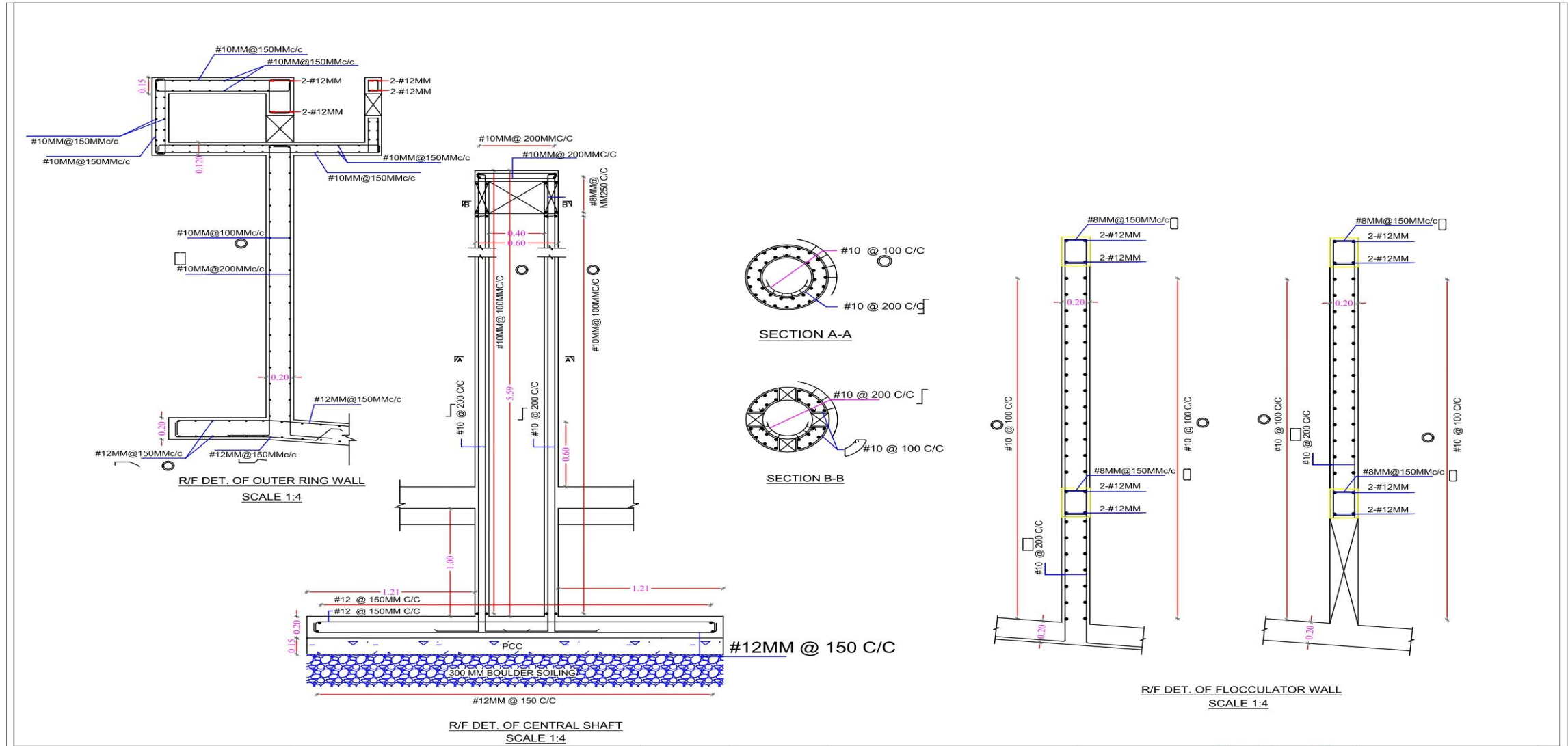
PLAN  
OUTLET CHANNEL TO FILTER HOUSE

<b>PROJECT TITLE:</b>	<b>SUB TITLE</b>	<b>DRAWING</b>	<b>NORTH</b>	<b>DATE:</b>	<b>DRAWING NO:WTP/DAPO/ARC/07/A</b>	<b>NOTE:</b>	This drawing is a property & copyright of M/s Yield Engineering Services. No part of this drawing may be used or reproduced used in any manner, stored in a retrieval system, or transmitted in any form or by any means such as electronics, mechanical, or otherwise, except for related project, without written permission of M/s Yield Engineering Services.	<b>PROJECT BY:</b>
AUGMENTATION OF WATER SUPPLY AT DAPORIJO TOWNSHIP (5.90 MLD)	ARCHITECTURAL DWG	<input type="checkbox"/> FOR PROPOSAL <input type="checkbox"/> FOR APPROVAL <input checked="" type="checkbox"/> FOR EXECUTION		15/01/2023	<b>REVISION NO: R0</b>	1.DO NOT scale the drawing, follow written dimensions. 2.All Dimensions and levels are in meter.		PROJECTS, INTERIORS, PLANNING ADDRESS- Riba Building Division Road, Itanagar, Arunachal Pradesh PHONE +91-9650821997, 9774068766 E-mail : yesconsultancy17@gmail.com
<b>CLIENT:</b>	<b>SHEET TITLE</b>			<b>SCALE:</b>	<b>DRAWN BY: SELF</b>			
PHE & WATER SUPPLY DIVISION,DAPORIJO.	CLARIFLOCCULATOR (16M DIA)			NTS	<b>CHECKED BY: Er.BAKE JULI</b>			

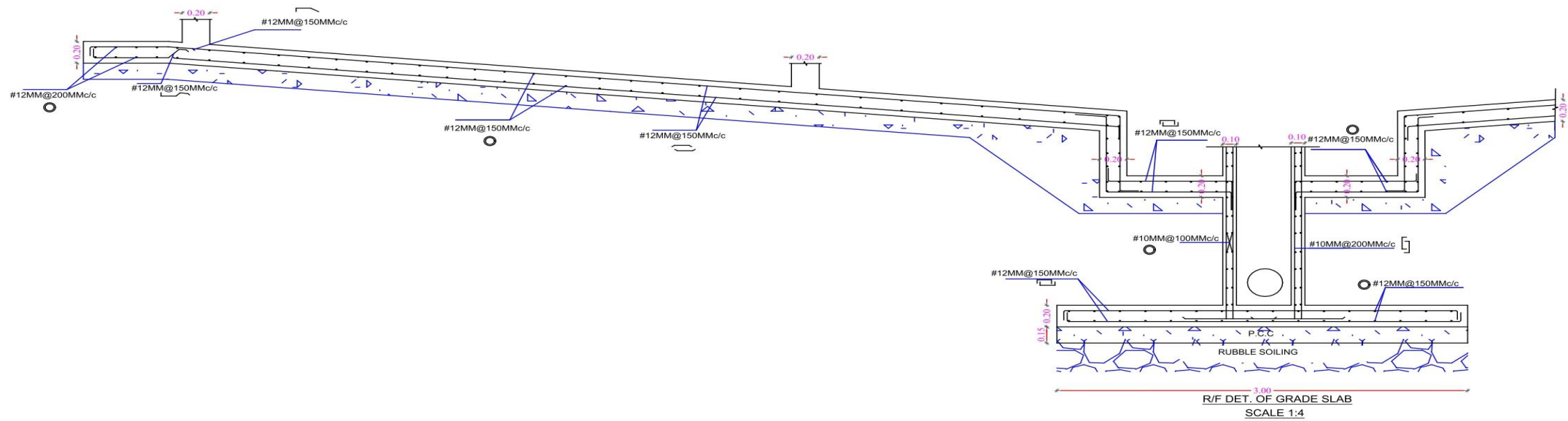





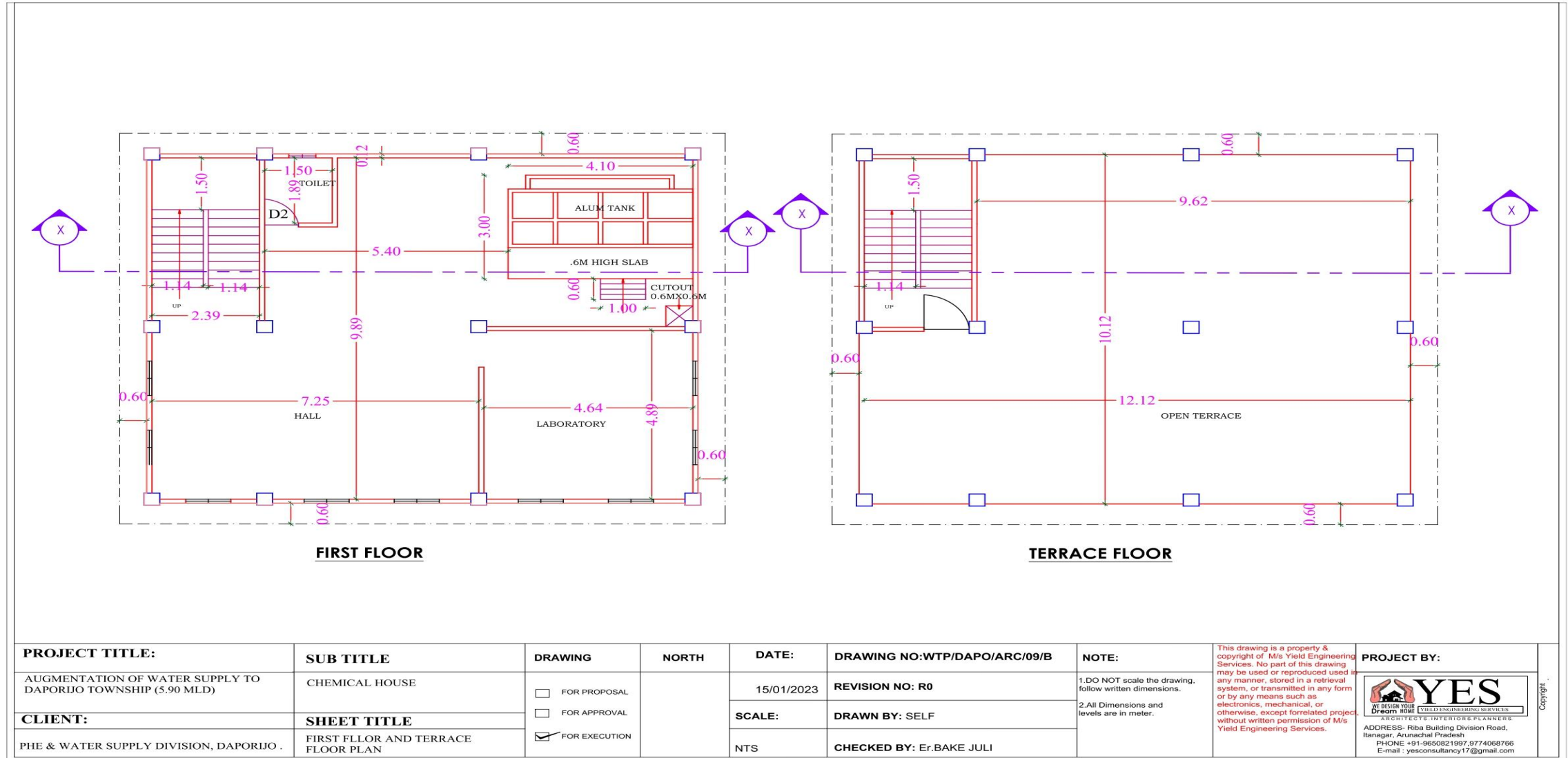
<b>PROJECT TITLE:</b>	<b>SUB TITLE</b>	<b>DRAWING</b>	<b>NORTH</b>	<b>DATE:</b>	<b>DRAWING NO:</b> WTP/DAPO/ARC/07/B	<b>NOTE:</b>	This drawing is a property & copyright of M/s Yield Engineering Services. No part of this drawing may be used or reproduced used in any manner, stored in a retrieval system, or transmitted in any form or by any means such as electronics, mechanical, or otherwise, except for related project without written permission of M/s Yield Engineering Services.	<b>PROJECT BY:</b>
AUGMENTATION OF WATER SUPPLY AT DAPORIJO TOWNSHIP (5.90 MLD)	ARCHITECTURAL DWG	<input type="checkbox"/> FOR PROPOSAL <input type="checkbox"/> FOR APPROVAL <input checked="" type="checkbox"/> FOR EXECUTION		15/01/2023	<b>REVISION NO:</b> R0	1. DO NOT scale the drawing, follow written dimensions. 2. All Dimensions and levels are in meter.		ADDRESS- Riba Building Division Road, Itanagar, Arunachal Pradesh PHONE +91-9650821997, 9774068766 E-mail : yesconsultancy17@gmail.com
<b>CLIENT:</b>	<b>SHEET TITLE</b>				<b>DRAWN BY:</b> SELF			
PHE & WATER SUPPLY DIVISION, DAPORIJO.	CLARIFLOCCULATOR (16M DIA)			NTS	<b>CHECKED BY:</b> Er. BAKE JULI			

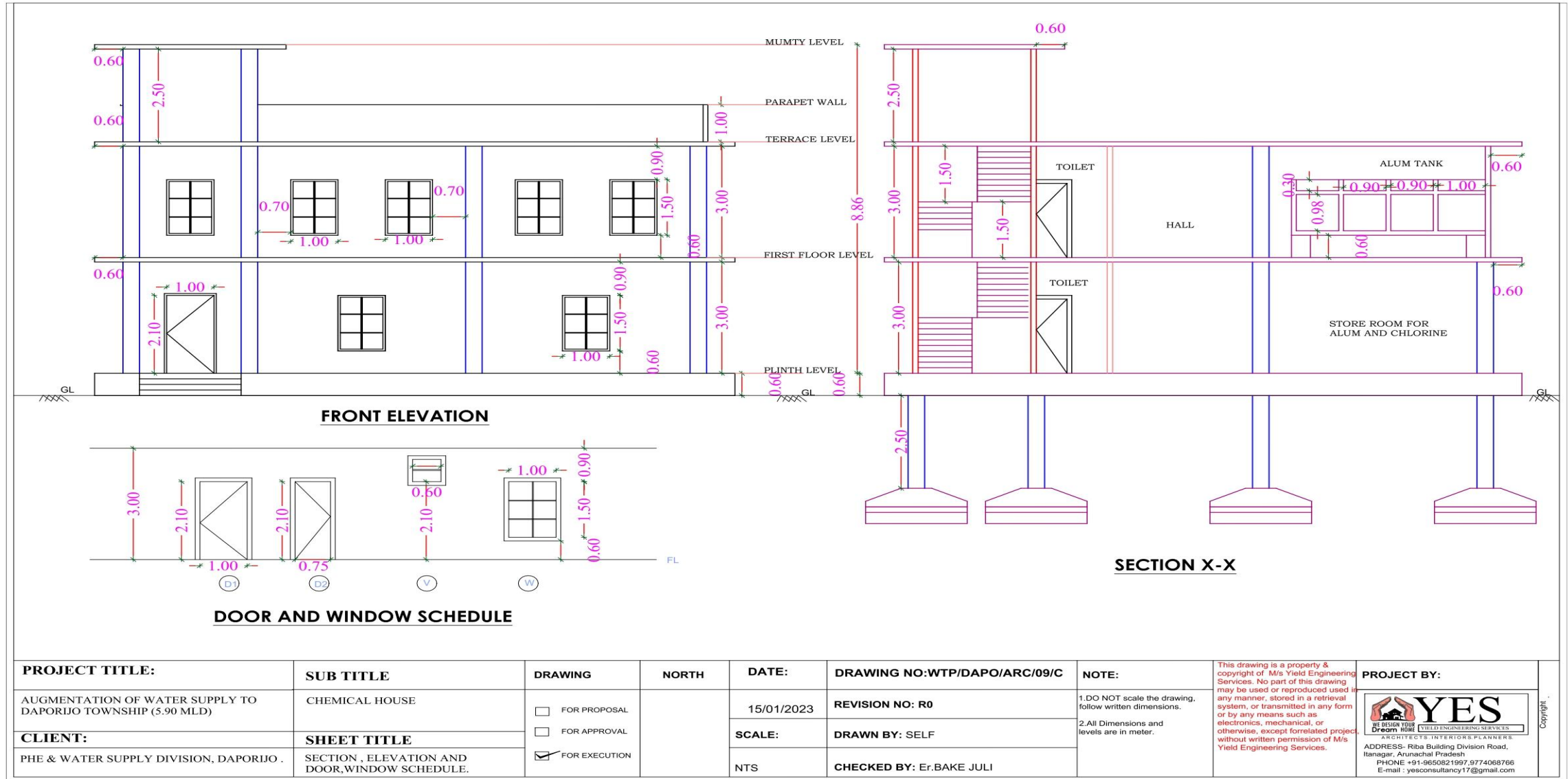


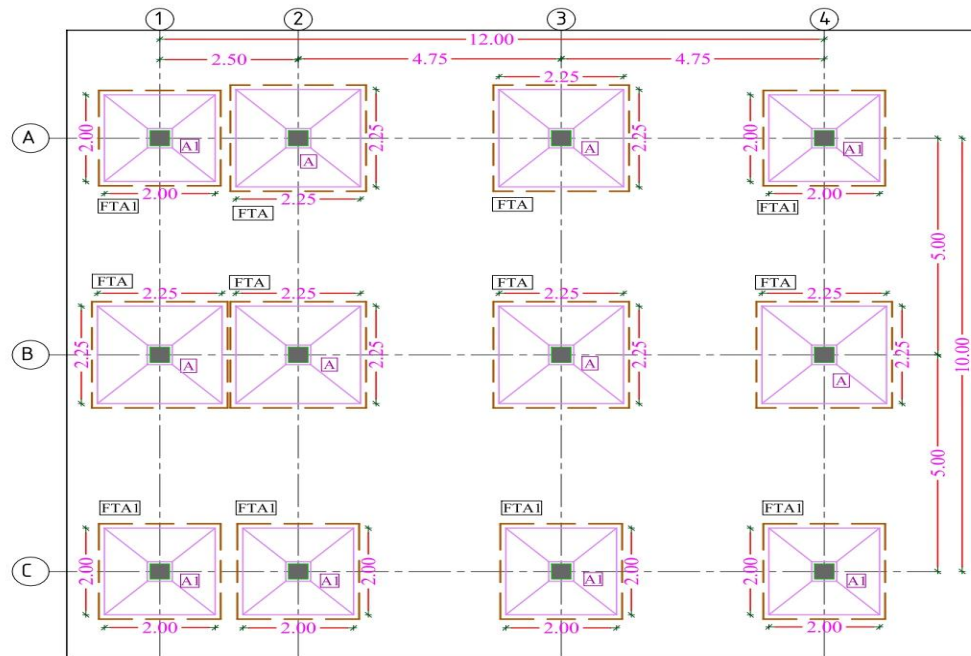
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AUGMENTATION OF WATER SUPPLY AT DAPORIJO TOWNSHIP (5.90 MLD).	STRUCTURAL DETAILING DWG.	<input type="checkbox"/> FOR PROPOSAL <input type="checkbox"/> FOR APPROVAL <input checked="" type="checkbox"/> FOR EXECUTION		15/01/2023	<b>REVISION NO:</b> R0	1. DO NOT scale the drawing, follow written dimensions. 2. All Dimensions and levels are in meter.		YES WE BUILD YOUR DREAM HOME YIELD ENGINEERING SERVICES ARCHITECTS- INTERIORS- PLANNERS
<b>CLIENT:</b>	<b>SHEET TITLE</b>				<b>DRAWN BY:</b> SELF			
PHE & WATER SUPPLY DIVISION, DAPORIJO.	CLARIFLOCCULATOR (16M DIA)			NTS	<b>CHECKED BY:</b> Er. BAKE JULI			ADDRESS:- Riba Building Division Road, Itanagar, Arunachal Pradesh PHONE +91-9650821997, 9774068766 E-mail : yesconsultancy17@gmail.com



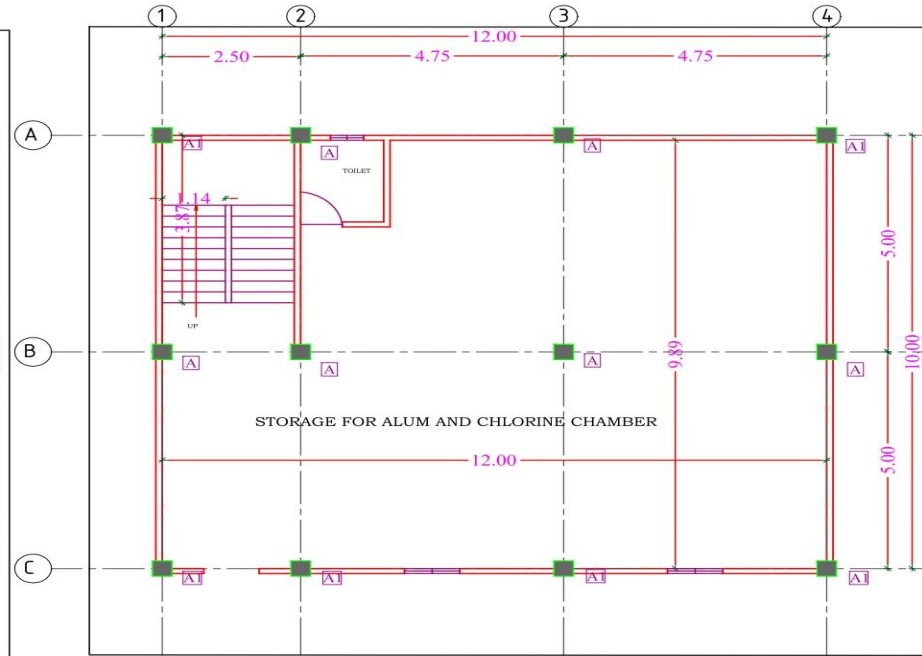
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AUGMENTATION OF WATER SUPPLY AT DAPORJO TOWNSHIP (5.90 MLD)	STRUCTURAL DETAILING DWG.	<input type="checkbox"/> FOR PROPOSAL <input type="checkbox"/> FOR APPROVAL <input checked="" type="checkbox"/> FOR EXECUTION		15/01/2023	<b>REVISION NO:</b> R0	1.DO NOT scale the drawing, follow written dimensions. 2.All Dimensions and levels are in meter.		 ADDRESS- Riba Building Division Road, Itanagar, Arunachal Pradesh PHONE +91-9650821997,9774068766 E-mail : yesconsultancy17@gmail.com
<b>CLIENT:</b>	<b>SHEET TITLE</b>				<b>DRAWN BY:</b> SELF			
OFFICE OF PHE & WS DEPARTMENT,DAPORJO.	CLARIFLOCCULATOR (16M DIA)			NTS	<b>CHECKED BY:</b> Er.BAKE JULI			







CENTRE LINE PLAN AT COLUMN AND FOOTING DETAILS



CENTRE LINE PLAN AT COLUMN DETAILS

SCHEDULE FOR FOOTING

SR. NO	TYPE OF COLUMN	TYPE OF FOOTING	EXCAVATION SIZE IN MM	FOOTING SIZE IN MM	DEPTH IN MM 'D'	DEPTH IN MM 'd'	BOTTOM MAIN STEEL	
							PARALLEL TO SHORT SPAN	PARALLEL TO LONG SPAN
1	A	FTA	2450 X 2450	2250 X 2250	600	250	Ø 10MM X 17 NOS.	Ø 10MM X 17 NOS.
2	A1	FTA1	2200 X 2200	2000 X 2000	450	150	Ø 10MM X 17 NOS.	Ø 10 MM X 17 NOS.

GRADE CONCRETE	
F.T. C-M15	GRADE OF STEEL Fe500
COLUMN - M25	BEAM - M25
WALL - M25	SLAB - M25
DOF - 3M	SBC : 200KN/SQM.

STRUCTURAL NOTES

1. MINIMUM CLEAR COVER (mm)

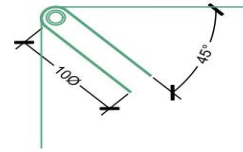
S.N.	ELEMENT	COVER
1	FOOTING	50
2	COLUMN	40
3	BEAM	25
4	SLAB	20
5	WALL	25

2. DEVELOPMENT LENGTHS(Ld) FOR Fe500

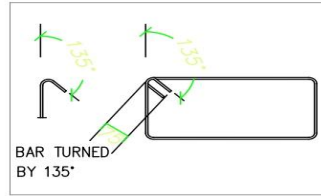
BAR DIA	MIX M25	T	C
8	358	311	
10	485	388	
12	583	466	
16	777	621	
20	991	777	
25	1214	971	

- USE OF MIDDLE VIBRATOR RECOMMENDED FOR RCC WORK.
- BURNT OIL NOT PERMITTED FOR SHUTTERING.
- EXPOSED SURFACE OF CONCRETE SHALL BE CONTINUOUSLY IN WET CONDITION FOR MINIMUM 14 DAYS.
- ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED.
- IN CASE OF ANY AMBIGUITY PLEASE BRING IT TO NOTICE OF OFFICE BEFORE EXECUTION OF THE WORK.
- THIS DRAWING SHOULD BE READ ALONG WITH ARCHITECTURAL DRAWING.
- S.B.C. OF SOIL FOR DESIGN OF FOUNDATION HAS BEEN TAKEN AS SPECIFIED MINIMUM DEPTH SHALL BE UP TO HARD STRATA. IN CASE OF ANY DOUBT REGARDING S.B.C. DURING EXCAVATION THE MATTER SHALL BE REPORTED TO THE GEO-TECH. CONSULTANT.
- STRUCTURAL SUPERVISION AT CLIENT OR BUILDER SIDE.
- ANY RESPONSIBILITY LIKE WORKMANSHIP, MATERIAL CONTRACTOR TEKAN BY APPOINTED TECHNICAL PERSON ON SITE.
- PLEASE CONFORM SBC AND DENSITY BRICK BEFORE EXECUTION.

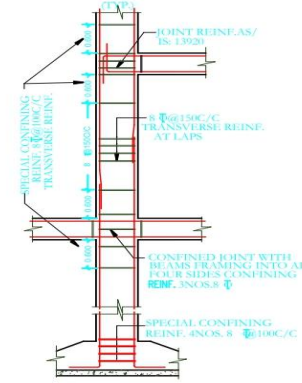
<b>PROJECT TITLE:</b> AUGMENTATION OF WATER SUPPLY TO DAPORIJO TOWNSHIP (5.90 MLD)	<b>SUB TITLE:</b> CHEMICAL HOUSE	<b>DRAWING:</b> <input type="checkbox"/> FOR PROPOSAL <input type="checkbox"/> FOR APPROVAL <input checked="" type="checkbox"/> FOR EXECUTION	<b>NORTH:</b> N	<b>DATE:</b> 23/01/2023	<b>DRAWING NO:</b> WTP/DAPO/STR/09/1	<b>NOTE:</b> 1. DO NOT scale the drawing, follow written dimensions. 2. All Dimensions and levels are in meter.	This drawing is a property & copyright of M/s Yield Engineering Services. No part of this drawing may be used or reproduced used in any manner, stored in a retrieval system, or transmitted in any form or by any means such as electronics, mechanical, or otherwise, except for related project, without written permission of M/s Yield Engineering Services.	<b>PROJECT BY:</b>  ADDRESS- Riba Building Division Road, Itanagar, Arunachal Pradesh PHONE +91-9650821997, 9774068766 E-mail - yesconsultancy17@gmail.com
<b>CLIENT:</b> PHE & WATER SUPPLY DIVISION, DAPORIJO.	<b>SHEET TITLE:</b> STRUCTURAL DETAILS AT FOUNDATION LEVEL			<b>SCALE:</b> NTS	<b>DRAWN BY:</b> SELF			
					<b>CHECKED BY:</b> Er. BAKE JULI			



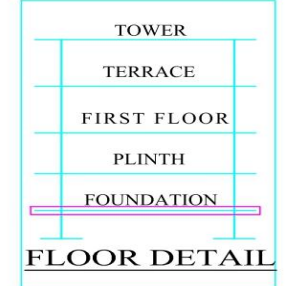
DETAILS OF HOOK  
(FOR RING OF BEAM & COLUMN)



DETAILS OF HOOK  
(FOR RING BEAM AND COLUMN)



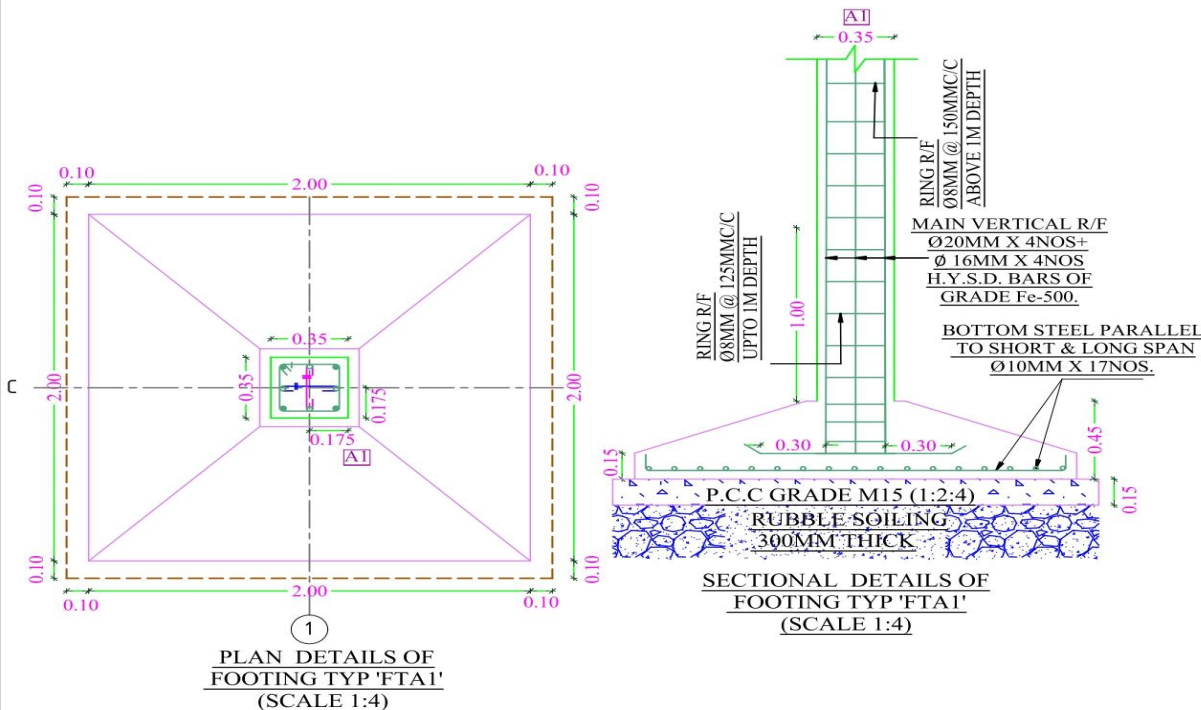
TYPICAL COLUMN-BEAM CONNECTION



GRADE CONCRETE		GRADE OF STEEL	
F.F.C.M15	COLU-M15	Fe 250	Fe 410
WALL-M15	DOF-3M	Fe 250	Fe 410
SLAB-M15	SBC : 200KN/SQM.	Fe 250	Fe 410

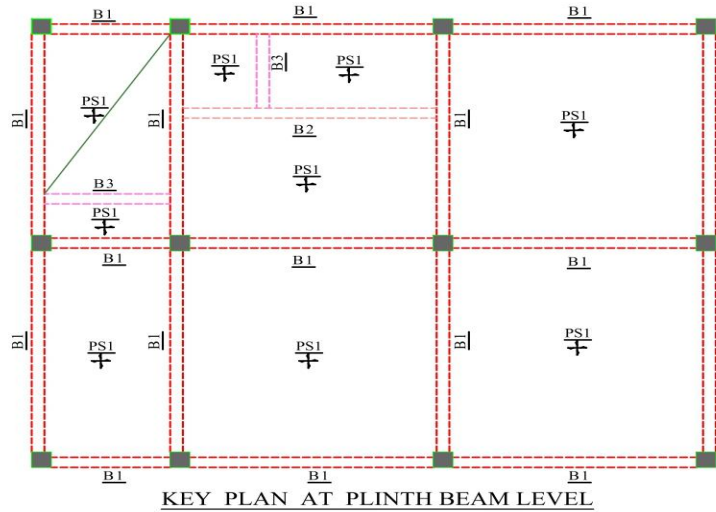
STRUCTURAL NOTES	
1. MINIMUM CLEAR COVER (mm)	
S.N.	ELEMENT COVER
1	FOOTING 50
2	COLUMN 40
3	BEAM 25
4	SLAB 20
5	WALL 25
2. DEVELOPMENT LENGTHS(Ld) FOR Fe500	
BAR DIA.	MIX M25
8	388
10	485
12	583
16	777
20	971
25	1214
3. USE OF MIDDLE VIBRATOR RECOMMENDED FOR RCC WORK.	
4. BURNT OIL NOT PERMITTED FOR SHUTTERING.	
5. EXPOSED SURFACE OF CONCRETE SHALL BE CONTINUOUSLY IN WET CONDITION FOR MINIMUM 14 DAYS.	
6. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED.	
7. IN CASE OF ANY AMBIGUITY PLEASE BRING IT TO NOTICE OF OFFICE BEFORE EXECUTION OF THE WORK.	
8. THIS DRAWING SHOULD BE READ ALONG WITH ARCHITECTURAL DRAWING.	
9. S.B.C. OF SOIL FOR DESIGN OF FOUNDATION HAS BEEN TAKEN AS SPECIFIED MINIMUM DEPTH SHALL BE UPTO HARD STRATA. IN CASE OF ANY DOUBT REGARDING S.B.C. DURING EXCAVATION THE MATTER SHALL BE REPORTED TO THE GEO-TECH. CONSULTANT.	
10. STRUCTURAL SUPERVISION AT CLIENT OR BUILDER SIDE.	
11. ANY RESPONSIBILITY LIKE WORKMANSHIP, MATERIAL CONTRACTOR TEKAN BY APPOINTED TECHNICAL PERSON ON SITE.	
12. PLEASE CONFORM SBC AND DENSITY BRICK BEFORE EXECUTION.	



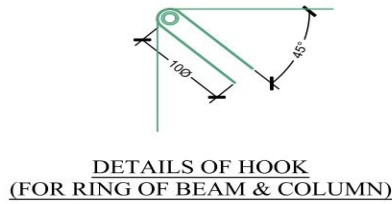
SCHEDULE FOR COLUMN

COLUMN No.	A	A1
TERRACE TO TOWER	<p>Ø20MM X 4NOS. Ø12MM X 8NOS. Ø8MM@100-150C/C</p>	<p>Ø20MM X 4NOS. Ø16MM X 4NOS. Ø8MM@100-150C/C</p>
FIRST TO TERRACE	<p>Ø20MM X 4NOS. Ø12MM X 8NOS. Ø8MM@100-150C/C</p>	<p>Ø20MM X 4NOS. Ø16MM X 4NOS. Ø8MM@100-150C/C</p>
PLINTH TO FIRST	<p>Ø20MM X 4NOS. Ø12MM X 8NOS. Ø8MM@100-150C/C</p>	<p>Ø20MM X 4NOS. Ø16MM X 4NOS. Ø8MM@100-150C/C</p>
FOOTING TO PLINTH	<p>Ø20MM X 4NOS. Ø12MM X 8NOS. Ø8MM@100-150C/C</p>	<p>Ø20MM X 4NOS. Ø16MM X 4NOS. Ø8MM@100-150C/C</p>

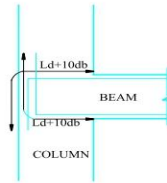
<b>PROJECT TITLE:</b> AUGMENTATION OF WATER SUPPLY TO DAPORJO TOWNSHIP (5.90 MLD)	<b>SUB TITLE:</b> CHEMICAL HOUSE	<b>DRAWING:</b> <input type="checkbox"/> FOR PROPOSAL <input type="checkbox"/> FOR APPROVAL <input checked="" type="checkbox"/> FOR EXECUTION	<b>NORTH:</b>	<b>DATE:</b> 23/01/2023	<b>DRAWING NO:</b> WTP/DAPO/STR/09/2	<b>NOTE:</b> 1. DO NOT scale the drawing, follow written dimensions. 2. All Dimensions and levels are in meter.	This drawing is a property & copyright of M/s Yield Engineering Services. No part of this drawing may be used or reproduced used in any manner, stored in a retrieval system, or transmitted in any form or by any means such as electronics, mechanical, or otherwise, except for related project, without written permission of M/s Yield Engineering Services.	<b>PROJECT BY:</b>  ARCHITECTS - INTERIORS PLANNER ADDRESS- Riba Building Division Road, Itanagar, Arunachal Pradesh PHONE +91-9650821997, 9774088766 E-mail - yesconsultancy17@gmail.com
<b>CLIENT:</b> PHE & WATER SUPPLY DIVISION, DAPORJO.	<b>SHEET TITLE:</b> STRUCTURAL DETAILS AT FOUNDATION LEVEL			<b>SCALE:</b> NTS	<b>DRAWN BY:</b> SELF	<b>CHECKED BY:</b> Er.BAKE JULI		



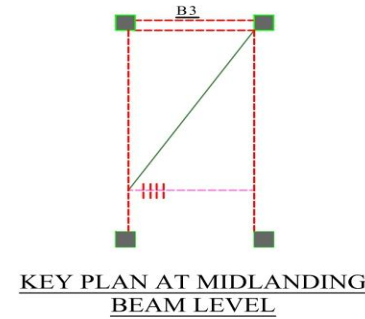
KEY PLAN AT PLINTH BEAM LEVEL



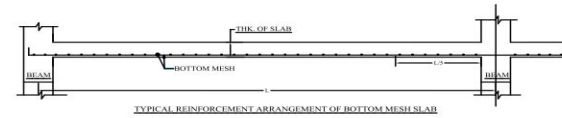
DETAILS OF HOOK (FOR RING OF BEAM & COLUMN)



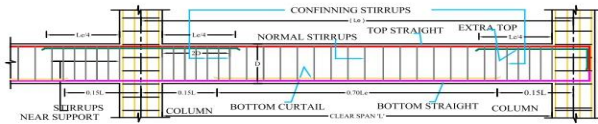
ANCHORAGE DETAILS (BEAM- END COLUMN)



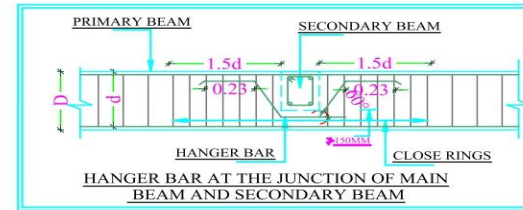
KEY PLAN AT MIDLANDING BEAM LEVEL



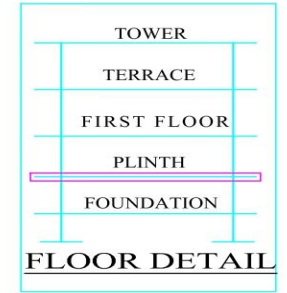
TYPICAL REINFORCEMENT ARRANGEMENT OF BOTTOM MESH SLAB



TYPICAL SECTIONAL DETAIL AT BEAM



HANGER BAR AT THE JUNCTION OF MAIN BEAM AND SECONDARY BEAM



FLOOR DETAIL

GRADE CONCRETE		GRADE OF STEEL Fc500	
F.C.C M15	COLUMN M25	SLAB M25	BEAM M25
WALL M25			
STRUCTURAL NOTES			
1. MINIMUM CLEAR COVER (mm)			
S.N.	ELEMENT	COVER	
1	FOOTING	50	
2	COLUMN	40	
3	BEAM	25	
4	SLAB	20	
2. DEVELOPMENT LENGTHS (Ld) FOR Fc500			
BAR	TENSION	MIX M25	C - COMPRESSION
DIA.	T	C	
8	388	311	
10	485	388	
12	583	466	
16	777	621	
20	971	777	
25	1214	971	

- USE OF MIBBLE VIBRATOR RECOMMENDED FOR RCC WORK.
- BURNED OIL NOT PERMITTED FOR SHUTTLING.
- EXPOSED SURFACE OF CONCRETE SHALL BE CONTINUOUSLY IN WET CONDITION FOR MINIMUM 14 DAYS.
- ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED.
- IN CASE OF ANY AMBIGUITY PLEASE BRING IT TO NOTICE OF OFFICE BEFORE EXECUTION OF THE WORK.
- THIS DRAWING SHOULD BE READ ALONG WITH ARCHITECTURAL DRAWING.
- S.I.C. OF SOL FOR DESIGN OF FOUNDATION HAS BEEN TAKEN AS SPECIFIED MINIMUM DEPTH SHALL BE UPTO HARD STRATA. IN CASE OF ANY DOUBT REGARDING S.I.C. DURING EXCAVATION THE MATTER SHALL BE REPORTED TO THE GEO-TECH. CONSULTANT.
- STRUCTURAL SUPERVISION AT CLIENT OR BUILDER SIDE.
- ANY RESPONSIBILITY LIKE WORKMANSHIP, MATERIAL CONTRACTOR TEKAN BY APPOINTED TECHNICAL PERSON ON SITE.
- PLEASE CONFORM SBC AND DENSITY BRICK BEFORE EXECUTION.
- THE STRUCTURE IS DESIGNED AS PER IS 1893:2002 AND DETAILLED AS PER IS 13920:1993.


- NOTES
- All dimensions and levels are in meters and centimeters respectively.
  - Do not scale the drawing. Follow the written dimensions. In case any doubt contact the consultant.
  - Toilet floor level is 0.05 m below the corresponding floor level.
  - Both exterior and internal wall thickness is 12 cm (single brick wall)
  - The contractor/Site Engineer/client must verify all dimensions and report any discrepancies to the consultant before execution of work at every stage. Refer drawing carefully prior to every execution of work.

SCHEDULE FOR RCC SLAB

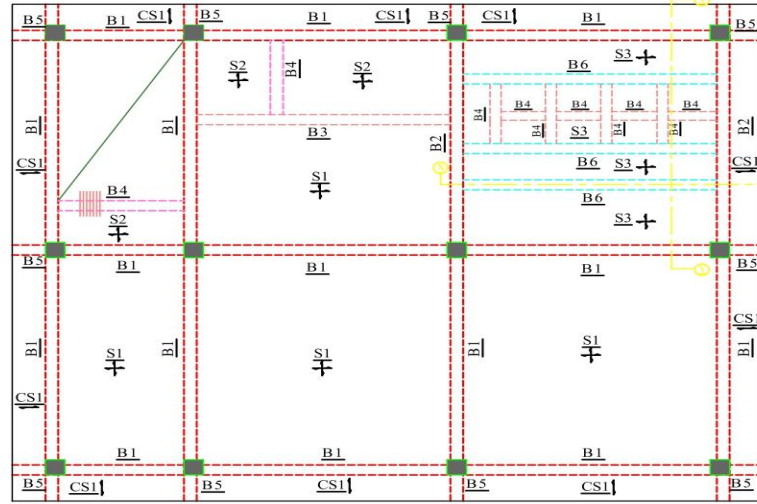
SR. NO	PANEL CODE	OVERALL THICKNESS	MAIN R/F ON SHORT SPAN	MAIN R/F ON LONG SPAN	REMARKS
1	PS1	115MM	Ø8MM @ 150 C/C	Ø8MM @ 150 C/C	BOTTOM MESH

SCHEDULE FOR BEAM

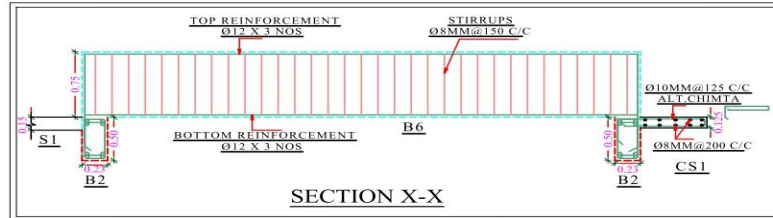
SR. NO	BEAM CODE	BEAM SIZE IN MM.	BOTTOM R/F MM X NOS.	BOTTOM CURTAIL MM X NOS.	TOP R/F MM X NOS.	EXTRA TOP AT SUPPORT @ L/4 MM X NOS.	LENGTH OP CURTAILED BAR	STIRRUPS
1	B1	230 x 500	Ø 16 X 4	----	Ø 16 X 2	Ø 16 X 2	----	Ø8MM@100-150 C/C
2	B2	230 x 450	Ø 12 X 3	----	Ø 12 X 3	----	----	Ø8MM@150 C/C
3	B3	230 x 300	Ø 12 X 2	----	Ø 12 X 2	----	----	Ø8MM@150 C/C

<b>PROJECT TITLE:</b>	<b>SUB TITLE</b>	<b>DRAWING</b>	<b>NORTH</b>	<b>DATE:</b>	<b>DRAWING NO: WTP/DAPO/STR/09/3</b>	<b>NOTE:</b>	This drawing is a property & copyright of M/s Yield Engineering Services. No part of this drawing may be used or reproduced used in any manner, stored in a retrieval system, or transmitted in any form or by any means such as electronics, mechanical, or otherwise, except forelated project without written permission of M/s Yield Engineering Services.	<b>PROJECT BY:</b>
AUGMENTATION OF WATER SUPPLY TO DAPORJO TOWNSHIP (5.90 MLD)	CHEMICAL HOUSE	<input type="checkbox"/> FOR PROPOSAL <input type="checkbox"/> FOR APPROVAL <input checked="" type="checkbox"/> FOR EXECUTION		23/01/2023	<b>REVISION NO: R0</b>	1.DO NOT scale the drawing, follow written dimensions. 2.All Dimensions and levels are in meter.		 ADDRESS- Riba Building Division Road, Itanagar, Arunachal Pradesh PHONE +91-9650821997,9774068766 E-mail : yesconsultancy17@gmail.com
<b>CLIENT:</b>	<b>SHEET TITLE</b>			NTS	<b>DRAWN BY: SELF</b>			
PHE & WATER SUPPLY DIVISION, DAPORJO.	STRUCTURAL DETAILS AT PLINTH BEAM LEVEL							

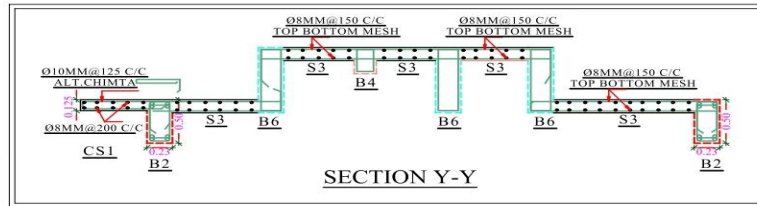




KEY PLAN AT FIRST FLOOR BEAM LEVEL



SECTION X-X



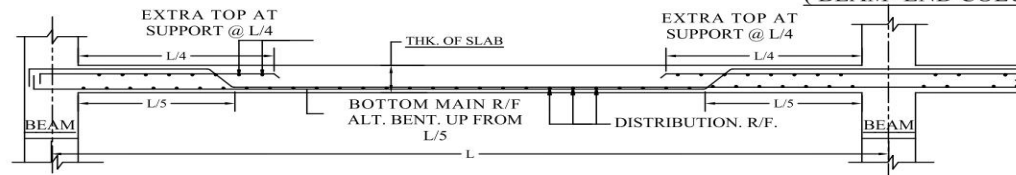
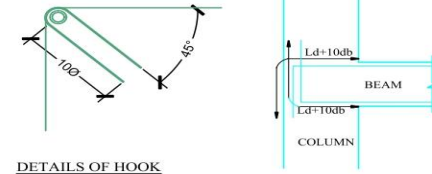
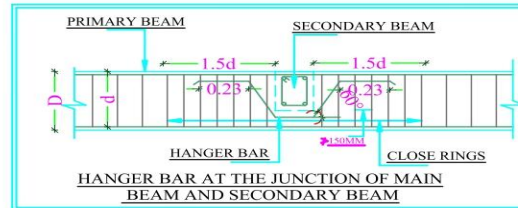
SECTION Y-Y

SCHEDULE FOR SLAB

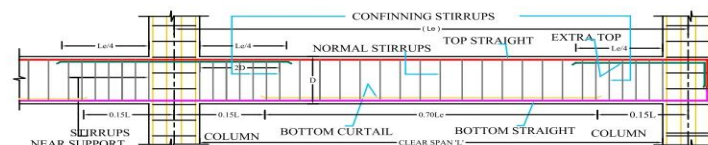
SR. NO	PANNEL CODE	OVERALL THICKNESS	MAIN R/F ON SHORT SPAN	MAIN R/F ON LONG SPAN	EXTRA TOP AT SUPPORT @ L/4	DISTRIBUTION STEEL	REMARK
1	S1	150 MM	Ø10MM@125 C/C ALT.BAR BENTUP	Ø10MM@125 C/C ALT.BAR BENTUP	Ø10MM@250 C/C	Ø8MM@200 C/C	TWO WAY SLAB
2	S2	125 MM	Ø8MM@150 C/C		TOP BOTTOM MESH		—
3	CS1	125 MM	—	—	Ø10MM@125 C/C ALT.CHIMTA	Ø8MM@200 C/C	CANTILEVER SLAB
4	S3	150 MM	Ø8MM@150 C/C		TOP BOTTOM MESH		—

SCHEDULE FOR BEAM

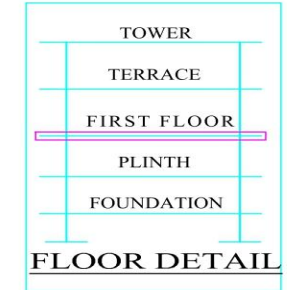
SR. NO	BEAM CODE	BEAM SIZE IN MM.	BOTTOM R/F MM X NOS.	BOTTOM CURTAIL MM X NOS.	TOP R/F MM X NOS.	EXTRA TOP AT SUPPORT @ L/4 MM X NOS.	LENGTH OP CURTAILED BAR	STIRRUPS
1	B1	230 x 500	Ø 16 X 3	—	Ø16 X 2	Ø16 X 2	—	Ø8MM@100-150 C/C
2	B2	230 x 500	Ø 16 X 4	—	Ø16 X 2	Ø16 X 2	—	Ø8MM@100-150 C/C
3	B3	230 x 450	Ø 12 X 3	—	Ø12 X 3	—	—	Ø8MM@150 C/C
4	B4	200 x 300	Ø 12 X 2	—	Ø12 X 2	—	—	Ø8MM@150 C/C
5	B5	230 x 500	Ø 16 X 3	—	Ø16 X 4	—	—	Ø8MM@125 C/C
6	B6	230 x 750	Ø 12 X 3	—	Ø12 X 3	—	—	Ø8MM@150 C/C



TYPICAL REINFORCEMENT ARRANGEMENT AT SLAB

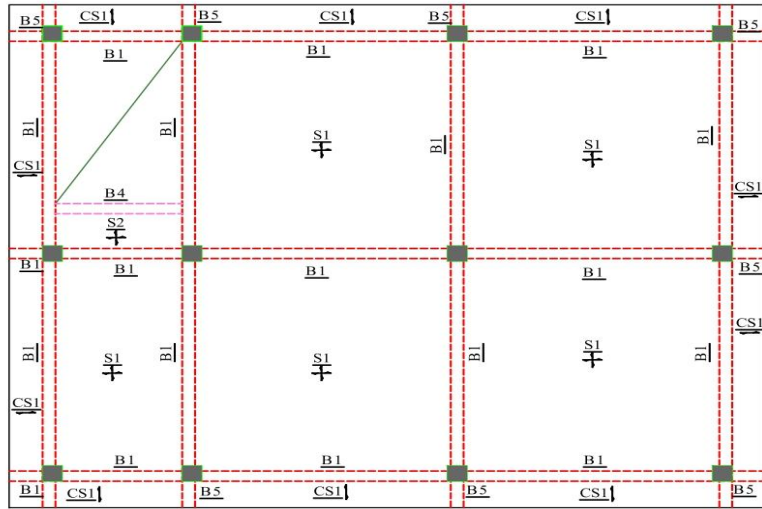


TYPICAL SECTIONAL DETAIL AT BEAM



GRADE CONCRETE		GRADE OF STEEL	
F.C CM15	COLUMN M25	BEAM M25	SLAB M25
STRUCTURAL NOTES			
1. MINIMUM CLEAR COVER (mm)			
S.N.	ELEMENT	COVER	
1	FOOTING	50	
2	COLUMN	40	
3	BEAM	25	
4	SLAB	20	
2. DEVELOPMENT LENGTHS (L <sub>d</sub> ) - FOR Fe500			
T - TENSION, C - COMPRESSION			
BAR	MIX MESH	C	
DIA	T	C	
8	388	311	
10	485	388	
12	583	466	
16	777	621	
20	971	777	
25	1214	971	
3. USE OF SIDDLE VIBRATOR RECOMMENDED FOR RCC WORK.			
4. BURNT OIL NOT PERMITTED FOR SHUTTERING.			
5. EXPOSED SURFACE OF CONCRETE SHALL BE CONTINUOUSLY IN WET CONDITION FOR MINIMUM 14 DAYS.			
6. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED.			
7. IN CASE OF ANY AMBIGUITY PLEASE BRING IT TO NOTICE OF OFFICE BEFORE EXECUTION OF THE WORK.			
8. THIS DRAWING SHOULD BE READ ALONG WITH ARCHITECTURAL DRAWING.			
9. S.B.C. OF SOIL FOR DESIGN OF FOUNDATION HAS BEEN TAKEN AS SPECIFIED MINIMUM DEPTH SHALL BE UP TO HARD STRATA. IN CASE OF ANY DOUBT REGARDING S.B.C. DURING EXCAVATION THE MATTER SHALL BE REPORTED TO THE GEO-TECH CONSULTANT.			
10. STRUCTURAL SUPERVISION AT CLIENT OR BUILDER SIDE.			
11. ANY RESPONSIBILITY LIKE WORKMANSHIP, MATERIAL, CONTRACTOR TERAN BY APPOINTED TECHNICAL PERSON ON SITE.			
12. PLEASE CONFORM SBC AND DENSITY BRICK BEFORE EXECUTION.			
13. THE STRUCTURE IS DESIGNED AS PER IS 1893:2002 AND DETAILED AS PER IS 13920:1993			
NOTES			
1. All dimensions and levels are in meters and centimeters respectively.			
2. Do not scale the drawing. Follow the written dimensions. In case any doubt contact the consultant.			
3. Toilet floor level is 0.05 m below the corresponding floor level.			
4. Both exterior and internal wall thickness is 12 cm (single brick wall)			
5. The contractor/ Site Engineer/ client must verify all dimensions and report any discrepancies to the consultant before execution of work at every stage.			
6. Refer drawing carefully prior to every execution of work.			

<b>PROJECT TITLE:</b> AUGMENTATION OF WATER SUPPLY TO DAPORJU TOWNSHIP (5.90 MLD)	<b>SUB TITLE:</b> CHEMICAL HOUSE	<b>DRAWING:</b> <input type="checkbox"/> FOR PROPOSAL <input type="checkbox"/> FOR APPROVAL <input checked="" type="checkbox"/> FOR EXECUTION	<b>NORTH:</b>	<b>DATE:</b> 23/01/2023	<b>DRAWING NO:</b> WTP/DAPO/STR/09/4	<b>NOTE:</b> 1. DO NOT scale the drawing, follow written dimensions. 2. All Dimensions and levels are in meter.	This drawing is a property & copyright of M/s Yield Engineering Services. No part of this drawing may be used or reproduced used in any manner, stored in a retrieval system, or transmitted in any form or by any means such as electronic, mechanical, or otherwise, except for related project without written permission of M/s Yield Engineering Services.
<b>CLIENT:</b> PHE & WATER SUPPLY DIVISION, DAPORJU.	<b>SHEET TITLE:</b> STRUCTURAL DETAILS AT FIRST FLOOR BEAM LEVEL			<b>SCALE:</b> NTS	<b>REVISION NO:</b> R0 <b>DRAWN BY:</b> SELF <b>CHECKED BY:</b> Er. BAKE JULI		<b>PROJECT BY:</b>  ARCHITECTS, INTERIORS, PLANNERS ADDRESS: Riba Building Division Road, Itanagar, Arunachal Pradesh PHONE +91-9650821997, 9774068766 E-mail : yesconsultancy17@gmail.com



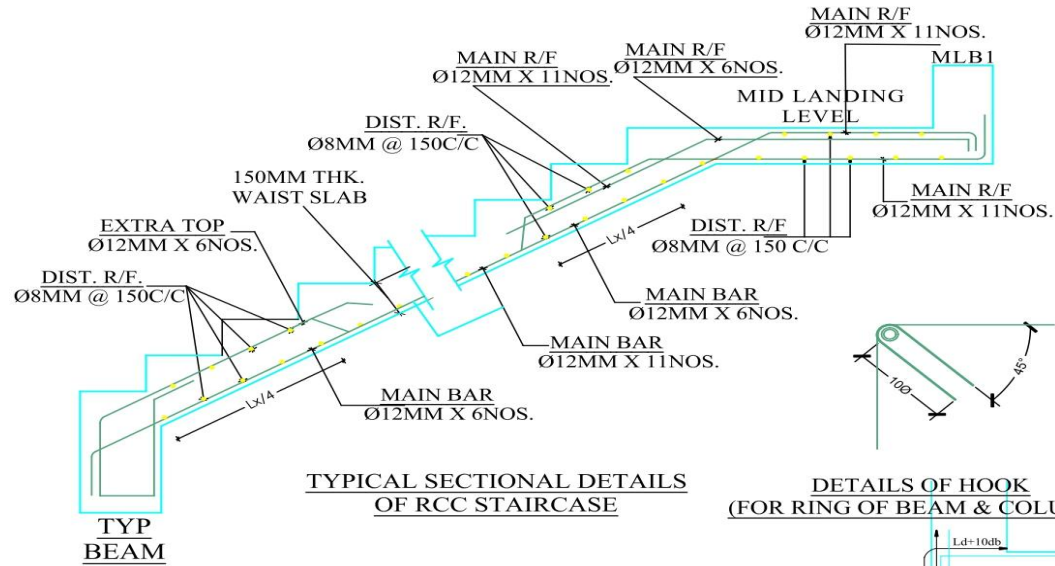
KEY PLAN AT TERRACE BEAM LEVEL

SCHEDULE FOR SLAB

SR. NO	PANNEL CODE	OVERALL THICKNESS	MAIN R/F ON SHORT SPAN	MAIN R/F ON LONG SPAN	EXTRA TOP AT SUPPORT @ L/4	DISTRIBUTION STEEL	REMARK
1	S1	150 MM	Ø10MM@150 C/C ALT.BAR BENTUP	Ø10MM@150 C/C ALT.BAR BENTUP	Ø10MM@300 C/C	Ø8MM@200 C/C	TWO WAY SLAB
2	S2	125 MM	Ø8MM@125 C/C		TOP BOTTOM MESH		---
3	CS1	125 MM	----	----	Ø10MM@150 C/C ALT.CHIMTA	Ø8MM@200 C/C	CANTILEVER SLAB

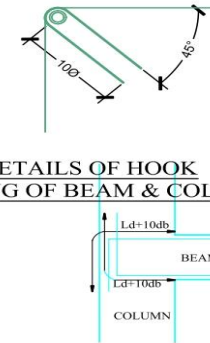
SCHEDULE FOR BEAM

SR. NO	BEAM CODE	BEAM SIZE IN MM.	BOTTOM R/F MM X NOS.	BOTTOM CURTAIL MM X NOS.	TOP R/F MM X NOS.	EXTRA TOP AT SUPPORT @ L/4 MM X NOS.	LENGTH OP CURTAILED TBAR	STIRRUPS
1	B1	230 x 500	Ø 16 X 2	----	Ø 16 X 2	----	----	Ø8MM@100-150 C/C
2	B2	230 x 300	Ø 12 X 2	----	Ø 12 X 2	----	----	Ø8MM@150 C/C
3	B3	230 x 500	Ø 16 X 2	----	Ø 16 X 2	----	----	Ø8MM@125 C/C

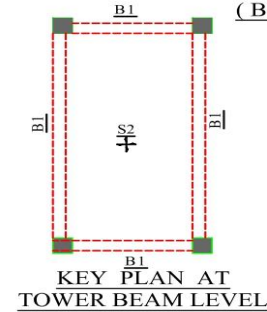


TYPICAL SECTIONAL DETAILS OF RCC STAIRCASE

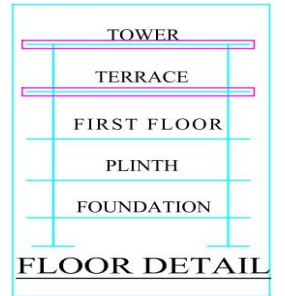
DETAILS OF HOOK (FOR RING OF BEAM & COLUMN)



ANCHORAGE DETAILS (BEAM- END COLUMN)



KEY PLAN AT TOWER BEAM LEVEL



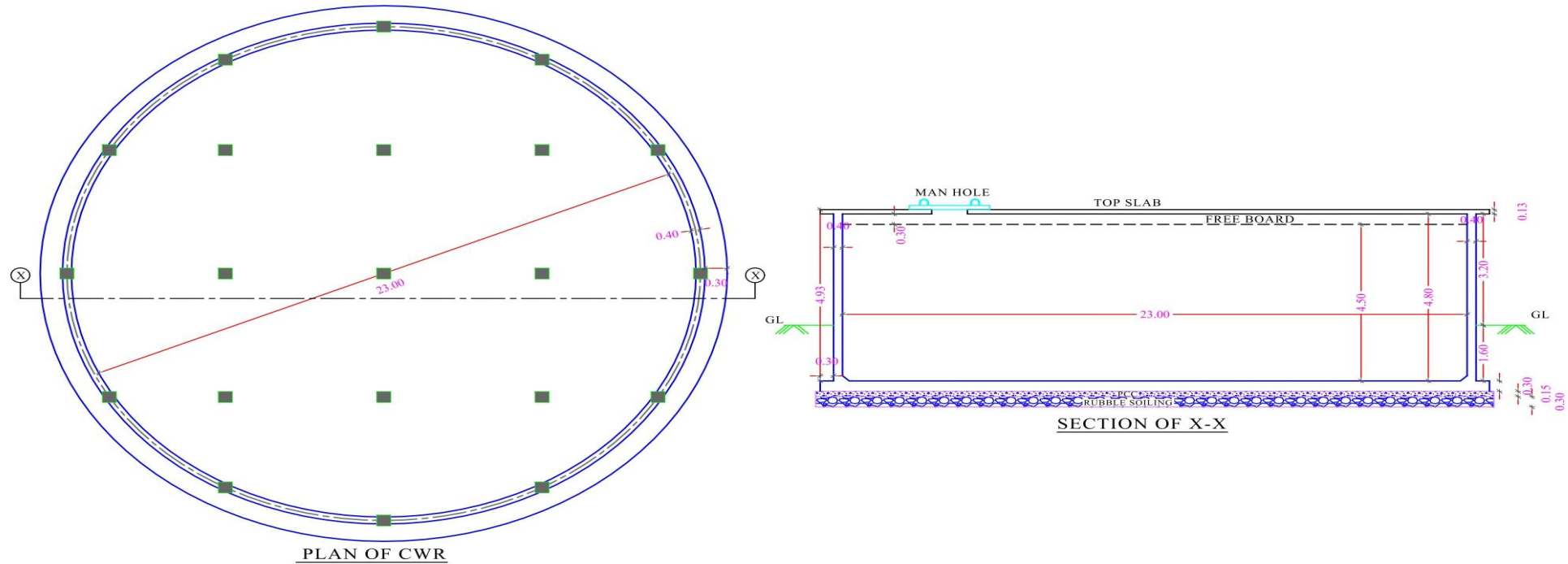
GRADE CONCRETE		GRADE OF STEEL Fe500	
F.C.C M15	COLUMN, M25	SLAB, M25	BEAM, M25
STRUCTURAL NOTES			
1. MINIMUM CLEAR COVER (mm)			
S.N.	ELEMENT	COVER	
1	FOOTING	50	
2	COLUMN	40	
3	BEAM	25	
4	SLAB	20	
2. DEVELOPEMENT LENGTHS (Ld) FOR Fe500			
T - TENSION			
BAR DIA.	MIX M25		
	T	C	
8	388	311	
10	485	388	
12	583	466	
16	777	621	
20	971	777	
25	1214	971	
C - COMPRESSION			

- USE OF MIDDLE VIBRATOR RECOMMENDED FOR RCC WORK.
- BURNT OIL NOT PERMITTED FOR SHUTTERING.
- EXPOSED SURFACE OF CONCRETE SHALL BE CONTINUOUSLY IN WET CONDITION FOR MINIMUM 14DAYS.
- ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED.
- IN CASE OF ANY AMBIGUITY PLEASE BRING IT TO NOTICE OF OFFICE BEFORE EXECUTION OF THE WORK.
- THIS DRAWING SHOULD BE READ ALONG WITH ARCHITECTURAL DRAWING.
- S.B.C. OF SOL FOR DESIGN OF FOUNDATION HAS BEEN TAKEN AS SPECIFIED MINIMUM DEPTH SHALL BE UPTO HARD STRATA. IN CASE OF ANY DOUBT REGARDING S.B.C. DURING EXCAVATION THE MATTER SHALL BE REPORTED TO THE GEO-TECH. CONSULTANT.
- STRUCTURAL SUPERVISION AT CLIENT OR BUILDER SIDE.
- ANY RESPONSIBLILTY LIKE WORKMANSHIP, MATERIAL CONTRACTOR BECAN BY APPOINTED TECHNICAL PERSON ON SITE.
- PLEASE CONFORM SBC AND DENSITY BRICK BEFORE EXECUTION.
- THE STRUCTURE IS DESIGNED AS PER IS 1893:2002 AND DETAILED AS PER IS 13920:1993

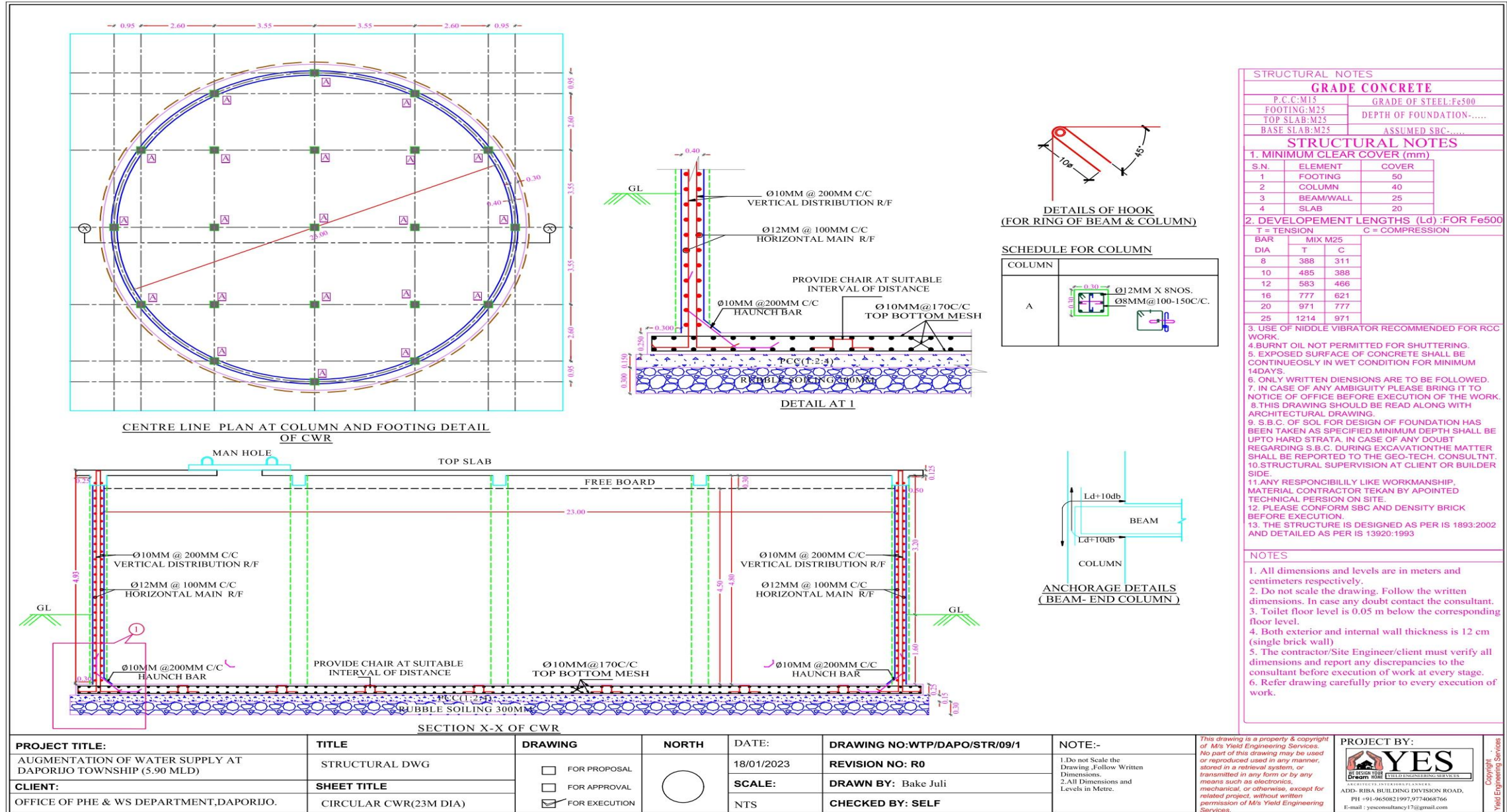
- NOTES
- All dimensions and levels are in meters and centimeters respectively.
  - Do not scale the drawing. Follow the written dimensions. In case any doubt contact the consultant.
  - Toilet floor level is 0.05 m below the corresponding floor level.
  - Both exterior and internal wall thickness is 12 cm (single brick wall)
  - The contractor/Site Engineer/client must verify all dimensions and report any discrepancies to the consultant before execution of work at every stage.
  - Refer drawing carefully prior to every execution of work.

<b>PROJECT TITLE:</b>	<b>SUB TITLE</b>	<b>DRAWING</b>	<b>NORTH</b>	<b>DATE:</b>	<b>DRAWING NO: WTP/DAPO/STR/09/4</b>	<b>NOTE:</b>	This drawing is a property & copyright of M/s Yield Engineering Services. No part of this drawing may be used or reproduced used any manner, stored in a retrieval system, or transmitted in any form or by any means such as electronics, mechanical, or otherwise, except for related project, without written permission of M/s Yield Engineering Services.	<b>PROJECT BY:</b>  ADDRESS: Riba Building Division Road, Ranagar, Anurachal Pradesh PHONE +91-9850821997,9774068766 E-mail : yesconsultancy17@gmail.com
AUGMENTATION OF WATER SUPPLY TO DAPORJO TOWNSHIP (5.90 MLD)	CHEMICAL HOUSE	<input type="checkbox"/> FOR PROPOSAL <input type="checkbox"/> FOR APPROVAL <input checked="" type="checkbox"/> FOR EXECUTION		23/01/2023	<b>REVISION NO: R0</b>	1.DO NOT scale the drawing, follow written dimensions. 2.All Dimensions and levels are in meter.		
<b>CLIENT:</b> PHE & WATER SUPPLY DIVISION, DAPORJO.	<b>SHEET TITLE</b> STRUCTURAL DETAILS AT TERRACE BEAM LEVEL			<b>SCALE:</b> NTS	<b>DRAWN BY: SELF</b> <b>CHECKED BY: Er.BAKE JULI</b>			

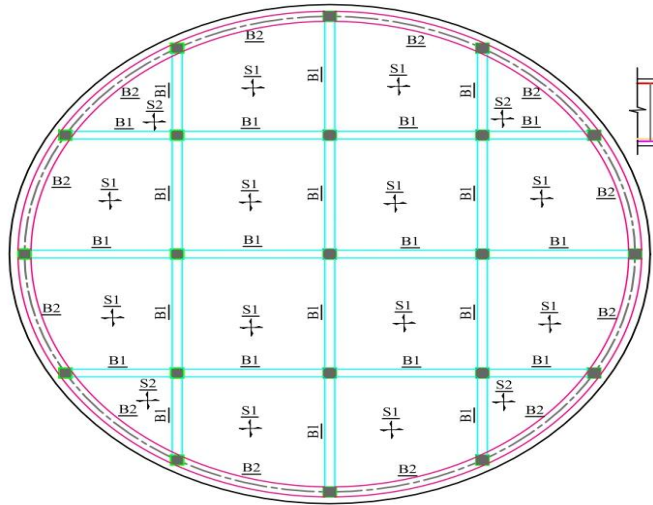
NESIDS-DRJ



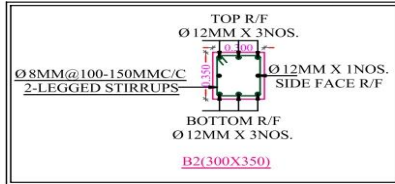
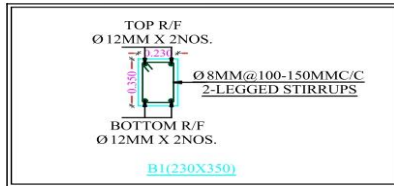
<b>PROJECT TITLE:</b> AUGMENTATION OF WATER SUPPLY AT DAPORJO TOWNSHIP (5.90 MLD)	<b>TITLE</b> ARCHITECTURAL DWG	<b>DRAWING</b> <input type="checkbox"/> FOR PROPOSAL <input type="checkbox"/> FOR APPROVAL <input checked="" type="checkbox"/> FOR EXECUTION	<b>NORTH</b> 	<b>DATE:</b> 18/01/2023	<b>DRAWING NO:</b> WTP/DAPO/ARC/09/A	<b>NOTE:-</b> 1. Do not Scale the Drawing. Follow Written Dimensions. 2. All Dimensions and Levels in Metre.	<i>This drawing is a property &amp; copyright of M/s Yield Engineering Services. No part of this drawing may be used or reproduced used in any manner, stored in a retrieval system, or transmitted in any form or by any means such as electronics, mechanical, or otherwise, except for related project, without written permission of M/s Yield Engineering Services.</i>	<b>PROJECT BY:</b>  REGISTERED INTERIOR PLANNER ADD: RIBA BUILDING DIVISION ROAD, PHE -91-9650821997,9774688766 E-mail : yesconsultancy17@gmail.com
<b>CLIENT:</b> PHE & WATER SUPPLY DIVISION, DAPORJO.	<b>SHEET TITLE</b> CIRCULAR CWR(23M DIA)		<b>SCALE:</b> NTS	<b>REVISION NO:</b> R0	<b>DRAWN BY:</b> Bake Juli			
				<b>CHECKED BY:</b> SELF				



NESIDS-DRJ

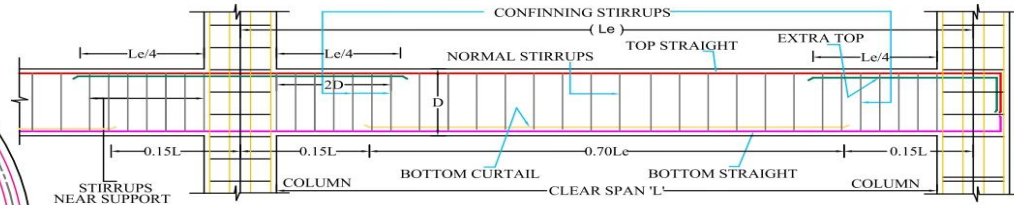


KEY PLAN AT TOP SLAB LEVEL

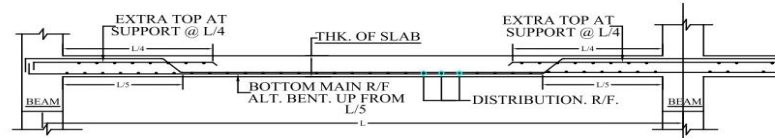


SCHEDULE FOR SLAB

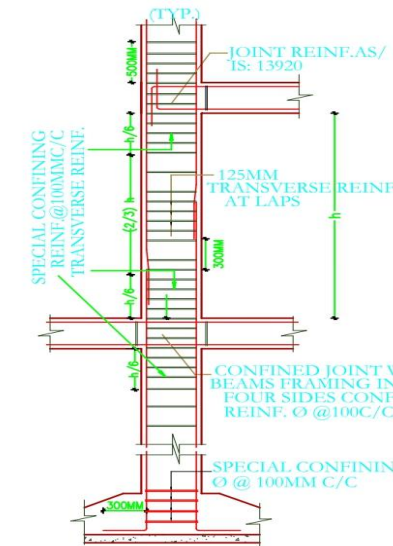
SR. NO	PANNEL CODE	OVERALL THICKNESS	MAIN R/F ON SHORT SPAN	MAIN R/F ON LONG SPAN	EXTRA TOP AT SUPPORT @ L/4	DISTRIBUTION STEEL	REMARK
1	S1	125 MM	Ø8MM@150 C/C ALT.BENTUP	Ø8MM@150 C/C ALT.BENTUP	Ø8MM@300 C/C	Ø8MM@200 C/C	TWO WAY SLAB
2	S2	125 MM	Ø8MM@150 C/C	Ø8MM@150 C/C	TOP BOTTOM MESH		—



TYPICAL SECTIONAL DETAIL AT BEAM



TYPICAL REINFORCEMENT ARRANGEMENT AT SLAB



(TYP) COLUMN ELEVATION

**STRUCTURAL NOTES**

**GRADE CONCRETE**  
 P.C.C:M15 GRADE OF STEEL:Fe500  
 FOOTING:M25 DEPTH OF FOUNDATION-.....  
 TOP SLAB:M25  
 BASE SLAB:M25 ASSUMED SBC-.....

**STRUCTURAL NOTES**

1. MINIMUM CLEAR COVER (mm)

S.N.	ELEMENT	COVER
1	FOOTING	50
2	COLUMN	40
3	BEAM/WALL	25
4	SLAB	20

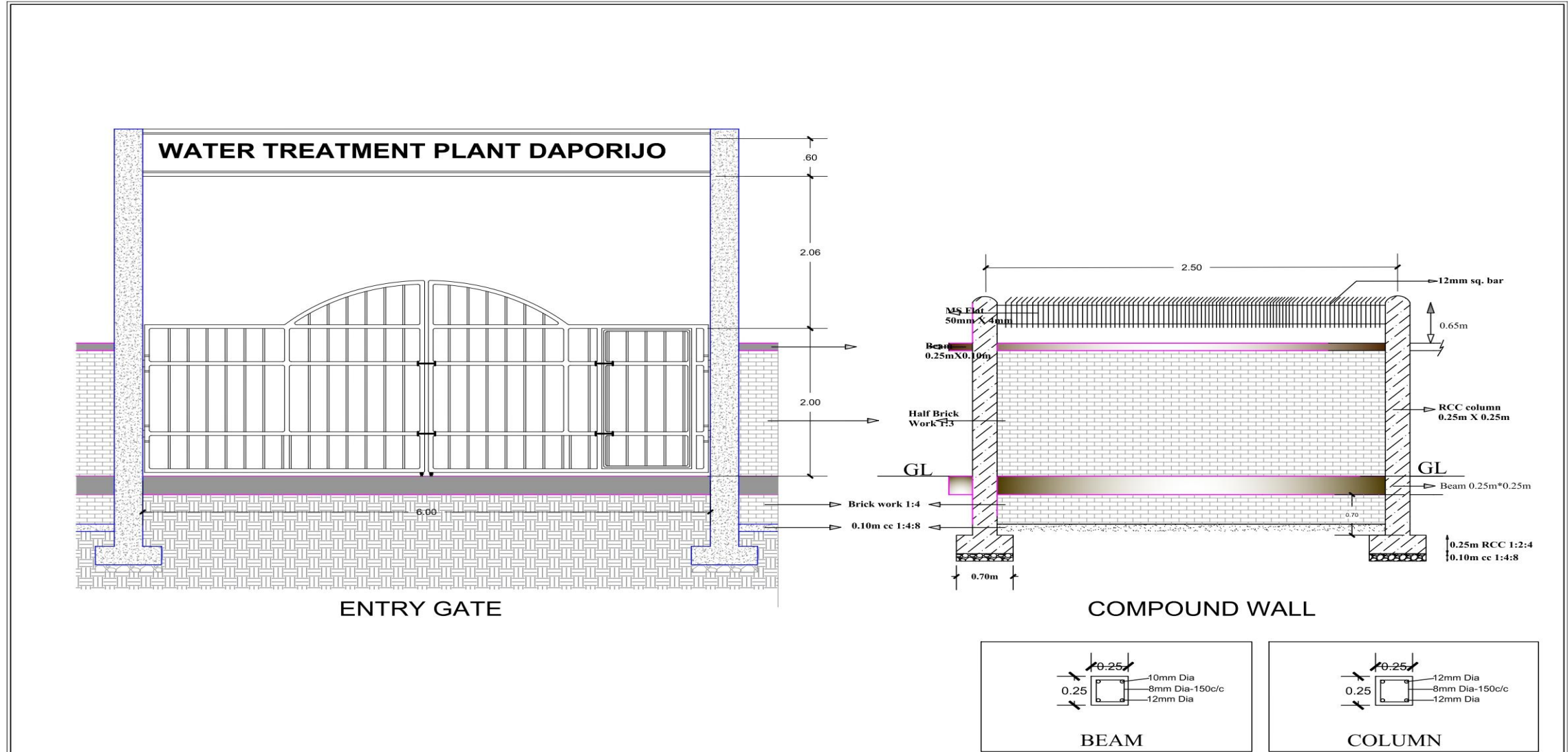
2. DEVELOPEMENT LENGTHS (Ld) :FOR Fe500  
 T = TENSION C = COMPRESSION

BAR	MIX M25	T	C
DIA			
8	388	311	
10	485	388	
12	583	466	
16	777	621	
20	971	777	
25	1214	971	

3. USE OF NIDDLE VIBRATOR RECOMMENDED FOR RCC WORK.  
 4. BURNT OIL NOT PERMITTED FOR SHUTTERING.  
 5. EXPOSED SURFACE OF CONCRETE SHALL BE CONTINUEOSLY IN WET CONDITION FOR MINIMUM 14DAYS.  
 6. ONLY WRITTEN DIENSSIONS ARE TO BE FOLLOWED.  
 7. IN CASE OF ANY AMBIGUITY PLEASE BRING IT TO NOTICE OF OFFICE BEFORE EXECUTION OF THE WORK.  
 8. THIS DRAWING SHOULD BE READ ALONG WITH ARCHITECTURAL DRAWING.  
 9. S.B.C. OF SOL FOR DESIGN OF FOUNDATION HAS BEEN TAKEN AS SPECIFIED. MINIMUM DEPTH SHALL BE UPTO HARD STRATA, IN CASE OF ANY DOUBT REGARDING S.B.C. DURING EXCAVATION THE MATTER SHALL BE REPORTED TO THE GEO-TECH. CONSULTNT.  
 10. STRUCTURAL SUPERVISION AT CLIENT OR BUILDER SIDE.  
 11. ANY RESPONCIBILLY LIKE WORKMANSHIP, MATERIAL CONTRACTOR TEKAN BY APOINTEED TECHNICAL PERSON ON SITE.  
 12. PLEASE CONFORM SBC AND DENSITY BRICK BEFORE EXECUTION.  
 13. THE STRUCTURE IS DESIGNED AS PER IS 1893:2002 AND DETAILED AS PER IS 13920:1993

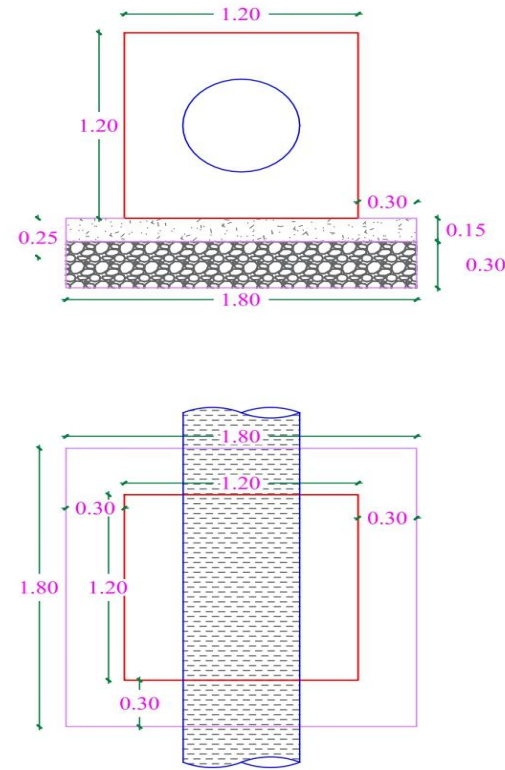
- NOTES**
- All dimensions and levels are in meters and centimeters respectively.
  - Do not scale the drawing. Follow the written dimensions. In case any doubt contact the consultant.
  - Toilet floor level is 0.05 m below the corresponding floor level.
  - Both exterior and internal wall thickness is 12 cm (single brick wall)
  - The contractor/Site Engineer/client must verify all dimensions and report any discrepancies to the consultant before execution of work at every stage.
  - Refer drawing carefully prior to every execution of work.


<b>PROJECT TITLE:</b> AUGMENTATION OF WATER SUPPLY AT DAPORJO TOWNSHIP (5.90 MLD)	<b>TITLE</b> STRUCTURAL DWG	<b>DRAWING</b> <input type="checkbox"/> FOR PROPOSAL <input type="checkbox"/> FOR APPROVAL <input checked="" type="checkbox"/> FOR EXECUTION	<b>NORTH</b> 	<b>DATE:</b> 18/01/2023	<b>DRAWING NO:WTP/DAPO/STR/09/2</b> <b>REVISION NO: R0</b>	<b>NOTE:-</b> 1. Do not Scale the Drawing. Follow Written Dimensions. 2. All Dimensions and Levels in Metre.	<small>This drawing is a property &amp; copyright of M/s Yield Engineering Services. No part of this drawing may be used or reproduced used in any manner, stored in a retrieval system, or transmitted in any form or by any means such as electronics, mechanical, or otherwise, except for related project, without written permission of M/s Yield Engineering Services.</small>
<b>CLIENT:</b> OFFICE OF PHE & WS DEPARTMENT,DAPORJO.	<b>SHEET TITLE</b> CIRCULAR CWR(23M DIA)			<b>SCALE:</b> NTS	<b>DRAWN BY:</b> Bake Jui <b>CHECKED BY:</b> SELF		<b>PROJECT BY:</b>  YES ENGINEERING SERVICES ABD- RIBA BUILDING DIVISION ROAD, PH +91-9659821997,9774068766 E-mail : yesconsultancy17@gmail.com



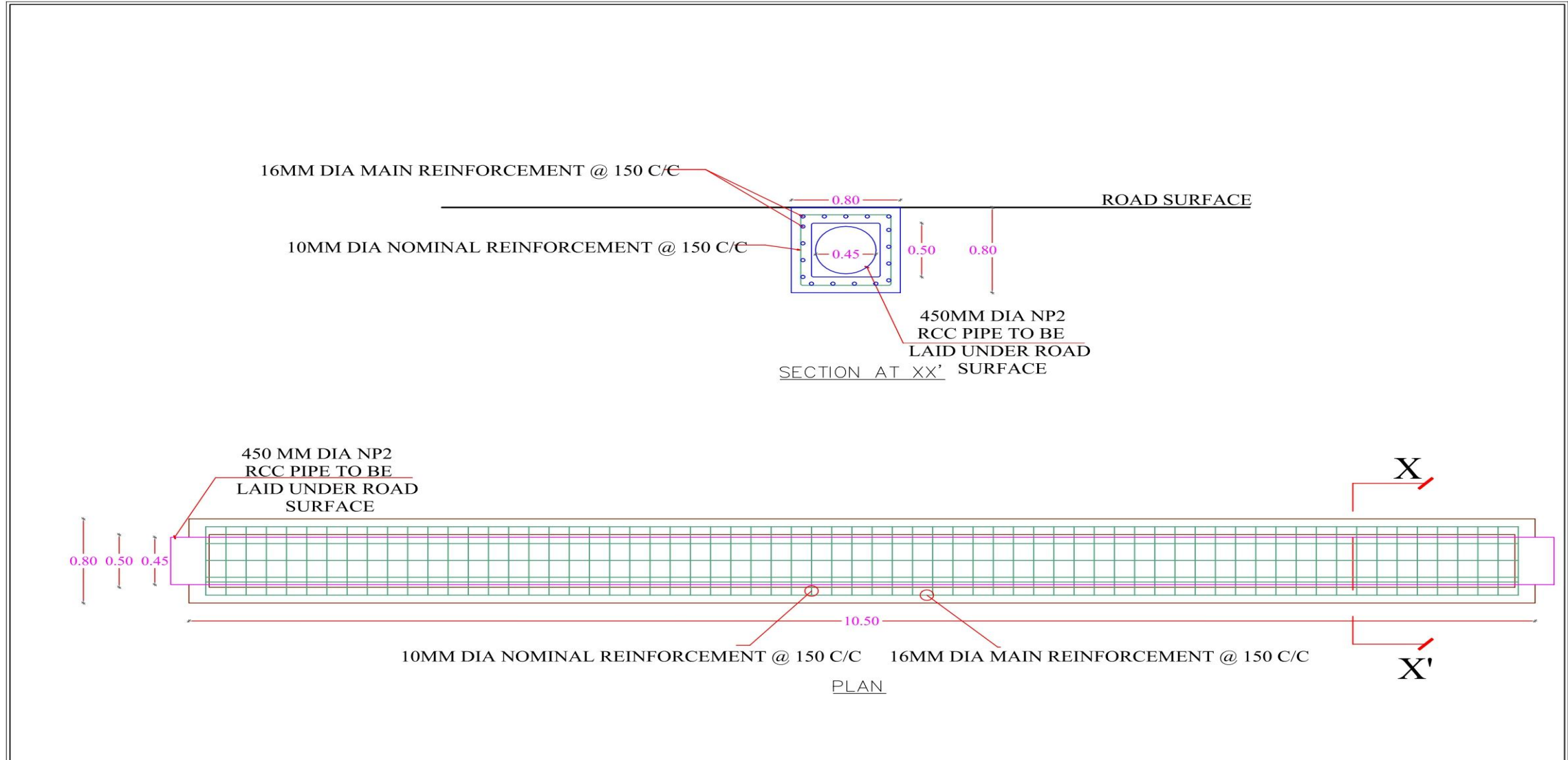
<b>PROJECT TITLE:</b> AUGMENTATION OF WATER SUPPLY AT DAPORIJO TOWNSHIP (5.90 MLD).	<b>TITLE</b> ENTRY GATE & COMPOUND WALL	<b>DRAWING</b> <input type="checkbox"/> FOR PROPOSAL <input type="checkbox"/> FOR APPROVAL <input checked="" type="checkbox"/> FOR EXECUTION	<b>NORTH</b> 	<b>DATE:</b> 18/01/2023	<b>DRAWING NO:</b>	<b>NOTE:-</b> 1. Do not Scale the Drawing, Follow Written Dimensions. 2. All Dimensions and Levels in Metre.	This drawing is a property & copyright of M/s Yield Engineering Services. No part of this drawing may be used or reproduced used in any manner, stored in a retrieval system, or transmitted in any form or by any means such as electronic, mechanical, or otherwise, except for related project, without written permission of M/s Yield Engineering	<b>PROJECT BY:</b>  ADD- RIBA BUILDING DIVISION ROAD, PH +91-9650821997,9774068766 E-mail : yesconsultancy17@gmail.com
<b>CLIENT:</b> PHE & WATER SUPPLY DIVISION, DAPORIJO.	<b>SHEET TITLE</b>			<b>SCALE:</b> NTS	<b>REVISION NO:</b>			
				<b>CHECKED BY:</b> ER. BAKE JULI	<b>DRAWN BY:</b> AR. LUNI DOLEY			


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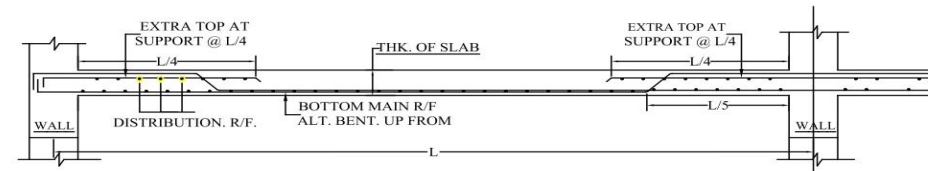
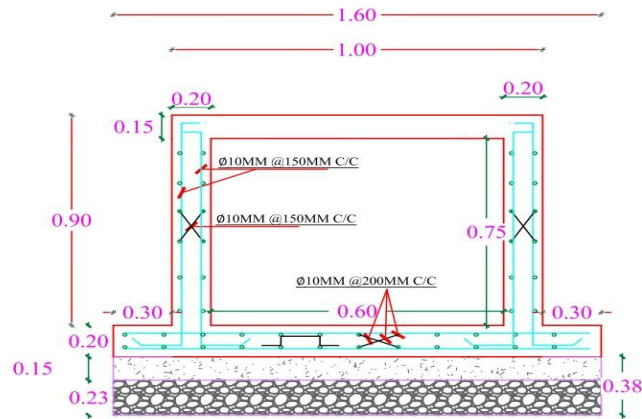
<b>PROJECT TITLE:</b> AUGMENTATION OF WATER SUPPLY TO DAPORIJO TOWNSHIP (5.90 MLD)	<b>TITLE</b> ARCHITECTURAL & STRUCTURAL DRAWING	<b>DRAWING</b> <input type="checkbox"/> FOR PROPOSAL <input type="checkbox"/> FOR APPROVAL <input checked="" type="checkbox"/> FOR EXECUTION	<b>NORTH</b>	<b>DATE:</b> 31/01/2023	<b>DRAWING NO:</b> WTP/DAPO/SS/013	<b>NOTE:-</b> 1. Do not Scale the Drawing Follow Written Dimensions. 2. All Dimensions and Levels in Metre.	<i>This drawing is a property &amp; copyright of M/s Yield Engineering Services. No part of this drawing may be used or reproduced used in any manner, stored in a retrieval system, or transmitted in any form or by any means such as electronics, mechanical, or otherwise, except for related project, without written permission of M/s Yield Engineering Services.</i>	 YES MULTIDISCIPLINARY ENGINEERING SERVICES ADD- RIBA BUILDING DIVISION ROAD, PH +91-9650821997, 9774068766 E-mail : yesconsultancy17@gmail.com	Copyright Yield Engineering Services
<b>CLIENT:</b> PHE & WATER SUPPLY DIVISION, DAPORIJO.	<b>SHEET TITLE</b> ANCHOR BLOCK			<b>SCALE:</b> NTS	<b>REVISION NO:</b> R0 <b>DRAWN BY:</b> Self <b>CHECKED BY:</b> Er. Bake Juli				

NESIDS-DRJ

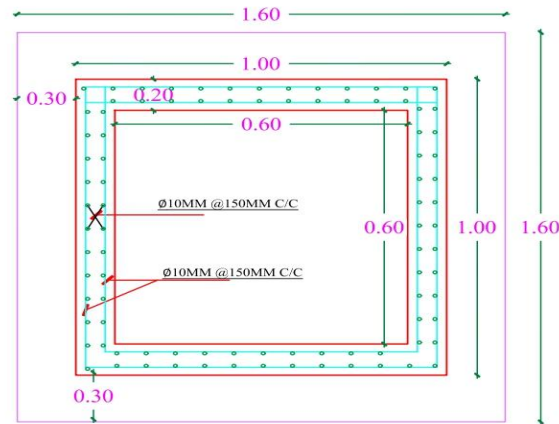


<b>PROJECT TITLE:</b> AUGMENTATION OF WATER SUPPLY TO DAPORIJO TOWNSHIP (5.90 MLD)	<b>TITLE</b> ARCHITECTURAL & STRUCTURAL DRAWING	<b>DRAWING</b> <input type="checkbox"/> FOR PROPOSAL <input type="checkbox"/> FOR APPROVAL <input checked="" type="checkbox"/> FOR EXECUTION	<b>NORTH</b>	<b>DATE:</b> 31/01/2023	<b>DRAWING NO:</b> WTP/DAPO/SS/012	<b>NOTE:-</b> 1. Do not Scale the Drawing Follow Written Dimensions. 2. All Dimensions and Levels in Metre.	<small>This drawing is a property &amp; copyright of M/s Yield Engineering Services. No part of this drawing may be used or reproduced used in any manner, stored in a retrieval system, or transmitted in any form or by any means such as electronics, mechanical, or otherwise, except for related project, without written permission of M/s Yield Engineering Services.</small>
<b>CLIENT:</b> PHE & WATER SUPPLY DIVISION, DAPORIJO.	<b>SHEET TITLE</b> ROAD CROSSING WORKS			<b>SCALE:</b> NTS	<b>REVISION NO:</b> R0 <b>DRAWN BY:</b> Self <b>CHECKED BY:</b> Er. Bake Juli		 <p><b>YES</b> CONSULTANCY ARCHITECTS, INTERIOR PLANNERS ADD: RIBA BUILDING DIVISION ROAD, PH +91-9650821997, 9774068766 E-mail : yesconsultancy17@gmail.com</p>






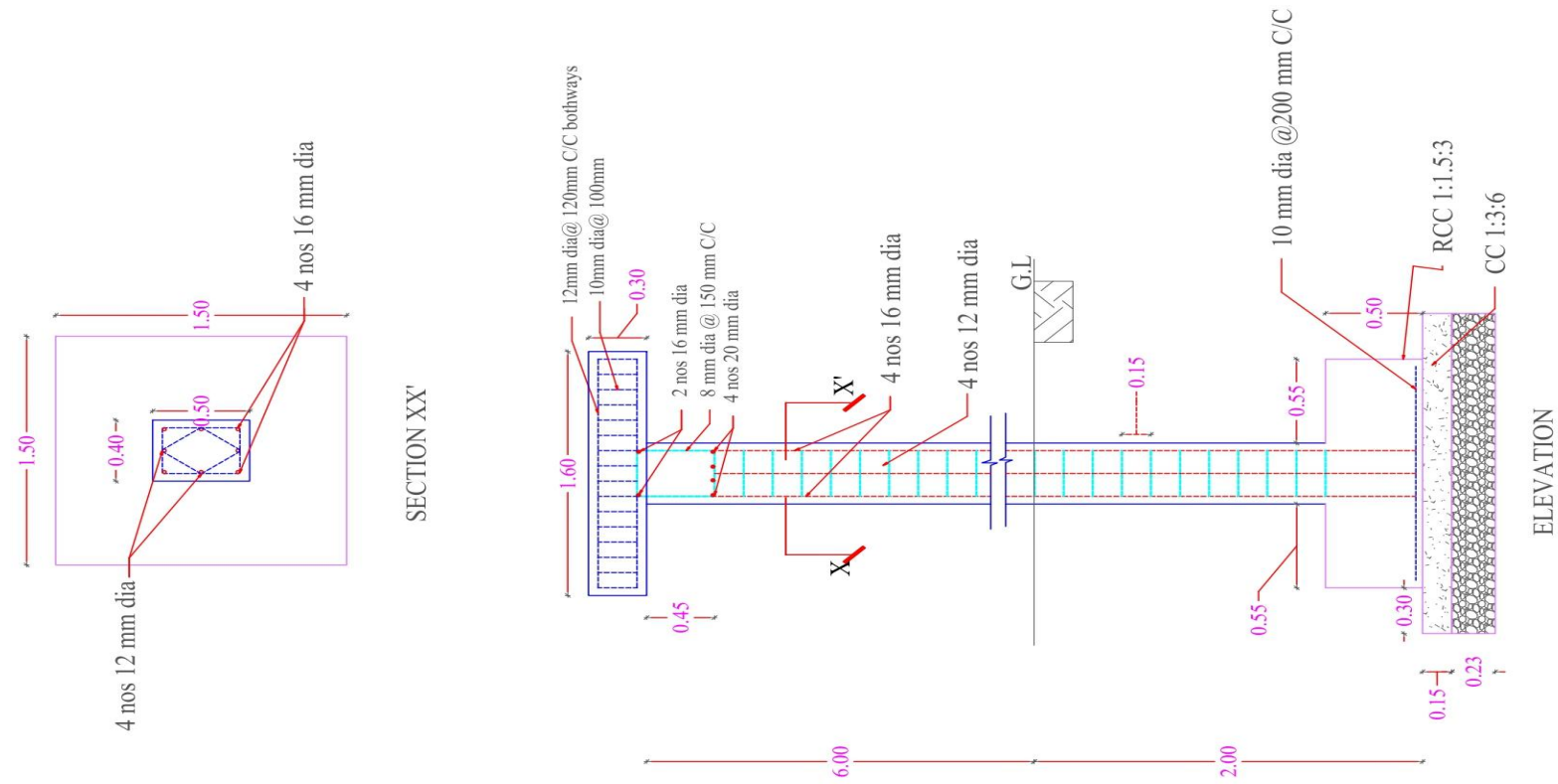
TYPICAL REINFORCEMENT ARRANGEMENT DETAIL AT TOP SLAB



SCHEDULE FOR TWO WAY SLAB

SR. NO	PANNEL CODE	OVERALL THICKNESS	MAIN R/F ON SHORT SPAN	MAIN R/F ON LONG SPAN	EXTRA TOP AT SUPPORT @ L/4	DISTRIBUTION STEEL
1	S1	125 MM	Ø10MM@150 C/C ALT. BENT UP	Ø10MM@150 C/C ALT. BENT UP	Ø10MM@300 C/C	Ø8MM@200 C/C

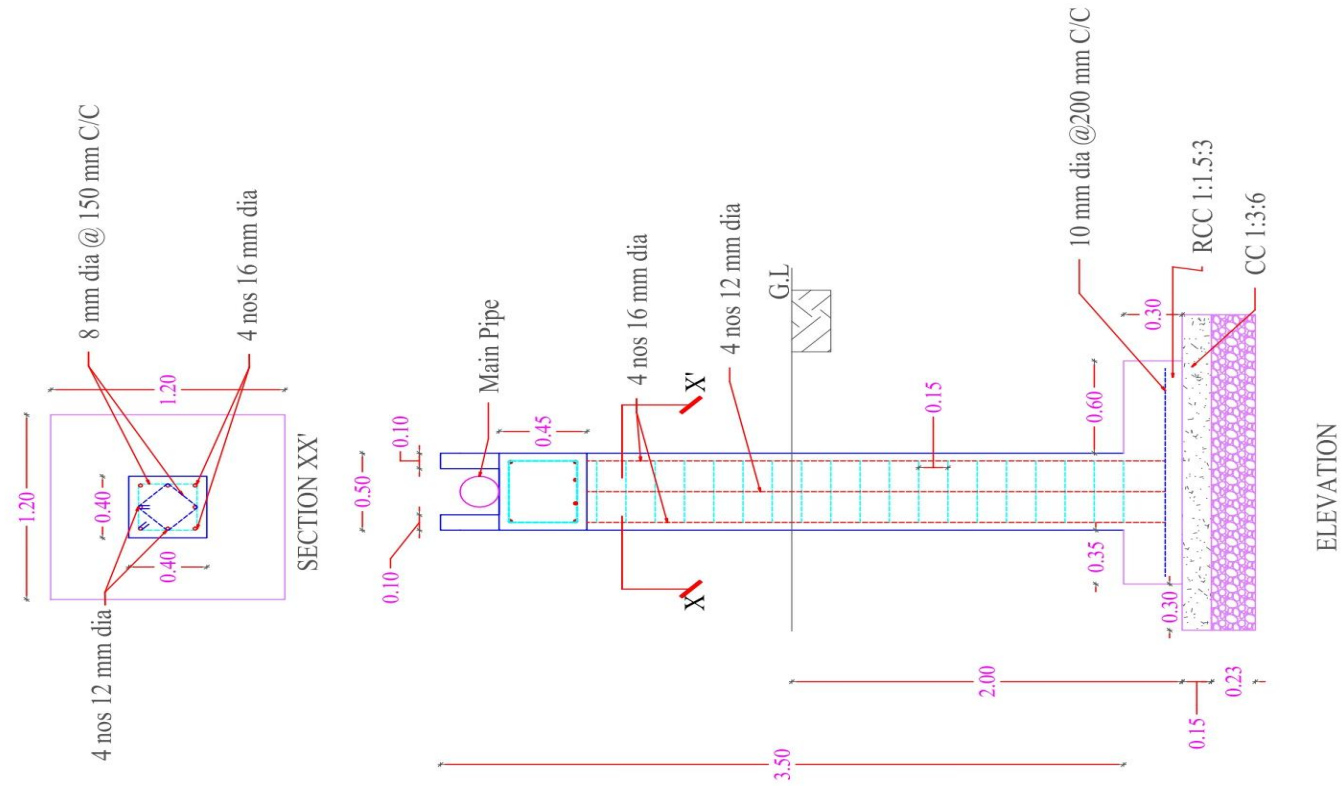
<b>PROJECT TITLE:</b> AUGMENTATION OF WATER SUPPLY TO DAPORIJU TOWNSHIP (5.90 MLD)	<b>TITLE</b> ARCHITECTURAL & STRUCTURAL DRAWING	<b>DRAWING</b> <input type="checkbox"/> FOR PROPOSAL <input type="checkbox"/> FOR APPROVAL <input checked="" type="checkbox"/> FOR EXECUTION	<b>NORTH</b>	<b>DATE:</b> 31/01/2023	<b>DRAWING NO:</b> WTP/DAPO/SS/016	<b>NOTE:-</b> 1. Do not Scale the Drawing 2. Follow Written Dimensions. 3. All Dimensions and Levels in Metre.	<i>This drawing is a property &amp; copyright of M/s Yield Engineering Services. No part of this drawing may be used or reproduced used in any manner, stored in a retrieval system, or transmitted in any form or by any means such as electronics, mechanical, or otherwise, except for related project, without written permission of M/s Yield Engineering Services.</i>	 <p>PROJECTS: INTERIORS PLANNING ADD- RIBA BUILDING DIVISION ROAD, PH +91-9650821997, 9774068766 E-mail - yesconsultancy17@gmail.com</p>
<b>CLIENT:</b> PHE & WATER SUPPLY DIVISION, DAPORIJU.	<b>SHEET TITLE</b> CONTROL CHAMBER			<b>SCALE:</b> NTS	<b>REVISION NO:</b> R0			
					<b>DRAWN BY:</b> Self <b>CHECKED BY:</b> Er. Bake Juli			




<b>PROJECT TITLE:</b>	<b>TITLE</b>	<b>DRAWING</b>	<b>NORTH</b>	<b>DATE:</b>	<b>DRAWING NO: WTP/DAPO/SS/015</b>	<b>NOTE:-</b>	This drawing is a property & copyright of Mrs. Yield Engineering Services. No part of this drawing may be used or reproduced used in any manner, stored in a retrieval system, or transmitted in any form or by any means such as electronics, mechanical, or otherwise, except for related project, without written permission of Mrs. Yield Engineering Services.
AUGMENTATION OF WATER SUPPLY TO DAPORIJO TOWNSHIP (5.90 MLD)	ARCHITECTURAL & STRUCTURAL DRAWING	<input type="checkbox"/> FOR PROPOSAL <input type="checkbox"/> FOR APPROVAL <input checked="" type="checkbox"/> FOR EXECUTION		27/07/2022	<b>REVISION NO:R0</b>	1. Do not Scale the Drawing Follow Written Dimensions. 2. All Dimensions and Levels in Metre.	
<b>CLIENT:</b>	<b>SHEET TITLE</b>			<b>SCALE:</b>	<b>DRAWN BY:</b> Self		
PHE & WATER SUPPLY DIVISION, DAPORIJO.	TEE BEAM			NTS	<b>CHECKED BY:</b> Er. Bake Juli		

**YES**  
 RIBBON SIGN  
 DREAM HOME  
 ARCHITECTURE & INTERIORS  
 ADD- RIBA BUILDING DIVISION ROAD,  
 PH +91-9650821997, 9774068766  
 E-mail - yesconsultancy17@gmail.com

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<b>PROJECT TITLE:</b> AUGMENTATION OF WATER SUPPLY TO DAPORIJO TOWNSHIP (5.90 MLD).	<b>TITLE</b> ARCHITECTURAL & STRUCTURAL DRAWING	<b>DRAWING</b> <input type="checkbox"/> FOR PROPOSAL <input type="checkbox"/> FOR APPROVAL <input checked="" type="checkbox"/> FOR EXECUTION	<b>NORTH</b>	<b>DATE:</b> 31/01/2023	<b>DRAWING NO:</b> WTP/DAPO/SS/014 <b>REVISION NO:</b> R0	<b>NOTE:-</b> 1. Do not Scale the Drawing .Follow Written Dimensions, 2.All Dimensions and Levels in Metre.	<i>This drawing is a property &amp; copyright of M/s Yield Engineering Services. No part of this drawing may be used or reproduced used in any manner, stored in a retrieval system, or transmitted in any form or by any means such as electronic, mechanical, or otherwise, except for related project, without written permission of M/s. Yield Engineering Services.</i>
<b>CLIENT:</b> PHE & WATER SUPPLY DIVISION, DAPORIJO.	<b>SHEET TITLE</b> TRESTLE SUPPORT			<b>SCALE:</b> NTS	<b>DRAWN BY:</b> Self <b>CHECKED BY:</b> Er. Bake Juli		 <p><b>YES</b> ENGINEERING SERVICES ADD- RIBA BUILDING DIVISION ROAD, PH +91-9650821997, 9774068766 E-mail : yesconsultancy17@gmail.com</p>

# SECTION 9

# FORM OF BID

**FORM OF BID**

Description of the Works:

.....

BID :  
To : Executive Engineer  
Address : PHE&WS Division  
Daporijo, AP

1. We offer to execute the Works described above and remedy any defects therein in conformity with the conditions of Contract, specification, drawings, Bill of Quantities and Addenda for the sum(s) of \_\_\_\_\_
2. We undertake, if our Bid is accepted, to commence the Works as soon as is reasonably possible after the receipt of the Engineer's notice to commence, and to complete the whole of the Works comprised in the Contract within the time stated in the document.
3. We agree to abide by this Bid for the period of **75 (Seventy five ) days** from the date fixed for receiving the same, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
4. Unless and until a formal Agreement is prepared and executed this Bid, together with your written acceptance thereof, shall constitute a binding contract between us.
5. We understand that you are not bound to accept the lowest bid or any tender you may receive.
6. We accept the appointment of Shri ..... as the Dispute Review Expert as per Clause 36 of ITB (Section-1)

(OR)

~~We do not accept the appointment of Shri..... as the Dispute Review Expert and propose instead that Shri \_ be appointed as Dispute Review Expert, whose BIO-DATA is attached.~~

Dated this \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_\_

Signature \_\_\_\_\_ in the capacity of \_\_\_\_\_

duly authorized to sign bids for the on behalf of \_\_\_\_\_

(in block capitals or typed)

Address \_\_\_\_\_

Witness \_\_\_\_\_

Address \_\_\_\_\_

Occupation \_\_\_\_\_

**SECTION 10**  
**BILLS OF QUANTITY (BOQ)**

**BILL OF QUANTITIES (BOQ)****Preamble**

1. The Bill of Quantities shall be read in conjunction with the Instructions to Bidders, Conditions of Contract, Technical Specifications and Drawings.
2. The basis of payment will be the actual quantities of work ordered and carried out, as measured by the Contractor and verified by the Engineer and valued at the rates and prices tendered in the priced Bill of Quantities, corresponding to Para-9 & 10 of Section-4/Contract Data.
3. The prices tendered in the priced Bill of Quantities shall, except in so far as it is otherwise provided under the Contract, include all constructional plant, labour, supervision, materials, erection, maintenance, insurance, profit, taxes and duties, together with all general risks, liabilities and obligations set out or implied in the Contract.
4. The prices shall be quoted entirely in Indian Currency.
5. A rate or price shall be entered against each item in the Bill of Quantities, whether quantities are stated or not. The cost of Items against which the Contractor has failed to enter a rate or price shall be deemed to be covered by other rates .and prices entered in the Bill of Quantities.
6. General directions and descriptions of work and materials are not necessarily repeated or summarized in the Bill of Quantities.
7. The method of measurement of completed work for payment shall be in accordance Para-10 of Section-4/Contract Data.
8. Item for which no rate or price has been entered in will not be paid for by the Employer when executed and shall be deemed covered by the other rates and prices in the bill of quantities (Refer: ITB Clause 13.2 and CC Clause 43.3).
9. Unit rates and prices shall be quoted by the bidder in Indian rupee [ITB Clause 14.1].

**BILL OF QUANTITIES (BOQ)**

Division:- PHED, Daporijo

Sub-Division:- Daporijo

Name Project:- Augmentation of Water Supply system at Daporijo Township(4.20MLD) under NESIDS.

SL No	Components/Items	Quantity	Unit	Rate (in Rs)		Amount (in Rs.)	
				In Fig.	In Words	In Fig.	In Words
1	Design, drawing and construction of RCC Drop-inlet head work as per specifications.	1	Job				
2	Design, drawing and construction of Aerator, approach channel, flash mixture and parshall flume as per specifications.	1	Job				
3	Design, drawing and construction of plain sedimentation tank.	1	Job				
4	Design, drawing and construction of RCC circular clariflocculator tank including walk way slab, launder	1	Job				



	channel as per specifications complete.						
5	Design, Construction, supply of materials, erection, Installation & Commissioning of complete WTP pressure filtration system plant of average 2 Lakhs/hr capacity (2W+1S) with SCADA compatible pressure monitoring, controlling and back washing mechanism.	1	Job				
6	Design, drawing and construction of Chemical house.	1	Job				
7	Design, drawing and construction of RCC clear water reservoir with RCC slab ventilation, beam and column as per technical specifications.	1	Job				

8	150 KVA DG set	1	Job				
9	Generator shed	1	Job				
10	Provision of by pass and sludge pipeline 300mm dia to disposal point including delivery necessary specials fittings complete.	1	Job				
11	Design, Supply, Installation & Commissioning of SCADA system for monitoring & operation of Water Treatment Plant & Town Water distribution system with min 100" monitoring station, wireless communication systems, firewalls, LAN, switch, internet connectivity, cables	1	Job				

	and required instruments, electronics with complete trails training and handover.						
12	Design, drawing and construction of Zinc Alum distribution over head tank with RCC slab ventilation, beam and column as per technical specifications.	1	Job				
13	WTP and Zonal tank inlet-outlet valves- control valves, flow meter, pressure transmitter, level transmitter, RTU, Air valves, Isolation cum drain valves and fire hydrant.	1	Job				
14	Providing and supplying of S&S Centrifugally Cast (Spun)/Ductile Iron Pipes conforming to IS: 8329: 250mm dia Ductile Iron Class K-9 pipes and GI Pipes of different diameters.	1	Job				

15	Providing and supplying of necessary DI fittings for Pipelines.	1	Job				
16	Provision for House Service Connection.	1	Job				
17	Design, drawing and construction of compound wall around WTPs as per technical specifications.	1	Job				
18	Design, drawing and construction of road crossing, Valve Chamber, Anchor Blocks, Trestle Support and demolition and re-construction provision as per technical specifications.						

19	External Electrification in WTP complex including providing and fixing street light, lamp post, garden lamp, glow sign and flood lights and its inter cabling connection from the main board complete.	1	Job				
20	Construction of Retaining wall around WTP site.	1	Job				
21	Construction of approach to WTP and Head Work  a) Soling, Metalling and Carpetting.	1	Job				

	b) Formation Cutting.	1	Job				
	c) Formation Cutting for laying of DI Pipes.	1	Job				
22	Site Development.	1	Job				

**(Signature of Bidder)**