

Dt.9-10-23

STANDARD BIDDING DOCUMENT

PROCUREMENT OF

BUILDING WORKS

COMPLETE BIDDING DOCUMENT

PROJECT IMPLEMENTATION UNIT
HEALTH & FAMILY WELFARE DEPARTMENT



GOVERNMENT OF GUJARAT
HEALTH & FAMILY WELFARE DEPARTMENT
GANDHINAGAR

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**INVITATION FOR BID
(IFB)**

NATIONAL COMPETITIVE BIDDING

1. The Superintending engineer, PIU, Zone- 2, Dist. Junagadh invites bids for the construction of works detailed in the table.
The bidders may submit bids for any or all of the following works.

TABLE

Package No.	:	1
Name of work	:	A.R.C. year 2026-27 for civil works for various health care facilities in Junagadh City, Dist. Junagadh
Approximate value of works (Rs.)	:	Rs. 10000000
Tender Fee (Rs.)	:	Rs. 2400.00
Bid security EMD (Rs.)	:	Rs. 100000
Period of completion	:	12 (Twelve) Months
Class of Registration / Category of contractor if required	:	“D” Class and Above from Gujarat State R & B Depts or similar Government Dept of Government of Gujarat only.

2. Prospective / Interested bidder may download the Bid Documents from website <https://tender.nprocure.com> free of cost till the Time and Date as mentioned on online NIT at website <https://tender.nprocure.com>.
3. However, Bidder who is submitting the Bid Online will have to pay the Bid Document Fee / Tender Fee through Demand Draft only of any Schedule Bank payable at Gandhinagar and in favor of **‘PIU GENERAL FUND A/C 11-114’**. Once the Bid is received online, Bid Document / Tender Fee will not be refundable.
The Demand Draft for Bid Document / Tender fee and FDR / Bank Guarantee against Bid Security / EMD shall be submitted in electronic format through online (by scanning) while uploading the bid, this submission shall mean that bid document / tender fee and Bid Security / EMD has been received. Accordingly, the offer of only those shall be opened whose Bid Document / Tender Fee and Bid Security / EMD have been received electronically. However, for the purpose of realization of Demand Draft, and FDR / Bank Guarantee bidder shall send the same in original through R.P.A.D. so as to reach to ‘Superintending engineer, Gandhinagar within 7 Days from the last day of bid submission.
Penalitive action for not submitting Demand Draft / FDR / Bank Guarantee in original to Superintending engineer / Tender Inviting Authority, PIU by bidder shall be initiated.
4. Bids received online, will be opened on the time, date and place as specified in the online NIT at website <https://www.tender.nprocure.com> in the presence of the bidders or their authorized representatives, who wish to remain present.
If the office happens to be closed on the day of opening of the bids as specified, the bids will be opened on the next working day at the same time and venue.
5. ~~A pre bid meeting will be held onathrs. at the office of Superintending engineer at Gandhinagar to clarify the issues and to answer questions on any matter thatmay be raised at that stage as stated in clause 9.2 of ‘instructions to Bidders’ of the bidding documents.~~
6. Bid Security (EMD) is equal to 1% of Estimated Amount put to bid / tender and should be rounded off to the next thousand rupees.
7. Other Information is as under:

- A. Agencies can prepare and edit their offers a number of times before the end of the tender submission date and time. After the tender submission date and time, the bidder cannot modify / edit / withdraw their submitted offer in any case. No written or online request in this regard shall be granted.
- B. Offers in physical form will not be accepted in any case.
- C. Demand Draft purchased by the other than bidder and issued after the last date of submission of Bids, will not be considered or accepted.
- D. The cost incurred by the contractor for this offer for clarification or attending discussion, conferences or site visits will not be reimbursed by the Employer or Engineer-in-Charge.
- E. Conditional tender shall not be accepted.
- F. Any changes, addition, alternation made in the prescribed form attached with tender are liable to be rejected.
- G. Any change in format or conditional Bank Guarantee will not be accepted and the bidder will be considered non-responsive.
- H. All the bidders are instructed to fill in information strictly in accordance with the format given in the checklist / qualification document / tender document.
- I. It is mandatory for the bidders to supply each and every information as asked strictly in electronic format at appropriate places only.
- J. Blank / insufficient information shall be treated as nil information and shall result in disqualification.
- K. Even if the bidder has been qualified in a similar or larger size of project in the past, it shall not be deemed to be a ground / reason for not giving required information for this work / bid.
- L. Information supplied for earlier projects shall not be considered while evaluation of this bid. The Government will not ask for any other information, unless it is found absolutely necessary by the competent authority.
- M. If found necessary, the contractor will be intimated for negotiation,

For the works costing up to 7.5 crore (ROAD), 7.0 crore (BUILDING & BRIDGE) kindly refer to SSR-10-2015-17-C dated 03-02-2017

For the works costing under 7.5 crore for Road Works and 7.0 crore for Building and Bridge Works following documents shall be submitted in electronic format only through online by scanning and the (i) Bid Document Fee / Tender Fee (ii) Bid Security / EMD should be sent in original to the Tender opening authority through RPAD, so as to reach the Executive Engineer within 7 days from last day of submission of Bid.

- (i) Bid Document Fee / Tender Fee **(From Bidders A/C Only)**
- (ii) Bid Security / EMD or Valid EMD Exemption Certificate of Appropriate Class of Registration of Approved Contractors
- (iii) Registration Certificate of Appropriate Class
- ~~(iv) Registration Certificate of Special Category – Building and Category I / II / III~~
- (v) GST Number & PAN Number
- (vi) Work Experience, if necessary...
- (vii) (A) EPF Registration Number ...(B) ESIC Registration Number if applicable
- (viii) Solvency Certificate of an amount of 20% of Estimated cost shall have validity of same calendar year of that of date in which tender is issued

SECTION - 1
INSTRUCTIONS TO BIDDERS
(ITB)

Section 1: Instructions to Bidders

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A. GENERAL

1. Scope of Bid

- 1.1 The Project Implementation Unit, Family Welfare Department, Government of Gujarat invites bids for the Construction of works(as defined in these documents and referred to as 'the works") detailed in the table given in IFB. The bidders may submit bids for any or all of the works detailed in the table given in IFB.

The Project Implementation Unit, Family Welfare Department, Government of A.R.C. year 2026-27 for civil works for various health care facilities in Junagadh City, Dist. Junagadh. The successful bidder will be expected to complete the works by the intended completion date specified in the Contract data.

- 1.2 Throughout these bidding documents, the terms 'bid' and 'tender' and their derivatives (bidder/ tenderer, bid / tender, bidding/ tendering, etc.) are synonymous.

2. Source of Funds

- 2.1 The expenditure on this project will be met from the budget of Govt. of Gujarat / Govt. of India for centrally sponsored projects.

3. Eligible Bidders

- 3.1 This Invitation for Bids is open to all eligible bidders.
- 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.

4. Qualification of the Bidder

- 4.1 All bidders shall provide in Section 2, Forms of Bid and Qualification Information, a preliminary description of the proposed work method and schedule, including drawings and charts, as necessary. The proposed methodology should include a program of construction backed with equipment planning and deployment duly supported with broad calculations and quality assurance procedures proposed to be adopted justifying their capability of execution and completion of work as per technical specifications, within stipulated period of completion.
- 4.2 Deleted
- 4.3 Deleted
- 4.4 Deleted

#4.5 QUALIFICATION CRITERIA: (Applicable for the works which require Post Qualification)

- 4.5.1 Qualification will be based on Applicant's meeting all the following minimum pass/fail criteria regarding the Applicant's general and particular experience, personnel and equipment capabilities and financial positions, as demonstrated by the applicant's responses in the forms attached to the letter of application (specified

requirement for joint ventures are given under para 4.6 below) Subcontractors experience and resources shall not be taken in to account in determining the applicants compliance with the qualifying criteria

To qualify for more than one contract, the applicant must demonstrate having experience and resources sufficient to meet the aggregate of the qualification criteria for each contract given in paragraphs 4.5.4, 4.5.5 and 4.5.9 below

~~4.5.2~~—Base year and Escalation

The base year shall be taken as Current financial year

Following enhancement factors will be used for the costs of works executed and the financial figure to a common base value for works completed in India.

<u>Year</u>	<u>Financial Year</u>	<u>Multiplying factor</u>
Base year of inviting tender	2023-24	1.00
-1	2022-23	1.10
-2	2021-22	1.21
-3	2020-21	1.33
-4	2019-20	1.46
-5	2018-19	1.61

Applicant should indicate actual figures of costs and amount for the works executed by them without accounting for the above-mentioned factors.

In case the financial figures and value of completed works are in foreign currency the above enhanced multiplying factors will not be applied. Instead, the current market exchange rate (State Bank of India BC Selling rate as on the last date of submission of the bid) will be applied for the purpose of conversion of the amount in foreign currency into India rupees.

~~4.5.3. General Experience.~~

The Applicant shall meet with the following minimum criteria:

(a) **~~Annual Turn Over~~**

Achieved a minimum annual financial turnover (defined as billing for works in progress and completed in all classes of civil engineering construction works only) in any one year, over the last five years of the annual value of contract / contracts applied for.

**~~Annual Turn Over shall be more than Rs. _____ Crore (i.e. X)
(for guidance of deriving X the value of X shall be derived by dividing amount put to tender by the time limit expressed in years for the project /work.)~~**

~~Joint Venture: Lead Partner & Second another Partner only (i.e. 1(Lead Partner)+1(Other Partner)~~

~~For Joint Venture: The Lead Partner must have updated annual turnover not less than Rs. _____ Crores. (51% of X) & remaining Partner must have updated annual turn over not less than Rs. _____ Crores. (30% of X).~~

~~The Joint Venture must collectively have updated annual turnover not less than Rs. _____ Crores. (i.e. X)~~

(b) Successful Experience

~~Experience in successfully completing or substantially completing at least one contract of **similar nature of** building works of at least 40 percent of the value of proposed contract within the last five years.~~

~~The works may have been executed by the applicant as prime contractor or as a member of a joint venture or as a nominated sub-contractor. As subcontractor, he should have acquired the experience of execution of all major items of works under the proposed contract. In case a project has been executed by a joint venture, weight towards experience of the project would be given to each joint venture in proportion to their financial participation in the joint venture.~~

~~Substantially completed works means those works which are at least 90 % completed as on the date of submission (i.e. gross value of work done up to the last date of submission is 90 % or more of the original contract price) and continuing satisfactorily.~~

~~For these, a certificate from the employers shall be submitted along with the application incorporating clearly the name of the work, contract value, billing amount, date of commencement of works, satisfactory performance of the contractor and any other relevant information. (as attached Form – 3A)~~

~~Bidder must have as prime contractor or as nominated (Approved by Employer) Sub Contractor successful Experience as follows:~~

- ~~I. At least One similar work having updated completion cost not less than Rs. _____ Crores. (40 % of the Amount put to tender of the proposed work).~~
- ~~II. Such Work must have been completed/ substantially completed (i.e. gross value of work done up to the last date of submission is 90 % or more of the original contract price) within last 5 financial years i.e. from 01/04/____ till the due date of bid for the proposed work.~~
- ~~III. A work would qualify as similar work only if it meets with definition given in Appendix – A.~~
- ~~IV. For updating completion cost of the work to the current financial year procedure narrated in Cl.4.5.2 and Appendix-2 ITB Section-1, Sr. No.18 itself mutatis mutandis apply.~~
- ~~V. For Joint Venture, qualifying threshold amount of updated completion cost would be as per GR No. SSR/10/2015/17/C Dt. 20-06-2020 of Sr. No. 2(b) V or as mention here under:
(V-I) Lead Member: Rs. _____ Crores (75% of amount mention in (b) I. i.e. 30% of amount put to tender)

(V-II) Other Member: Rs. _____ Crores (51% of amount mention in (b) I. i.e. 20.4% of amount put to tender)~~

4.5.4. Personnel Capabilities.

Availability for his work of personnel with adequate experience as required; as per **Appendix.**

4.5.5. Equipment Capabilities

Based on the studies carried out by the Engineer, the minimum suggested major equipment to attain the completion of works in accordance with the prescribed construction schedule are shown in the Appendix.

The bidders should, however, undertake their own studies and furnish with their bid, a detailed construction planning and methodology supported with layout and necessary drawings and calculations to allow the employer to review their proposals. The numbers, types and capacities of each plant/equipment shall be shown in the proposals along with the cycle time for each operation for the given production capacity to match the requirements.

4.5.6. Financial Position

The Applicant should give undertaking that he has access to, or has available, liquid assets (aggregate of working capital, cash in hand and uncommitted bank guarantees) and / or credit facilities up to 25 percent of the value of the contract / contracts applied.

4.5.7. The audited balance sheets for the last five years should be submitted, which must demonstrate the soundness of the applicant's financial position, showing long term profitability including an estimated financial projection for the next two years, if necessary, the employer will make inquiries with the applicant's bankers.

4.5.8. Litigation History

The Applicant should provide accurate information on any litigation or arbitration resulting from contracts completed or under execution by him over the last five years. A consistent history of awards against the Applicant or any partner of a joint venture may result in failure of the applicant.

4.5.9. Disqualification

Even though the applicants meet the above criteria, they are subject to be disqualified if they have:

Made misleading or false representation in the forms, statements submitted, and / or Record of poor performance such as abandoning the work, rescinding of contract for which the reasons are attributable to the non – performance of the contractor; consistent history of litigation awarded against the applicant or financial failure due to bankruptcy. The rescinding of contract of a joint venture on account of reasons other than non – performance, such as Most Experienced partner of joint venture pulling out, court directions leading to breaking up of a joint venture before the start of work, which are not attributable to the poor performance of the contractor will, however, not affect the qualification of the individual partners.

**#4.6 JOINT VENTURE: (Maximum 2 Members i.e. 1 Lead & 1 Others)-
(Applicable only for estimated project cost of 50 Crore and above)**

4.6.1. Joint ventures must comply with the following requirement:

(a) Following are the minimum qualification requirements:

(i) The lead partners shall meet not less than 51 percent of all criteria given in para

~~4.5.3~~ (a) Annual Turn Over 4.5.3 (b) Successful Experience V-I & 4.5.6 above.

The joint venture must collectively satisfy the criteria of para 4.5.3 & 4.5.6 above. The experience of the other joint venture partners shall be considered if it is not less than 30 percent of the qualifying criteria in para 4.5.3 & 4.5.6 above.

(ii) Individually each member must satisfy the requirements of para 4.5.3(a), 4.5.3.(b), 4.5.7, 4.5.8 above and 4.7 below.

(b) Bid shall be signed so as to legally bind all partners, jointly and severally, and shall be submitted with a copy of the joint venture agreement providing the joint and several liabilities with respect to the contract.

4.6.2. Qualification of a joint venture does not necessarily qualify any of its partners individually or as a partner in any other joint venture. In case dissolution of a joint venture, each one of the constituent firms may qualify if they meet all the qualification requirements, subject to the written approval of the Employer.

4.7. Bid Capacity.

Applicants who meet the minimum qualification criteria will be qualified only if their available bid capacity at the expected time of bidding is more than the total estimated cost of the works. The available bid capacity will be calculated as under:

Assessed Available Bid Capacity = (A*N*2-B), where

A = Maximum value of work executed in any one year during the last five financial years i.e. from 2018-19 to 2023-24 (updated to the price level of the year indicated in appendix) taking into account the completed as well as works in Progress.

B = Value at current price level of the existing commitments and ongoing works to be completed during the next (period of completion of work for which bids are invited); and

N = Number of years prescribed for completion of the works for which the bids are invited.

Note :- In Case of joint venture, the available bid capacity will be applied for each partner to the extent of his proposed participation in the execution of the work. Some of the bid capacity of all the member shall be more than 4.7.

4.8 Even though the bidders meet the above qualifying criteria, they are subject to be disqualified if they have:

- Made misleading or false representation in the forms, statements and Attachments the submitted in proof the qualification requirements; and /or
- Record of poor performance such as abandoning the works, not properly completing the contract, inordinate delay in completion, litigation history, or financial failures etc.; and/or
- Participated in the previous bidding for the same work and had quoted unreasonably high bid prices and could not furnish rational justification to the employer.

5. One bid per bidder

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

6. Cost of Bidding

6.1. 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.

7. Site Visit

7.1. The Bidder, at the Bidder's own responsibility and risk is encouraged to visit and examine the Site of work and its surrounding and obtain all information that may be necessary for preparing the Bid and entering into a contract for construction of the Works.

The costs of visiting the site shall be at the Bidder's own expense.

8. Bidders Registration Class and Building Category

8.1. Registration certificate of R & B Registered in D Class & Above / Water Resources Department, The contractors, who are registered in appropriate category of C.P.W.D., M.E.S., Railways and Indian State Governments, can also bid provided the bidder produce such registration certificate at the time of bidding and obtain and submit registration in required class & category from the Gujarat State R&BD/W.R.D before issue of work order in case they emerge as L-1 Bidder. Bidder will solely be responsible for obtaining and submitting the certificate before issue of work order.

B. BIDDING DOCUMENTS

9. Content of Bidding Documents

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

Section	Particulars	Volume No.
-	Invitation for Bids	I
1	Instructions to Bidders	
2	Qualification Information, and other forms	
3	Conditions of Contract	
4	Contract Data	
5	Technical Specifications	II
6	Form of Bid	III
7	Bill of Quantities	
8	Securities and other forms	
9	Drawings	IV
10	Documents to be furnished by bidder	V

82. Volumes I, II, III and IV are available online and documents to be furnished by the bidder in compliance to section 2 will be prepared by him and furnished as Volume-V in two parts (refer clause 12).
83. The bidder is expected to examine carefully all instructions, conditions of contract, contract data, forms, terms, technical specifications, bill of quantities, forms, Annexes and drawings in the Bid Document. Failure to comply with the requirements of Bid Documents shall be at the bidder's own risk. **Pursuant to clause 26 hereof**, bids which are not substantially responsive to the requirements of the Bid Documents shall be rejected.

10. Clarification Bidding Documents

- 10.1 A prospective bidder requiring any clarification of the bidding documents may notify the Employer in writing or through E-mail at the Employer's address indicated in the invitation to bid. The Employer will respond to any request for clarification which he received earlier than 15 days prior to the deadline for submission of bids. Employer's response will be published on website including a description of the enquiry but without identifying its source.

9.2. Pre-bid meeting

- 9.2.1. The bidder or his official representative is invited to attend a pre-bid meeting which will take place at the address, venue, time and date as indicated in the appendix.

- 9.2.2. The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.
- 9.2.3. The bidder shall be required to submit any questions in writing or e-mail to reach the Employer not later than 03 days before the meeting.
- 9.2.4 Minutes of the meeting, including the question raised (Without identifying the source of enquiry) and the responses given will be published without delay on the tender website i.e. www.nprocure.com. Any modification of the bidding documents listed in sub-Clause 8.1 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 10 and not through the minutes of the pre-bid meeting.
- 9.2.5. Non-attendance at the pre-bid meeting will not be a cause for disqualification of a bidder.

11. Amendment of Bidding Documents

- 11.1 Before the deadline for submission of bids, the Employer may modify the bidding documents by issuing addenda.
- 10.2. Any addendum thus issued shall be part of the bidding documents. The Employer will assume no responsibility for the same.
- 10.3. 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 20.2 below.

C. PREPARATION OF BIDS

12. Language of the Bid

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

13. Documents Comprising the Bid

12.1. The bid to be submitted by the bidder as Volume V of the bid document (refer Clause 8.1) shall be in two separate parts:

Part I shall be named "Technical Bid" and shall comprise

- (i) Bid Security in the form specified in Section 8
- (ii) Qualification Information and supporting documents as specified in Section 2
- (iii) Certificates, undertakings, affidavits as specified in Section 2
- (iv) Any other information pursuant to Clause 4.5 of these instructions
- (v) Undertaking that the bid shall remain valid for the period specified in Clause 15.1

Part II shall be named "Financial Bid" and shall comprise

- (i) Form of Bid as specified in Section 6
- (ii) Priced Bill of Quantities for items specified in Section 7

12.2. The Bidder shall submit the details / information pertaining to each part i.e. technical as well as financial and must be submitted online only.

12.3. Following documents will be deemed to be part of the bid.

Section	Particulars	Volume No.
Invitation for Bids (IFB)		
1	Instruction to Bidders	Volume I
3	Conditions of Contract	
4	Contract Data	
5	Specifications	Volume II
9	Drawings	Volume IV

14. Bid Prices

14.1 The Contract shall be for the whole works as described in Sub-Clause 1.1, based on the priced Bill of Quantities submitted by the Bidder.

14.2 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 Bill of Quantities.

- 14.3 All duties, taxes, and other levies except GST payable by the contractor under the contract, or for any other cause shall be included in the rates, prices and total Bid Price submitted by the Bidder. (GST will be paid extra)

14.4 Deleted

- 14.5 The rates and prices quoted by the bidder are subject to adjustment during the performance of the Contract in accordance with the provisions of Clause 47 of the Condition of Contract **(Irrespective of the time limit and Bid Amount)**

15. Currencies of Bid and Payment

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

16. Bid Validity

- 16.1 Bids shall remain valid for a period of not less than 120 days from the date of technical bid opened.
- 16.2 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 period. 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, but will be required to extend the validity of his security for a period of the extension, and in compliance with Clause 16 in all respects.

#16. Bid Security

- 16.1 The Bidder shall furnish, as part of his Bid, a Bid security in the amount as shown in column 4 of the table of IFB for this particular work. This Bid security shall be in favor of Employer as named in Appendix and may be in one of the following forms;
- a. Bank Guarantee from any scheduled Indian bank, in the format given in Volume III. **(Bank Guarantee is applicable only for Bid Estimated Amount of 01 Crore and above) and Bank** Guarantee of Schedule and Private Banks shall be considered as per GoG Finance Department's Circular No. FD/MSM/e-file/4/2023/0057/D.M.O. Date 21/04/2023 or as per their latest amendment.
- b. Fixed Deposit Receipt issued by any Scheduled Indian Bank or a foreign Bank approved by the Reserve Bank of India.

OR

A Valid Bid Security / EMD Exemption Certificate issued by (1) Road & Building Department or (2) Narmada Water Resources, Water Supply and Kalpsar Department of Govt of Gujarat. **Exemption Certificate is applicable only when Registration Certificate of Appropriate Class and Category of Approved Contractors is required as eligible criteria of bidder.**

162. Bank guarantees (and other instruments having fixed validity) issued as surety for the bid shall be valid for 45 days beyond the validity of the bid i.e. total validity of 120+45 = 165Days
163. Any bid not accompanied by an acceptable Bid Security and not secured as indicated in Sub-Clauses 16.1 and 16.2 above shall be rejected by the Employer as non-responsive.
164. The Bid Security of unsuccessful bidders will be returned within 28 days of the end of the bid validity period specified in Sub-Clause15.1
- 16.5 The Bid Security of the successful bidder will be discharged when the bidder has signed the Agreement and furnished the required PerformanceSecurity.
- 16.6. The bid Security may be forfeited
 - (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, if any
 - (c) In the case of a successful Bidders, if the Bidder fails the specified time limit to
 - (i) Sign the Agreement;or
 - (ii) Furnish the requirement PerformanceSecurity.
 - (d) #If found necessary, the bidder will be intimated for negotiation, He will be intimated maximum three times within the validity period for negotiation, If contractor does not respond in time, his Bid Security (EMD) will be forfeited and his tender will be rejected. Punitive action will be taken on such contractors. (As per GoG R&B Dept's Gr. No. S/22/2017/6369/D,Dt.08/06/2018)

17. Alternative Proposals by Bidders.

- 17.1 Bidders shall submit offers that fully comply with the requirements of the bidding documents, including the conditions of contract (including mobilization advance or time for completion), basic technical design as indicated in the drawing and specifications. Conditional offers or alternative offers will not be considered further in the process of tender evaluation.

18. Format and Signing of Bid

- 18.1 The Bidder shall prepare documents comprising the bid as described in Clause 12 of these Instructions to bidder as the "Technical Bid "and "Financial Bid" in separate parts to be uploaded.

D. SUBMISSION OF BIDS

19. Deleted

20. Deadline for Submission of the Bids

- 20.1. Complete Bids must be received online by the Employer at the tender website specified above not later than the date indicated in appendix.
- 20.2. The Employer may extend the deadline for submission of bids by issuing an amendment in accordance with Clause 10, in which case all right and obligation of the Employer and the bidders previously subject to the original deadline will then be subject to the new deadline.

21. Deleted

22. Modification and Withdrawal of Bids

- 22.1. Bidders may modify or withdraw their bids online before the deadline prescribed in Clause 20 or pursuant to Clause 23.
- 22.2. Deleted
- 22.3. No bid shall be modified or withdrawn after the deadline for submission of Bid.
- 22.4. 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 15.1 above or as extended pursuant to Clause 15.2 may result in the forfeiture of the Bid security pursuant to Clause 16.

E. BID OPENING AND EVALUATION

23. Bid Opening

- 23.1 The Employer will open all the Bids received including modifications made pursuant to Clause 22, in the presence of the Bidders or their representatives who choose to attend at time, date and the place specified in Appendix in the manner specified in Clauses 20 and 23.3, In the event of the specified date of Bid opening being declared a holiday for the Employer, the Bids will be opened at the appointed time and location on the next workingday.
- 23.2. Deleted.
- 23.3. The “Technical Bid” shall be opened. The amount, form and validity of the bid security furnished with each bid will be announced. If the bid security furnished does not conform to the amount and validity period as specified in the invitation for bid (ref. Column 4 and paragraph 3), and has not been furnished in the form specified in Clause 16, the technical bid will not be opened.
- 23.4. (i) Subject to confirmation of the bid security by the issuing Bank, the bids accompanied with valid bid security will be taken up for evaluation with respect to the Qualification information and other information furnished in part I of the bid pursuant to Clause 12.1.
- (ii) If required, the bidder will be asked in writing to clarify his Qualification Documents with respect to any required clarification.
- (iii) The bidders will respond in not more than 7 days of issue of the clarification letter.
- (iv) Immediately (usually within 3 or 4 days), on receipt of these clarification the Evaluation Committee will finalize the list of responsive bidders whose financial bids are eligible for consideration.
- 23.5. Deleted
- 23.6 At the time of opening of “Financial Bid”, the names of the bidders were found responsive in accordance with Clause 23.4(iv) will be announced. The bids of only these bidders will be opened. The responsive Bidders’ names, the Bid prices, the total amount of each bid, any discount and such other details as the Employer may consider appropriate, will be announced by the Employer at the opening.
- 23.7 the time of opening of “Financial Bid”, the names of the bidders were found responsive in accordance with Clause 23.4(iv) will be announced. The bids of only these bidders will be opened. The responsive Bidders’ names, the Bid prices, the total amount of each bid, any discount, and such other details as the Employer may consider appropriate, will be announced by the Employer at the opening.
- 23.8 In case bids are invited for more than one package, the order for opening of the “Financial Bid” shall be in order of Estimated amount of Bids from highest to lowest.
- 23.9 The Employer shall prepare minutes of the Bid opening, including the information disclosed to those present in accordance with Sub-Clause 23.6.

24 Process to be Confidential

- 24.1 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 Bidder to influence the Employer's processing of Bids or award decisions may result in the rejection of his Bid.

25. Clarification of Financial Bids

- 25.1. 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 substances 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.
- 25.2 Subject to sub-clause 25.1, no Bidder shall contact the Employer on any matter relating to his Bid opening to the contract is awarded. If the Bidder wishes to bring additional information to the notice of the Employer, it should do so in writing.
- 25.3. Any effort by the Bidder to influence the Employer in the Employer's bid evaluation, bid comparison or contract award decision may result in the rejection of the Bidders' bid.

26. Examinations of Bids and Determination of Responsiveness

- 26.1 During the detail evaluation of "Technical Bid", the Employer will determine whether each Bid (a) meets the eligibility criteria defined in Clause 3 and 4; (b) has been properly signed; (c) is accompanied by the required securities and; (d) is substantially responsive to the requirements of the Bidding document. 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.
- 26.2 A substantially responsive "Financial Bid" is one which confirms all the terms, conditions and specifications of 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.
- 26.3 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.

27. Deleted

28. Deleted

29. Evaluation and Comparison of Financial Bids

- 29.1. The Employer will evaluate and compare only the Bids determined to be substantially responsive in accordance with Sub-Clause 26.2.
- 29.2. Deleted.
- 29.3. The Employer reserves the right to accept or reject any variation or deviation. Variation 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 in to account in Bid evaluation.
- 29.4. 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 in to account in Bid evaluation.
- 29.5. If the Bid of the successful Bidder is seriously unbalanced in relation to the Engineer's estimate of the cost of work to be performed under the contract the Employer may require the Bidder to produce detailed consistency of those prices with the construction 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 34 be increased at 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.
- 29.6. A bid which contains several items in the bill of Quantities which are unrealistically priced low and which cannot be substantiated satisfactorily by the bidder may be rejected as non-responsive. (Applicable for item rate tender only)

30. Deleted

F. AWARD OF CONTRACT

31. Award Criteria

31.1. Subject to Clause 32, the Employer will award the contract to the Bidder whose Bid has been determined.

- (i) to be substantially responsive to the Bidding documents 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 the lowest evaluation in any of the packages opened earlier than the one consideration.

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 evaluation bid price.

32. Employer's Right to Accept any Bid and to Reject any or all Bids

32.1. Notwithstanding Clause 31, the Employer reserves the right to accept or reject any Bid, 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 Bidder or any obligation to inform the affected Bidder or Bidders of the grounds for the Employer's action.

33. Notification of Award and Signing of Agreement

33.1. The Bidder whose Bid has been accepted will be notified of the award by the Employer prior to expiration of the Bid validity period by cable, telex or facsimile confirmed by registered letter. This letter (hereinafter and in the condition 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").

33.2. 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.

33.3. The Agreement will incorporate all agreements between the Employer and the successful Bidder. It will be signed by the Employer and to the successful Bidder, within 28 days 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 the Employer.

33.4. Upon the furnishing by the successful Bidder of the Performance Security, the Employer will promptly notify the other Bidders that their Bids have been unsuccessful.

34. Performance Security

34.1. (A) Within 10 (Ten) days of receipt of Letter of Acceptance, the successful Bidder shall furnish to the Employer an irrevocable and unconditional guarantee from a Bank in the form set forth in Section 8 (the "Performance Security") for an amount equal to 5% (five percent) of its Contract Price. In case of bids mentioned below, the successful Bidder, along with the Performance Security,

shall also furnish to the Authority an irrevocable and unconditional guarantee from a Bank in the same form given at Section 8 towards an Additional Performance Security (The “Additional Performance Security”) for an amount calculated as under:

- (a) If the Contract Price offered by the Selected Bidder is lower than 10% but upto 20% of the Estimated Project Cost, then the Additional Performance Security shall be calculated @ 20% of the difference in the (i) Estimated Project Cost (as mentioned in Bid Document) - Minus 10% of the Estimated Project Cost and (ii) Contract Price offered by the selected Bidder.
 - (b) If the Contract Price offered by the Selected Bidder is lower than 20% of the Estimated Project Cost, then the Additional Performance Security shall be calculated @ 30% of the difference in the (i) Estimated Project Cost (as mentioned in Bid Document) - Minus 10% of the Estimated Project Cost and (ii) Contract Price offered by the selected Bidder.
 - (c) This Additional Performance Security shall be treated as part of the Performance Security.
- (B) The Performance Security shall be valid beyond 60(sixty) days of the Defects Liability Period and the Additional Performance Security shall be valid beyond 28 (twenty-eight) days of Project Completion Date.
- 34.2. If the performance security is provided by the successful Bidder in the form of a Bank Guarantee, it shall be issued either (a) at the Bidder’s option, by a Nationalized/Scheduled Indian bank or (b) by a foreign bank located in India and acceptable to the Employer. As per GoG Finance Department’s Circular No. FD/MSM/e-file/4/2023/0057/D.M.O. Date 21/04/2023 or as per their latest amendment.
- 34.3. Failure of the successful Bidder to comply with the requirement of Sub-Clause 34.1 shall constitute sufficient grounds for cancellation of the award and forfeiture of the Bid Security.

35 Advance Payment and Security

- 35.1 The Employer will provide an Advance payment on the Contract Price as stipulated in the Conditions of Contract, subject to maximum amount, as stated in the Contract Data.

36. Deleted

37. Corrupt or Fraudulent Practices

- 37.1 The Employer will reject a proposal if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in completing 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 National Highways Authority of India/ State PWD and any other agencies, if it at any time determines that the firm has engaged in corrupt or fraudulent practices in completing for the contractor, or in execution.
- 37.2 Furthermore, Bidders shall be aware of the provision stated in Sub- Clause 59.2 of the Conditions of Contract.

APPENDIX TO ITB

Clause Reference With respect to Section -I

1. The Name of the Employer is Principal Secretary, Health and Family Welfare Department [Cl.1.1]
2. ~~The last five/Seven years.~~
~~20___-20___~~
~~20___-20___~~
~~20___-20___~~
~~20___-20___~~
~~20___-20___~~
~~20___-20___~~
~~20___-20___~~
3. ~~This Annual Financial Turnover Amount is Rs.~~ [Cl.4.5.3 (a)]
~~.....~~
4. Value of Work is **Rs. 72,49,499.67**
5. Deleted
6. The cost of electric work is Rs. -
7. The cost of water supply / sanitary works is Rs. -
8. Liquid assets and / or availability of credit facilities (i.e.25% of contract value/ estimated cost) is Rs. [Cl.4.5.6]
9. ~~Price level of the financial year~~ [Cl. 4.5.2]
10. The pre-bid meeting will take place at [Cl. 9.2.1]
11. The technical Bid will be opened at the office of the.....ondt..... atAM/PM
12. Address of the Employer:
13. Deleted
14. The bid should be submitted latest by as stated on online NIT [Cl. 20.1 & 20.2]
15. The bid will be opened at [Cl. 23.1]
As stated on online NIT
16. The Bank Draft in favour of **"PIU GENERAL FUND
A/C 11-114"**
17. Deleted
18. ~~Escalation factors (for the cost of works executed and financial figure to a common base value) for works completed~~ [Cl.4.5.2]

<u>Year</u>	<u>Financial Year</u>	<u>Multiplying factor</u>
Base year of inviting tender	20___-20___	1.00
-1	20___-20___	1.10
-2	20___-20___	1.21
-3	20___-20___	1.33
-4	20___-20___	1.46
-5	20___-20___	1.61
-6	20___-20___	1.77
-7	20___-20___	1.95

#LIST OF KEY PLANT & EQUIPMENT TO BE DEPLOYED ON CONTRACT WORK

[Reference CL. 4.5.5]

For building works upto 2 Cr. and as mention under:

The contractors shall also give a list of machineries in his possession and which they propose to use on the work.

Sr. No.	Plant or Machinery	Nos.	Location	Age of Machinery (maximum 15 years)	Make	Capacity	Approximate Value	Remark
1	2(a)	2(b)	2(c)	3	4	5	6	7
1	Tipper Trucks	2	-					
2	Concrete mixer with integral way batch facility	2						
3	Needle Vibrator	4						
4	Surface Vibrator	2						
5	Diesel Generator	1						
6	Concrete Conveying System and Trolley	1						
7	Excavator	1						
8	Steel/ Wooden shuttering (Scaffolding props)	2000 Sqmt						
9	Concrete breaker	1						
10	Surveying Equipment (Total Station & Other)	1						
11	Welding machine	1						
12	Bar Bending and Cutting machines	1						
13	Goods lift for	1				minimum capacity of 300 Kg.		
14	Water tanker	1						

For building works more than Rs. 2 Cr. and less than Rs.7 Cr. as mention under:

The contractors shall also give a list of machineries in his possession and which they propose to use on the work.

Sr. No.	Plant or Machinery	Nos.	Location	Age of Machinery (maximum 15 years)	Make	Capacity	Approximate Value	Remark
1	2(a)	2(b)	2(c)	3	4	5	6	7
1	Tipper Trucks	3	-					
2	Concrete mixer with integral way batch facility or Concrete batching plant with automatic way batching facility (15 CMT Capacity)	3 Or 1						
3	Needle Vibrator	4						
4	Surface Vibrator	2						
5	Diesel Generator	1						
6	Concrete Conveying System and Trolley	1						
7	Excavator	1						
8	Steel/ Wooden shuttering (Scaffolding, props)	5000 Sqmt						
9	Concrete breaker	1						
10	Surveying Equipment (Total Station & Other)	1						
11	Welding machine	1						
12	Bar Bending and Cutting machines	1						
13	Goods lift for	1				minimum capacity of 300-Kg.		
14	Water tanker	2						

For building works more than Rs.7 Cr. as mention under (Sub District Hospitals, District Hospitals, Teaching Hospitals, Medical Colleges, Hostels and Other buildings):

The contractors shall also give a list of machineries in his possession and which they propose to use on the work.

Sr. No.	Plant or Machinery	Nos.	Location	Age of Machinery (maximum 15 years)	Make	Capacity	Approximate Value	Remark
1	2(a)	2(b)	2(c)	3	4	5	6	7
1	Concrete batch-mix plant with electronic control panel Minimum-30Cu.Mt/Hr. Admixture unit	1	-					
2	Hopper Mixer	4						
3	Steel/ Wooden shuttering (Scaffolding, props) or as suggested by Engineer in Charge	10000 Sqmt.						
4	Steel props (with Adjustable accessories)	20000 Nos.						
5	Excavator	3				Poelan 0.9 Cmt. Bucket capacity		
6	Trucks / Dumpers with capacity not less than 5 Cum	5						
7	Concrete mixture machine with integral weigh batching facilities	5						
8	Needle Vibrator	10						
9	Surface vibrators	10						
10	Laboratory set up List of site Laboratory Testing Machines (Attach Separate List)	1						
11	Air compressor	2 (Big, Small)						
12	Concrete breaker	2						
13	Welding machine	2				minimum capacity of 300 Kg.		
14	Surveying Equipment (Total Station & Other)	2						
15	Construction Tower Cranes (20 Tone)	1						
16	Bar Bending and Cutting machines	3						
17	Goods cum lift for minimum capacity of 300 Kg.	2						
18	Water Tanker	3						
19	Concrete pouring Pump and Motor	2 set						
20	RMC Transit Mixture	6						
21	Suspended Scaffold	5000 Sqmt						

List of Key Personnel to be deployed on Contract Work (Reference Cl. 4.5.4)

Employment of a qualified site Engineer by the Contractor.

The Contractor shall employ full-time technically qualified staff during the execution of this work as under: -

1. One graduate Civil Engineers and One diploma Civil Engineers when cost of the work to be executed is more than Rs.50lakhs but less than Rs.200 lakhs and above Rs. 2 Cr. to Rs. 7 Cr. additional One graduate Electrical Engineer and above Rs. 7 Cr. for Sub District, District Hospital, Medical College additional as per table mention at Sr.No. 5
2. One graduate & two Diploma, Civil Engineers when the cost of the work to be executed is more than Rs.15 lakhs but less than Rs.50lakhs.
3. Minimum one Diploma Civil Engineer when the cost of work is less than Rs.15 lakhs but more than Rs.5lakhs.
4. Minimum two Diploma Civil Engineers for the work when the cost of work to be executed is less than Rs. 5 lakhs. The Engineer so employed for the Government work must have sufficient experience to handle the work independently. Such an Engineer shall have to stay at the site of work and he shall not be entrusted with other duty except thiswork.

5. And Additional as under: Table to add

Bidder should propose the structure and composition of the team dedicated for carrying out the Assignment. Bidder should list the main disciplines of the assignment, the key personnel responsible, and proposed technical and support staff. The personnel schedule shall be consistent with the approach and methodology, detailed work plan, activity schedule.				
Sr. No	Position	No. Of Resources	Min Qualification	Deployment
Key Personal				
1	Project Manager	1	BE (Civil) + 15 Years' Experience into Construction Work or M.E. + 10 Year Experience	Full time for Project
2	Project Engineer	1	BE (Civil) + 10 year	Full time for Project
2	Sr. Civil Engineer	2	BE (Civil) + 7 Year of Experience into Construction Works or M.E. + 5 Year Min, Min 1 Engineers know AutoCAD Application	Full time for Project
3	Jr. Civil Engineer	3	BE (Civil) + 3 Year of Experience into Construction Works, Min 2 Engineers know AutoCAD Application	Full time for Project
4	Sr. MEPF Engineer	1	BE (Electrical / Mechanical) + 7 Year of Experience into Construction Works	Full time when concern work ongoing
5	Sr. Electrical Engineer	1	BE (Electrical) + 7 Year of Experience into Construction Works	Full time when concern work ongoing
6	Jr. Electrical Engineer	2	BE (Electrical) + 3 Year of Experience into Construction Works	Full time when concern work ongoing
7	Sr. Mechanical Engineer	1	BE (Mechanical) + 5 Year of Experience into Construction Works	Full time when concern work ongoing
8	Structural Design Expert	1	ME (Structure) + 5 Year of Experience	Periodic Visit / As and when required
9	Bio Medical	1	Shall Have experience of Min 5 Years	Periodic Visit / As

	Specialist			and when required
10	Surveyor	1	Diploma (Civil) or ITI (Survey) At least 5-year experience	Full time for Project
11	Safety Engineer	1	Graduate (Civil Engineer)	Full time for Project
12	Lab Technician	1	BE (Civil) + 3 Years Experience / Diploma (Civil) + 5 Years Experience	Full time for Project
13	Store Keeper	1	-	Full time for Project
14	Administrative Team (Computer Operator)	2	Sufficient Manpower to be deploy to make sure all requirement of resources are available at all time so that work should not affected.	Full time for Project
15	Purchase Team	2		

Within 15 days of issue of work-order the Contractor will have to furnish to the Deputy Executive Engineer-in-charge of the work the Name, Qualifications, copy of marksheet, Colour Photograph and the appointment order issued such engineers engaged for this contract work. If 15 days after issue of work order such designated Site Engineers do not resume or do not remain present on site of work, the recovery at the rate of Rs.15,000-00 per month per Engineer will be made from the bills/deposit/dues of the contractor. Such recovery shall be non-refundable.

SECTION - 2

QUALIFICATION INFORMATION

QUALIFICATION INFORMATION

The information to be filled in by the Bidder in the following pages will be used for the purpose of post qualification as provided for in Clause 4 of the Instruction to Bidders. This information will not be incorporated in the Contract.

1. For Individual Bidders

1.1 Constitution or legal status of Bidder (Attach Copy)

Place of registration _____

Principal place of business _____

Power of attorney of signatory of Bid

(Attach)

1.2 Total value of Civil engineering constructions Work **performed in the last five/ seven years (in Rs. Lakhs)**

Year	Work done value (in Rs. Lakhs)	Supporting documents certified by CA
2017-18		
2018-19		
2019-20		
2020-21		
2021-22		
2022-23		
2023-24		

1.3.1 Work performed as prime contractor, work performed in the past as a nominated sub-contractor will also be considered the sub-contract involved execution of all main items of work described in the bid documents, provided further that all other qualification criteria are satisfied (in the same name) on works of a similar nature over the last five years and in current year before the submission of the bid.**

Project Name	Name of the Employer	Description of work	Contract No.	Value of contract (Rs. Crore)	Date of issue of work order	Stipulated period of completion	Actual date of completion*	Remark explaining reasons for delay & work Completed

*Attach certificate(s) from the Engineer(s) in-charge

** Immediately preceding the financial year in which bids are received.

Preferably standard -3-A certificate issued by various government authority/ if work is private it should be by employer and private work should be supported by TDS work order, final bill payment, work order and as instructed in ITB.

~~#1.3.2 Quantities of work executed as prime contractor, work performed, in the past as a nominated sub-contractor, will also be considered provided the sub-contract involved execution of all main items of work described in the bid document, provided, further that all other qualification criteria are called (in the same name and style) in the last five years** and in current year before the submission of the bid.~~

Year	Name of the work	Name of the Employer	Quantity/Capacity of work performed (Capacity or Amount) particularly for health facilities- Hospital, Medical College, Hostels, etc.)								Remarks *(indicate contract Ref)
			MGPS		CSSD-System	HVAC (Capacity)	Fire-System	ELV	Lift Work	MOT	
			No. of Points	Value	Value	Value of Work	Value of Work	Value of Work	Value of Work	Nos.	
20-20											
20-20											
20-20											
20-20											
20-20											

~~1.4 Information on Bid Capacity (works for which bids have been submitted and works which are yet to be completed) as on the date of this bid.~~

~~(A) Existing commitments and on-going works:~~

Name of Building/ Hospital-works	Place & State	Contract No.	Name & Address of Employer	Value- Contract (Rs. Cr)	Stipulated Period of Completion	Value of Works* remaining to be completed (Rs. Cr)	Anticipated of completion	Remarks
1	2	3	4	5	6	7	8	9

~~*Attach certificate (s) from the Engineer(s) in-charge~~

~~** Immediately preceding the financial year in which bids are received.~~

~~1.5 Availability of key items of Contractors Equipment for carrying out the works (Ref. Clause 4.5.5). The Bidder should list all the information requested below.~~

Sr. No.	Plant or Machinery	Nos.	Location	Age of Machinery (maximum 15 years)	Make	Capacity	Approximate Value	Remark
1	2(a)	2(b)	2(c)	3	4	5	6	7

~~1.6 — Qualifications and experience of key personnel required for administration and execution of the contract. Attach biographical data. Refer also to Sub Clause 9.1 of the Conditions of Contract.~~

<p>Bidder should propose the structure and composition of the team dedicated for carrying out the Assignment. Bidder should list the main disciplines of the assignment, the key personnel responsible, and proposed technical and support staff. The personnel schedule shall be consistent with the approach and methodology, detailed work plan, activity schedule.</p>				
Sr. No	Position	No. Of Resources	Min Qualification	Deployment
Key Personal				

~~1.7 — Proposed sub-contract and firms involved~~

Sections of the works	Value of Sub-Contractor	Sub-Contractor (Name & Address)	Experience in similar work
MGPS			
MOT			
ELV			
HVAC			
Fire System			
Lift/ Elevators			
CSSD			
MEP			
Any Other sub work			

~~Attach copies of certificates on possession of valid license for executing water supply/ sanitary work/ building electrification works.~~

- ~~1.8 Financial reports for the last five years: balance sheets, profit and loss statements, auditors' reports (in case of companies/corporations), etc. List them below and attach copies.~~
- ~~1.9 Evidence of access to financial resources to meet the qualification requirements: cash in hand, lines of credit, etc. List them below and attach copied documents.~~
- ~~1.10 Name, address, and telephone, mobile number and Email ID of the Bidders bankers who may provide references if contacted by the Employer.~~
- ~~1.11 Information on Litigation history in which the Bidder is involved.~~

Other Party (ies)	Employer	Cause of Dispute	Amount Involved	Remarks showing Present Status

- ~~1.12. Statement of compliance under the requirements of Sub Clause 3.2 of the instruction to Bidders. (Name of Consultant engaged for project preparations*)~~

- ~~1.13 Proposed work method and schedule. The Bidder should attach descriptions, drawings and charts as necessary to comply with the requirements of the Bidding documents. (Refer ITB Clause 4.1)~~

- ~~1 Key Plan~~
~~2 Sectional Elevation~~
~~3 Campus Layout~~
~~4 Water Supply & Sewage Points~~
~~5 Any other~~

- ~~1.14 Programme~~

~~2. Deleted~~

~~3. Additional Requirements~~

- ~~3.1 Bidders should provide any additional information required to fulfill the requirements of Clause 4 of the Instructions to the Bidders, if applicable.~~

- ~~(i) Affidavit~~
~~(ii) Undertaking~~

~~* Fill the name of consultant~~

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

~~(CLAUSE 4.5.6 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
during the contract period. Estimated Cost~~

~~(Signature)~~

Name of Bank

Senior Bank Manager

Address of the Bank

APPENDIX – A

(Form No. 3 A) (Self attested)

Referred to in Rules No. 1.3.1

DETAILS OF SIMILAR WORK COMPLETED

1. _____ Name of Contractor _____ :
2. _____ Name of Work _____ :
3. _____ Estimated cost of Work put to tender _____ :
4. _____ Revised Estimated Cost _____ :
5. _____ Tender Amount _____ :
6. _____ Date of Starting the Work _____ :
7. _____ Date of completion of the work (As per contract agreement) _____ :
8. _____ Actual date of the Completion of work _____ :
9. _____ Amount of Actual completion of the total project _____ :
_____ A) _____ Electrical Work cost:
_____ B) _____ HVAC Work cost:
_____ C) _____ ELV Work cost:
_____ D) _____ MGPS Work cost:
_____ E) _____ CSSD Work cost:
_____ F) _____ MOT Work cost:
10. _____ State whether the details as above given by the contractor are correct if not state as to what is the correct information _____ :
11. _____ State whether the contractor has executed the work in progress. Satisfactory as per specification if not give the correct position of the work. _____ :
12. _____ Period rate & amount of compensation if levied. _____ :
13. _____ Period of extension granted if any _____ :
14. _____ Reason for delay in granted if any _____ :
15. _____ Any other remarks _____ :

Particulars of work completed:

Date: _____

_____ **Authorized Signature** _____

APPENDIX-B

LAB TESTING EQUIPMENT

The BIDDER shall provide adequate information for testing equipment and surveying equipment

	Name of Testing Equipment	Minimum Requirements	Equipment with Agency	
			Equipment in hand	Equipment to be procured
1	A-General Lab Equipment			
	a) Electronic balance 7Kg. to 10Kg. capacity semi self-indication type accuracy 1gm.	2Nos.		
	b) Pan balance 10kg capacity accuracy 0.01gm	12 nos.		
	c) Electronic balance 500gm capacity accuracy 0.001gm	2Nos.		
	f) Sieves as per I.S. 460-1962	Full IISet.		
	H) Stop watches, 1/5 sec. accuracy	2Nos.		
2	B-For Cement and Cement Concrete			
	I) Moulds			
	a) 150mm _____ dia. x 300mm height cylinder with capping component	As required		
	b) Cubes 150mm	As required		
	III) High frequency mortar cube Vibrator for cement testing	1No.		
	iv) Concrete mixer power driven, 0.03m ³ capacity	1No.		
	V) Variable _____ frequency and amplitude vibrating table size 1 meter x 1 meter as per the relevant British standard.	1No.		
	Vi) Flow table as per the relevant IS specifications.	4Nos.		
	Vii) a) 2000Kn (Least count 10Kn) compression testing machine for concrete cube.	1No.		
	b) 500 Kn (least count 2 Kn) compression testing machine for cement mortar cube.	1No.		
	viii) Equipment for slump test	2Nos.		
	xi) Needle Vibrator	1No.		
	xii) Cement Testing Equipment	1No.		
	xiii) Soil Testing Equipment	1No.		
	xiv) Aggregate Testing Equipment	1No.		
	Apparatus of Drinking Water: Total Dissolved Solid	1No.		
	Apparatus of water for construction purpose: Acidity, Alkalinity, Chloride, Inorganic Solid, Organic Solid, pH, Sulphate, Total Suspended Solid	1No.		
	Apparatus of Brick: Compressive Strength, Compressive Strength, Dimension-Height, Dimension-	1No.		

	Length, Dimension width, Efflorescence, Water Absorption			
	Apparatus of Cement: Compressive Strength, Density, Fineness by Blain's air permeability, Nominal Consistency, Setting time (Final), setting time (Initial), soundness by Le Chatelier	1No.		
	Apparatus of Coarse Aggregate: 10% Fine value, Crushing Value, Elongation Index, Flakiness index, Impact value, Loss Angle Abrasion, Sieve Analysis (sieve size 75micron to 90mm), specific Gravity, Water absorption	1No.		
	Apparatus of Concrete: Compressive strength, Slump test	1No.		
	Apparatus of Fine Aggregate: Bulk Density, Material finer than 75u, Sieve Analysis (sieve size 75micron to 90mm), Specific Gravity, water absorption	1No.		
	Apparatus of Paver block: Compressive Strength, water absorption	1No.		
	Apparatus of Steel HSD Bar/TMT Bar: Yield Strength, Elongation, Section weight per meter, Ultimate Tensile Strength	1No.		
	Apparatus of Soil: Liquid Limit, Plastic Limit, grain Size analysis, Specific Gravity, Unconfined compression strength, Direct Shear (Angle), Direct shear (C), Standard penetration test	1No.		
	Apparatus of Any Reinforced Concrete structure surface: Cover measurement of Reinforcement from top surface of member	1No.		
	Apparatus of Any Reinforced Concrete surface: Half Cell Potential Corrosion Measurement test, Pulse velocity test in concrete specimen, Rebound Hammer test on Concrete surface	1No.		
	Apparatus of Concrete Element (Core) : Carbonation	1No.		

ANNEXURE -C

Format: Joint Venture

Referred to in Rules No. 4.6

(1) ~~The Joint Venture Agreement made and entered into at _____~~
~~_ day of _ (year) by _____ and between _____.~~

a. ~~Firm A (Name with address of the registered office) _____~~

b. ~~Firm B (Name with address of the registered office) _____~~

(2) ~~Definitions: In this deed the following words and expressions shall have the meaning set out below.~~

a. ~~"The Authority" shall Project Implementation Unit, Gandhinagar.~~

b. ~~"The Works" shall mean~~

~~(Name of work) which is more particularly _____ described in the pre-qualification and tender documents issued thereof by the Authority.~~

c. ~~The Tender "shall" mean the tender to be submitted by Joint Venture to the Authority for the work/works.~~

d. ~~"The Contract" shall mean the contract entered / to be entered into between the Joint Venture and the Authority for the works.~~

(3) ~~Joint Venture (JV)~~

~~The Parties hereto declare that they have agreed to form a Joint Venture for the purpose of submitting the pre-qualification Application/tender document initially and then tender and if successful for the execution of the works as an integrated Joint Venture. The parties are not under this agreement entering into any permanent partnership of Joint Venture to tender or undertake any contract other than the subject works. Nothing herein contained shall be considered to constitute the parties of partners to constitute either Party the agent of the other.~~

(4) ~~Witnesses: Whereas Project Implementation Unit, Gandhinagar / Authority has invited tenders from intending bidders and the Authority has permitted a group of firms (not exceeding three) forming a Joint Venture to eligible to be a bidder. And whereas _____ party of the first part, _____ party of the second part and _____ party of the third part are desirous to enter into a Joint Venture in the nature of partnership engaged in the joint undertaking for the specific purpose of execution of the work of constructing _____ and whereas Parties of the First, Second and Third part reached understanding to submit pre-qualification/tender, if pre-qualified, and to execute the contract if awarded;~~

This agreement witness as follows:

(a) ~~The parties do not enter into an agreement of any permanent partnership of Joint Venture to tender or undertake any Contract other than the specified above;~~

(b) ~~That the operation of this Joint Venture firm concerns and is confined to the work of _____ of Authority.~~

(c) ~~The name of the Joint Venture firm for convenience and continuity _____ shall be _____~~

~~(d) — The Address of Joint Venture for communications shall be as under:~~

~~.....
.....
.....~~

~~(e) — The Joint Venture shall jointly submit pre-qualification application on the above name according to all terms and conditions stated in the relevant instructions contained in the bid documents.~~

~~(f) — That this Joint Venture shall regulate the relations between the parties thereto and shall include without being limited to them the following conditions.~~

~~(1) — _____ firm shall be the lead company in charge of the Joint Venture for all intents and purpose.~~

~~(2) — In case the said work is awarded to the Joint Venture, the partners of the Joint Venture _____ will nominate a person with duly _____ notarized power of Attorney on stamp paper, who will represent the Joint Venture with the authority to incur liabilities, receive instructions and payments, sign and execute the contract for and on behalf of the Joint Venture,~~

~~(i) — All the (Maximum two) parties agree to make financial participation and to place at disposal of Joint Venture the benefits of its individual experience, technical knowledge skill and shall in all respect bear its share as regards planning and execution of the work and responsibilities including the provision of information, advice and other assistance required in the Joint Venture and participation shall be in proportion of, Firm A.....% and Firm B.....%~~

~~(ii) — All rights, interests, liabilities, obligations work experience and risks (and all net profits or net losses) arising out of the contract shall be borne by the parties in proportion to their shares. Each of the parties shall furnish its proportionate share in any bonds, guarantees, sureties required for the works as well as its proportionate share in connection with the works. The share and participation of the two/three partners in working capital and other financial requirements shall be in ratio as mentioned above.~~

~~(5) — Internal responsibilities and liabilities~~

~~(a) — The division of individual scope of work may be worked out mutually by the parties but the party shall be jointly and severally liable to the Authority for the whole work.~~

~~(b) — The parties specifically undertake to carry out their separate works in full compliance with the contract with the Authority. Each party shall be responsible jointly and severally for consequences if any arising out of defective or delayed execution of works which falls within the individual's party's area of responsibility and/or it has been caused due to acts and/or omission of the concerned party.~~

~~(c) — The parties jointly and severally agree to replace modify or repair any defect in their respective portions of works in accordance with the terms and condition of the Contract with the Authority.~~

~~(d) — The parties jointly and severally shall indemnify and hold harmless to each other against any claim made by the Authority or any other third party for injury, damage, loss or expense is attributed to the breach/non-performance of his responsibilities~~

by the indemnifying party in accordance with the agreements and/or Contract with the Authority.

(e) — None of parties have joined in any other Joint Venture for the said works.

{6} — Responsibilities and liabilities of Joint Venture towards the Authority

(a) — Parties hereto shall be jointly and severally liable and responsible for the acts, deeds and things done or omitted to be done in respect of the execution of the Contract and for any financial liability arising therefrom.

(a) — Parties hereto shall be jointly and severally responsible to the Authority for the execution of the works in accordance with the Contract Conditions;

(c) — Parties hereto shall be jointly and severally indemnifying to the Authority against any claim made against the Authority or any other third party for any injury, damage or loss which may be attributed to the breach of the obligations under the Contract pursuant to the Contract.

{7} — Site management

(a) — The execution of the work on the site will be managed by a Project Manager appointed _____ by the Joint Venture and who will report to the _____ (JV). The Project Manager shall be authorized to represent the Joint Venture on site in respect of matters arising under the Contract.

(b) — The _____ (Name of the JV) shall be jointly and severally liable to the Authority for the execution of the Contract commitment in respect of the works in accordance with Contract Conditions.

{8} — Termination of the Agreement

This agreement shall be terminated in the following circumstances.

(a) — The Authority awards the contract for the work to the other Bidder.

(b) — The Authority cancels the work to award the contract.

(c) — On completion of the defect liability period as stipulated in the Contract Agreement of the works and all the liabilities thereof are liquidated.

{9} — No partner has right to assign any benefits, obligation of liability under the agreement to any third party without prior written consent of the other partner as well as Authority.

{10} — Financial matter

(a) — Bank Account in the name of the Joint Venture will be opened with any scheduled or nationalized Bank to be operated by an individual signatory as decided mutually by the Joint Venture partners.

(b) — All the partners shall be responsible to maintain or cause to maintain proper Books of accounts, balance sheet and profit and loss account as to the state of affairs of the firm as at the end of the financial year and as to the profit and loss made or incurred by the firm for the year ended on that date, respectively shall be prepared and the same shall be subject to audit by a Chartered Accountant.

(c) — None of the party shall be entitled to make any borrowing on behalf of the Joint Venture without express prior written consent of the other party.

- ~~(d) Bank guarantee for the application/execution of the work shall be provided jointly from a bank acceptable to the Authority.~~
- ~~(11) **Negotiation:** Any negotiation of agreement between the parties hereto and the Authority subsequent to the submission of the tender and prior to award, shall take place only with consent of each of the parties who shall be represented at the such negotiation by one or more representative(s) duly empowered to make such negotiation or agreement.~~
- ~~(12) **Legal jurisdiction:** All questions relating to validity interpretation of this agreement shall be governed by the law of India and shall be subject to jurisdiction of High Court at Ahmedabad.~~
- ~~(13) **Settlement of disputes:** Any dispute in interpretation of any condition mentioned herein shall be referred to an arbitrator/tribunal by mutual consent of the partners and such proceedings shall be governed by Gujarat Public Works contract disputes tribunal act of 1992 and as amended from time to time. The award of arbitrator shall be final and binding on the party hereto. Neither the obligation of each party hereto the performance of contract nor the execution of work shall stop during the course of arbitration proceeding or as a result thereof.~~
- ~~(14) **Insurance**~~
- ~~(a) The Joint Venture through the parties individually shall take such insurance in connection with the work in accordance with the tender condition as acceptable to the Authority.~~
- ~~(b) The cost of the insurance premium paid by the Joint Venture shall be borne and paid by the parties in proportion to their respective shares of work. Other insurance taken individually by the parties shall be fully borne by the respective parties.~~
- ~~(15) No change shall be made this agreement without prior written consent of the Authority and other party. However the Authority directs the parties to make changes in the agreement so as to fulfil tender conditions the parties discuss with Authority and mutually agreed such changes required to be made in the agreement.~~
- ~~(16) **Default and withdrawal from the Joint Venture:** in case that either party fails to observe the provision stipulated in this agreement withdrawal from the Joint Venture, Loss and/or expenses incurred by other party due to such default and/or withdrawal shall be fully compensated by the party who has defaulted.~~
- ~~(17) All matter relating to or arising due to this agreement shall be treated as confidential and shall not be disclosed to any other party.~~

In witness whereof the parties have caused their duly authorized representatives to sign below.

Signed for and on behalf of Firm-A

Date

Seal & Sign

Witness

Signed for and on behalf of Firm-B

Date

Seal & Sign

Witness

ANNEXURE-D

Medical Gas Pipeline System (MGPS)

MANUFACTURER'S AUTHORISATION FORM

To,
Chief Engineer,
PIU, Gandhinagar

Ref: Your TE document No _____ dated _____

We, _____ who are proven and reputable manufacturers of _____ (name and description of the goods offered in the tender) having factories at _____, hereby authorize Messrs. _____ (name and address of the agent) to submit a tender, process the same further and enter into a contract with you against your requirement as contained in the above referred TE documents for the above goods manufactured by us.

We also state that we are not participating directly in this tender for the following reason(s):
_____ (please provide reason here).

We also hereby extend our full warranty, CMC as applicable as per clause of the tender documents, read with modification, if any, in the Special Conditions of Contract for the goods and services offered for supply by the above firm against this TE document.

We also hereby confirm that we would be responsible for the satisfactory execution of contract placed on the authorized agent

We also confirm that the price quoted by our agent shall not exceed the price which we would have quoted directly"

Yours faithfully, [Signature with date, name and designation] for and on behalf of Messrs _____
[Name & address of the manufacturers]

Note: 1. This letter of authorization should be on the letter head of the manufacturing firm and should be signed by a person competent and having the power of attorney to legally bind the manufacturer. 2. Original Letter may be sent. Photocopy not acceptable

ANNEXURE - II

Medical Gas Pipeline System (MGPS)

Declaration / Undertaking on Letter Head

I/We.....Resident of (Address) do solemnly pledge and affirm That I am the proprietor/partner/authorized.....signatory of M/S.....hereby giving assurance that we will supply and install all medical gas pipeline system, as per referenced standard (NAME OF PARTICULAR STANDARD TO BE MENTIONED, i.e. HTM-02-01 / NFPA 99 / DIN ISO 7396) and corresponding tender technical specifications and items incorporated in this tender documents and material, equipment, accessories are meeting the quality standards accordingly to relevant IS / ASTM / BIS and relevant standards and technical specifications.

Name, Signature & Address of the tenderer

With Stamp

ANNEXURE-III
Medical Gas Pipeline System (MGPS)

MOU

Memorandum of Understanding between bidder and nominated sub-contractor for MGPS

This Memorandum of Understanding (MOU) made on Date----- between M/S (Name of the bidder) having their registered office (hereinafter called the "Bidder") and Sub-contractor (Here after called nominated sub-contractor) is a Bonafide experienced Civil Contractor of sound financial standing and reputation fulfilling the requirements, specifications and mandatory and special conditions mentioned in tender document----- to take up the work of **New Construction of Annex Hospital Building at GMERS, Medical College & Hospital at Gandhinagar (Annex, Critical care center and Reinbasera)** Whereas Nominated Sub-contractor (Name and address of Nominated sub-contractor) is a Bonafide medical gas Contractor of sound financial standing and reputation fulfilling the requirement to take up the Medical Gas works.

And whereas Bidder and Nominated sub-contractor having recognized their strengths of each other's unique position and having felt it necessary to enter into this Memorandum of Understanding

Nominated Sub-contractor having experience of SITC of MGPS work as per standard HTM-02-01 / NFPA 99 / DIN-ISO 7396 and specification.-

NOW THEREFORE THIS DEED WITNESSED AS UNDER:

Nominated sub-contractor (Name and address of nominated sub-contractor) i.e. the "Associates" for Medical Gas works has shown their interest to quote for the Medical Gas works.

The "Bidder" and the Nominated sub-contractor shall fulfil the Mandatory Pre-qualifications criteria and also submit all the mandatory documents as per PQ criteria,-

This Memorandum of Understanding should not be construed as deed of partnership and shall be governed by applicable laws in India.

Dated this

For_____For

(Name and address of Bidder)_____(Name and address of Nominated Sub Contractor)

Position:_____Position:

ANNEXURE-IV
Central Sterile Supply Department (CSSD)

(Technical Compliance)

Should be duly certified by the Manufacturer

Sr no	Description of items as per technical specification	Compliance Yes/ No	Deviation	Make Quoted

ANNEXURE-V
Central Sterile Supply Department (CSSD)

(Agreement for Supply of Spares)

AGREEMENT

This Agreement entered into at _____ Between M/s. _____
_____ (Name of Bidder) _____ having its registered office at _____

AND

M/s. _____ (Name of Supplier) _____ having its registered
office at _____.

~~WHEREAS the first party is the bidder and the Second Party is the Supplier.~~

~~NOW THIS AGREEMENT WITNESSETH AS UNDER AGREED BY AND BETWEEN THE PARTY
HERETO:~~

~~1. _____ The Second Party hereby agrees to supply spares to First Party for a period of 10 Years
from the date of final commissioning for Central Sterile Service Department.~~

SIGNATURE:

FIRST PARTY

SECOND PARTY

**(~~*Should be duly notarized by the Notary Authority of the Country of Origin of Bidder
and Supplier~~)**

ANNEXURE-VI

Central Sterile Supply Department (CSSD)

MANUFACTURER'S AUTHORISATION FORM

Chief Engineer,
PIU, Gandhinagar

Ref: Your TE document No _____ dated _____

We, _____ who are proven and reputable manufacturers of _____ (name and description of the goods offered in the tender) having factories at _____, hereby authorize Messrs _____ (name and address of the agent) to submit a tender, process the same further and enter into a contract with you against your requirement as contained in the above referred TE documents for the above goods manufactured by us.

We also state that we are not participating directly in this tender for the following reason(s):
_____ (please provide reason here).

We also hereby extend our full warranty, CMC as applicable as per clause of the tender documents, read with modification, if any, in the Special Conditions of Contract for the goods and services offered for supply by the above firm against this TE document.

We also hereby confirm that we would be responsible for the satisfactory execution of contract placed on the authorized agent

We also confirm that the price quoted by our agent shall not exceed the price which we would have quoted directly"

Yours faithfully, [Signature with date, name and designation] for and on behalf of
Messrs. _____ [Name & address of the manufacturers]

Note: 1. This letter of authorization should be on the letter head of the manufacturing firm and should be signed by a person competent and having the power of attorney to legally bind the manufacturer. 2. Original Letter may be sent. Photocopy not acceptable

ANNEXURE-VII
Central Sterile Supply Department (CSSD)

MOU

~~Memorandum of Understanding between bidder and nominated sub-contractor for CSSD~~

~~This Memorandum Of Understanding (MOU) made on Date----- between M/S (Name of the bidder) having their registered office ----- (hereinafter called the "Bidder") and Sub contractor (Here after called nominated sub-contractor) is a Bonafide experienced Civil Contractor of sound financial standing and reputation fulfilling the requirements , specifications and mandatory and special conditions mentioned in tender document ----- to take up the work of **New Construction of Annex Hospital Building at GMERS, Medical College & Hospital at Gandhinagar (Annex, Critical care center and Reinbasera)** Whereas Nominated Sub-contractor (Name and address of Nominated sub-contractor) is a Bonafide medical gas Contractor of sound financial standing and reputation fulfilling the requirement to take up the CSSD.~~

~~And whereas Bidder and Nominated sub-contractor having recognized their strengths of each other's unique position and having felt it necessary to enter into this Memorandum of Understanding~~

~~Nominated Sub-contractor having completed similar standard and nature of CSSD~~

~~NOW THEREFORE THIS DEED WITNESSED AS UNDER:~~

~~Nominated sub-contractor (Name and address of nominated sub-contractor) i.e. the "Associates" for CSSD has shown their interest to quote for the CSSD.~~

~~The "Bidder" and the Nominated sub-contractor shall fulfil the Mandatory Pre-qualifications criteria and also submit all the mandatory documents as per PQ criteria,~~

~~This Memorandum of Understanding should not be construed as deed of partnership and shall be governed by applicable laws in India.~~

Dated this _____

For _____	For _____
(Name and address of Bidder) _____	(Name and address of _____
NominatedSub Contractor)- _____	_____
Position:- _____	Position:- _____

ANNEXURE-VIII (HVAC, Electrical work and ELV WORK)

MOU

**Memorandum of Understanding between bidder and nominated sub-contractor for
HVAC, Electrical and ELV work**

This Memorandum of understanding (MOU) made on Date----- between M/S (name of the bidder) having their registered office ----- (hereinafter called the "Bidder") and Sub-contractor (Here after called nominated sub-contractor) is a Bonafide experienced Civil Contractor of sound financial standing and reputation fulfilling the requirements, specifications and mandatory and special conditions mentioned in tender document to take up the work of **CR works for D,E,E1 SQ & Girls Hostel, PDU Medical College Campus, Rajkot.** Whereas Nominated Sub-contractor (Name and address of Nominated sub-contractor) is a Bonafide medical gas Contractor of sound financial standing and reputation fulfilling the requirement to take up HVAC, Electrical and ELV works.

And whereas Bidder and Nominated sub-contractor having recognized their strengths of each other's unique position and having felt it necessary to enter into this Memorandum of Understanding

Nominated Sub-contractor having completed similar standard and nature of HVAC, Electrical and ELV works.

NOW THEREFORE THIS DEED WITNESSED AS UNDER:

Nominated sub-contractor (Name and address of nominated sub-contractor) i.e. the "Associates" for HVAC, Electrical and ELV work has shown their interest to quote for HVAC, Electrical and ELV.

The "Bidder" and the Nominated sub-contractor shall fulfil the Mandatory Pre-qualifications criteria and also submit all the mandatory documents as per PQ criteria,

This Memorandum of Understanding should not be construed as deed of partnership and shall be governed by applicable laws in India.

Dated this

For _____ For
(Name and address of Bidder) (Name and address of Nominated Sub-
Contractor)

Position: _____ Position:

ANNEXURE-IX(HVAC, Electrical work and ELV WORK)

Declaration/ Undertaking on Rs. 300/- nonjudicial stamp paper notarized affidavit

I/We.....Resident of (Address)do solemnly pledge and affirm:-

That I am the proprietor/partner/authorized signatory of

M/S..... hereby giving assurance
that we will supply and install all ELV system, as per referenced standard (Mention name
of standard) and Corresponding tender technical specifications. There will be no change in
declared standard and tender technical specifications at any time of the project execution.

Name, Signature &Address of the tenderer

With Stamp

ANNEXURE-X (MOT)

MANUFACTURER'S AUTHORISATION FORM

Chief Engineer,
PIU, Gandhinagar

Ref: Your TE document No _____ dated _____

We, _____ who are proven and reputable manufacturers of _____ (name and description of the goods offered in the tender) having factories at _____, hereby authorize Messrs _____ (name and address of the agent) to submit a tender, process the same further and enter into a contract with you against your requirement as contained in the above referred TE documents for the above goods manufactured by us.

We also state that we are not participating directly in this tender for the following reason(s):

_____ (please provide reason here).

We also hereby extend our full warranty, CMC as applicable as per clause of the tender documents, read with modification, if any, in the Special Conditions of Contract for the goods and services offered for supply by the above firm against this TE document.

We also hereby confirm that we would be responsible for the satisfactory execution of contract placed on the authorized agent

We also confirm that the price quoted by our agent shall not exceed the price which we would have quoted directly"

Yours faithfully, [Signature with date, name and designation] for and on behalf of
Messrs. _____ [Name & address of the manufacturers]

Note: 1. This letter of authorization should be on the letter head of the manufacturing firm and should be signed by a person competent and having the power of attorney to legally bind the manufacturer.

2. Original Letter may be sent. Photocopy not acceptable

ANNEXURE-XI (MOT)

MOU

~~Memorandum of Understanding between bidder and nominated sub-contractor for MOT~~

~~This Memorandum Of Understanding (MOU) made on Date----- between M/S (Name of the bidder) having their registered office ----- (hereinafter called the "Bidder") and Sub-contractor (Here after called nominated sub-contractor) is a Bonafide experienced Civil-Contractor of sound financial standing and reputation fulfilling the requirements, specifications and mandatory and special conditions mentioned in tender document----- to take up the work of Construction of GMERS Medical College and Hospital, Morbi, Whereas Nominated Sub-contractor (Name and address of Nominated sub-contractor) is a Bonafide Modular-Prefabricated Operation Theater Contractor of sound financial standing and reputation fulfilling the requirement to take up the MOT.~~

~~And whereas Bidder and Nominated sub-contractor having recognized their strengths of each other's unique position and having felt it necessary to enter into this Memorandum of Understanding~~

~~Nominated Sub-contractor having completed similar standard and nature of MOT~~

~~NOW THEREFORE THIS DEED WITNESSED AS UNDER:~~

~~Nominated sub-contractor (Name and address of nominated sub-contractor) i.e. the "Associates" for MOT has shown their interest to quote for the MOT.~~

~~The "Bidder" and the Nominated sub-contractor shall fulfil the Mandatory Pre-qualifications criteria and also submit all the mandatory documents as per PQ criteria,~~

~~This Memorandum of Understanding should not be construed as deed of partnership and shall be governed by applicable laws in India.~~

~~Dated this For-----~~

~~(Name and address of Bidder)----- (Name and address of Nominated Sub Contractor)-~~

~~Position:----- Position:-----~~

ANNEXURE-XII

Declaration / Undertaking on Letter Head for LIFT (To be submitted by bidder/Nominated Sub-Contractor, as may be the case)

_____, am the Partner/Proprietor/Authorized signatory of _____ (Mention name of firm and its complete address) do here by solemnly affirm and declare as under:-

1. That our Firm/company i.e. _____ (Mention name of firm and its complete address) is registered vide Registration No. _____ under the provisions of _____ (mention the name of the Act).-

2. That our Firm/company i.e. (Mention name of firm) has applied in response to the tender for the work of _____ (Name of work)_____.

3. That _____ (Mention name of firm) is eligible to submit the aforesaid proposal as it is not under liquidation, court receivership or similar proceedings.-

4. That _____ (Mention name of firm) has not been barred and/or blacklisted by the Central Government / State Government / or any Government under taking at the time of submission of tender.-

5. That _____ (Mention name of firm) has during the last three years neither failed to perform on any agreement nor was expelled from any project or agreement terminated for any breach by the applicant.-

6. That _____ (Mention name of firm) has no contracts with the state/central government that are in arbitration. (In case some contract (s) are in arbitration give the details of such contract in a schedule to be attached with this affidavit).

**Name, Signature & Address of Tenderer
With Stamp**

ANNEXURE-XIII
MANUFACTURER'S AUTHORISATION FORM

The Chief Engineer,
Project Implementation Unit,
4th Floor, PIU/RDD/NHM Building,
Civil Hospital Campus, Gandhinagar-382012

Dear Sir,

Ref: Your TE document No-

Dated-

We, Who..... are proven and reputable manufacturers of (name and description of the goods offered in the tender) having factories athereby authorize M/s. (name and address of the agent) to submit a tender, process the same further and enter into a contract with you against your requirement as contained in the above referred tender documents for LIFT system products manufactured by us.....

The Bidder /Approved Make Lift OEM agency should have to depute at least one technical person to attend any emergency breakdown during 24x7 period 365 days for hospital & College Building. No extra payment Shall be made for the same.

We also hereby extend our full warranty, as per General conditions of contract, we also hereby confirm that we would be responsible for the satisfactory execution of contract placed on the authorized agent we also confirm that the price quoted by our agent shall not exceed the price which we would have quoted directly"

Yours faithfully,

[Signature with date, name and designation]

For and on behalf of M/s. [Name & address of the manufacturers]

Note: 1. this letter of authorization should be on the letter head of the manufacturing firm and should be signed by a person competent

Annexure -XV
MOU

Memorandum of Understanding between bidder and nominated sub-contractor for LIFT

This Memorandum Of Understanding (MOU) made on Date _____ between M/S (Name of the bidder) having their registered office _____ (hereinafter called the "Bidder") and Sub-contractor (Here after called nominated sub-contractor) is a Bonafede experienced Civil Contractor of sound financial standing and reputation fulfilling the requirements, specifications and mandatory and special conditions mentioned in tender document to take up the _____ (Name of Work) _____.

Whereas Nominated Sub-contractor (Name and address of Nominated sub-contractor) is a Bonafede Lift OEM/Contractor of sound financial standing and reputation fulfilling the requirement to take up the Lift works.

And whereas Bidder and Nominated sub-contractor having recognized their strengths of each other's unique position and having felt it necessary to enter into this Memorandum of Understanding.

Nominated Sub-contractor having completed similar standard and nature of Lift Works.

NOW THEREFORE THIS DEED WITNESSED AS UNDER:-

Nominated sub-contractor (Name and address of nominated sub-contractor) i.e. the "Associates" for Lift works has shown their interest to quote for the Lift works.

The "Bidder" and the Nominated sub-contractor shall fulfil the Mandatory Pre qualifications criteria and also submit all the mandatory documents as per PQ criteria, further I (Bidder) shall abide to submit all the remaining documents specified in special conditions of tender document within one month of issue of work order failing which Department / Employer can take appropriate action as per tender clause and conditions.

The Bidder /Approved Make Lift OEM agency should have to depute at least one technical person to attend any emergency breakdown during 24x7 period 365 days for hospital & College Building. No extra payment Shall be made for the same.

This Memorandum of Understanding should not be construed as deed of partnership and shall be governed by applicable laws in India.

In Witness whereof the parties through their authorized representative have executed those present and common seal of their respective companies on the day, month and year mentioned below.

Dated this

For (Name and address of Bidder)	For (Name and address of nominated Sub-contractor)
Name:-	
Address:-	
Position:-	

ANNEXURE- XVI

FOR LIFT

Declaration / Undertaking on Letter Head

~~I/We.....Resident of (Address) do solemnly pledge and affirm : That I am the proprietor/partner/authorized signatory of M/S..... hereby giving assurance that we will supply and install all Lift system, as per referenced standard (NAME OF PARTICULAR STANDARD TO BE MENTIONED, i.e. Latest (Amendment) Rules of The Gujarat Lifts and Escalators as the Chief Electrical Inspector and Collector of Electricity Duty, GoG) and corresponding tender technical specifications. There will be no change in declared standard and tender technical specifications at any time of the project execution. Moreover, I/We will execute all the LIFT items as per approved technical specifications.~~

**Name, Signature & Address of the tenderer
With Stamp**

ANNEXURE- XVII

Affidavit for appointment of Specialised Agency
(MGPS)

Date: __/__/__

Subject: Appointment of Specialised Agency for Works

Project: _____

~~We Here by Produce affidavit that, We _____ having our registered office at _____ is willing to participate in the upcoming project of _____. As per the Pre Qualification Criteria Clause _____, we hereby submit this affidavit and confirm that if our Techno-Commercial Bid is found successful and LOA/LOI is issued, we shall submit MOU with prospective sub-contractor or manufacturer or authorised dealer who has specific experience qualifying the clause _____ of the tender document before agreement.~~

~~We understand that if we fail to submit such MOU within specified time as per the affidavit and tender documents, Client has right to take appropriate action including forfeiting the EMD also.~~

Authorized Signatory

~~ANNEXURE- XVIII~~

Affidavit for appointment of Specialised Agency
(MOT)

Date: / /

Subject: Appointment of Specialised Agency for _____ Works

Project: _____

We Here by Produce affidavit that We _____ having our registered office at _____ is willing to participate in the upcoming project of _____. As per the Pre-Qualification Criteria Clause _____, we hereby submit this affidavit and confirm that if our Techno-Commercial Bid is found successful and LOA/LOI is issued, we shall submit MOU with prospective sub-contractor or manufacturer or authorised dealer who has specific experience qualifying the clause _____ of the tender document before agreement.

~~We understand that if we fail to submit such MOU within specified time as per the affidavit and tender documents, Client has right to take appropriate action including forfeiting the EMD also.~~

~~Authorized Signatory~~

ANNEXURE-XIX

Affidavit for appointment of Specialised Agency
(CSSD)

Date: __/__/__

Subject: ~~Appointment of Specialised Agency for~~ _____ ~~Works~~

Project: _____

~~We Here by Produce affidavit that We _____ having our registered office at _____ is willing to participate in the upcoming project of _____. As per the Pre-Qualification Criteria Clause _____, we hereby submit this affidavit and confirm that if our Techno-Commercial Bid is found successful and LOA/LOI is issued, we shall submit MOU with prospective sub-contractor or manufacturer or authorised dealer who has specific experience qualifying the clause _____ of the tender document before agreement.~~

~~We understand that if we fail to submit such MOU within specified time as per the affidavit and tender documents, Client has right to take appropriate action including forfeiting the EMD also.~~

Authorized Signatory

~~ANNEXURE-XX~~

Affidavit for appointment of Specialised Agency
(HVAC)

Date: / /

Subject: Appointment of Specialised Agency for _____ Works

Project: _____

We Here by Produce affidavit that We _____ having our registered office at _____ is willing to participate in the upcoming project of _____. As per the Pre-Qualification Criteria Clause _____, we hereby submit this affidavit and confirm that if our Techno-Commercial Bid is found successful and LOA/LOI is issued, we shall submit MOU with prospective sub-contractor or manufacturer or authorised dealer who has specific experience qualifying the clause _____ of the tender document before agreement.

~~We understand that if we fail to submit such MOU within specified time as per the affidavit and tender documents, Client has right to take appropriate action including forfeiting the EMD also.~~

~~Authorized Signatory~~

ANNEXURE-XXI

Affidavit for appointment of Specialised Agency
(ELV)

Date: __/__/__

Subject: Appointment of Specialised Agency for Works

Project: _____

~~We Here by Produce affidavit that We _____ having our registered office at _____ is willing to participate in the upcoming project of _____. As per the Pre-Qualification Criteria Clause _____, we hereby submit this affidavit and confirm that if our Techno-Commercial Bid is found successful and LOA/LOI is issued, we shall submit MOU with prospective sub-contractor or manufacturer or authorised dealer who has specific experience qualifying the clause _____ of the tender document before agreement.~~

~~We understand that if we fail to submit such MOU within specified time as per the affidavit and tender documents, Client has right to take appropriate action including forfeiting the EMD also.~~

Authorized Signatory

ANNEXURE-XXII

Affidavit for appointment of Specialised Agency
(Electrical)

Date: __/__/__

Subject: Appointment of Specialised Agency for Works

Project: _____

~~We Here by Produce affidavit that We _____ having our registered office at _____ is willing to participate in the upcoming project of _____. As per the Pre-Qualification Criteria Clause _____, we hereby submit this affidavit and confirm that if our Techno-Commercial Bid is found successful and LOA/LOI is issued, we shall submit MOU with prospective sub-contractor or manufacturer or authorised dealer who has specific experience qualifying the clause _____ of the tender document before agreement.~~

~~We understand that if we fail to submit such MOU within specified time as per the affidavit and tender documents, Client has right to take appropriate action including forfeiting the EMD also.~~

Authorized Signatory

~~ANNEXURE-XXIII~~

Affidavit for appointment of Specialised Agency
(Lift)

Date: / /

Subject: Appointment of Specialised Agency for _____ Works

Project: _____

We Here by Produce affidavit that We _____ having our registered office at _____ is willing to participate in the upcoming project of _____. As per the Pre-Qualification Criteria Clause _____, we hereby submit this affidavit and confirm that if our Techno-Commercial Bid is found successful and LOA/LOI is issued, we shall submit MOU with prospective sub-contractor or manufacturer or authorised dealer who has specific experience qualifying the clause _____ of the tender document before agreement.

~~We understand that if we fail to submit such MOU within specified time as per the affidavit and tender documents, Client has right to take appropriate action including forfeiting the EMD also.~~

~~Authorized Signatory~~

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 not abandoned any work of Government of Gujarat/Government of India/any Board or Corporation under Government of Gujarat/Government of India nor any contract awarded to us for such works have been rescinded, during last five years prior to the date of this bid.~~
- ~~3. 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 any (our) competence and general reputation.~~
- ~~4. The Undersigned understands 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

UNDERTAKING

I, ~~the undersigned~~ do hereby undertake that our firm
M/s..... would invest a minimum cash
up to 25% of the value of the work during implementation of the contract.

(Signed by an Authorized officer of the firm)

Title of officer

Name of firm

DATE

SECTION - 3

CONDITIONS OF CONTRACT

Conditions of Contract

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CONDITIONS OF CONTRACT

A. GENERAL.

1. Definitions

- 1.1 Terms which are defined in the Contract Data are not also defined in the Conditions of Contract but keep their defined meaning.

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 Contractor to execute, complete and maintain the Works **till the completion of Defects Liability Period**. 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 the Work has been accepted by the Employer.

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

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

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

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

The **Employer- The Principal Secretary/ Additional Chief Secretary, Health Department**, Employers representative: Chief Engineer, PIU who is overall in charge of the works and contract signing authority.

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, and valuing the Compensation Events under the control of Superintending Engineer.

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

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

The **Intended 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.

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

Plant is any integral part of the work which is to have mechanical, electrical, electronic or chemical or biological functions.

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 interpretive reports about the surface and subsurface conditions at the site.

Specifications means the Specifications 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 or Indicating in Work Order. It is the date when the Contractor shall commence execution of the works. It does not necessarily coincide with any of the Site PossessionDates.

A **Subcontractor** is a person or corporate body who has a Contract with the Contractor to carry out a part of the work in the Contract which includes work on the Site.

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. Heading 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 Conditions ofContract.
- 2.2 If sectional completion is specified in the Contract Data, references in the Conditions of Contract to the Works, the Completion date, and Intended Completion Date apply to any Section of the Works (other than references to the Completion Date and Intended Completion date for the wholeworks)
- 2.3 The documents forming the Contract shall be interpreted in the following order ofpriority
 - (1) Agreement
 - (2) Letter of Acceptance, notice to proceed withworks
 - (3) Contractor'sBid

- (4) ContractData
- (5) Conditions of Contract including Conditions ofContract
- (6) Specifications
- (7) Drawings
- (8) Bills of quantitiesand
- (9) Any other document listed in the Contract Data as forming part of the Contract.

3. Language andLaw

- 3.1 The language of the Contract and the law governing the Contract are stated in the ContractData.

4. EngineersDecisions

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

5. Delegation

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

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

- 7.1 The Contractor may subcontract any portion of work, up to a limit specified in contract data, with the approval of the engineer but may not assign the Contract without the approval of the Employer in writing. Subcontracting shall not alter the Contractor's obligations. **Sub-contracting of supply or specific items of work is notallowed.**
- 7.2 The sub-contractor must be registered in appropriate class and category for the part of work to besubcontracted.

8. OtherContractors

- 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 Contractor. The Contractors shall as refer 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 suchmodifications.

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 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 Contractors Risks

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

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, 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.

12. Contractor's Risks

- 12.1 All risks of loss of or damages 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 damages 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.

- 133 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.
- 134 Alterations to the terms of an insurance shall not be made without the approval of the Engineer.
- 135 Both parties shall comply with any conditions of the insurance policies.
- 14. Site Investigation Report**
- 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**
- 18.1 The Contractor shall submit Specifications and Drawings showing the proposed Temporary works to the Engineer, who is to approve them if they comply with the Specifications 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 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 Contractors for the execution of the temporary or permanent work 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 a Compensation Event.
- 21.2 If within 25% of the time limit of the project, 80% of possession of the site is not handed over to the Contractor, then contractor/ Employer may fore-close the contract. Contractor/Employer has to foreclose the work within as decided by Employer. after lapse of 25%-time limit and after 30 days foreclosure option will be closed.

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 plants 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 is of the view 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 **#Superintending Engineer** (Higher Authority) within 30 days of the notification of the Engineer's decision. If the issue is not resolved, any party can refer the matter for conciliation within 30 days from the decision given by the **#Superintending Engineer**.
- 24.2
- (a) For the work up to Rs.250 Cr., if any of the parties is not satisfied with the decision of the **#Superintending Engineer**, both the parties have to refer to the Chief Engineer concern for the conciliation process.
 - (b) For the work more than Rs.250 Cr., if any of the parties is not satisfied with the decision of the **#Chief Engineer**, both the parties have to refer to the **#Secretary, Roads & Building Department, Government of Gujarat** for the conciliation process.

If the dispute is not resolved through the conciliation process, he may refer the dispute to Gujarat Public Works Contract Dispute Arbitration Tribunal. If the Contractor fails to refer a claim / dispute to the Higher Authority within 14 days of the notification of the Engineer's decision, the Contractor shall not be entitled to any additional payment/claim if he doesn't follow the above sequence in stipulated time and he should not stop the work.

25. Procedure for Disputes

- 25.1 The arbitration shall be conducted in accordance with the arbitration procedure stated in the Special Conditions of Contract.

26. Deleted

B. TIMECONTROL

27. Programme

- 27.1 Within the time stated in the Contract Data the Contractor shall submit to the Engineer for approval a Programme showing the general methods, arrangements orders, and timing for all the activities in the works along with monthly cash flowforecast.
- 27.2 An update of the 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 theactivities.
- 27.3 The Contractor shall submit to the Engineer, for approval an updated programme at intervals no longer than the period stated in the Contract data. If the Contractor does not submit an updated programme within this period, the Engineer may withhold the amount stated in the Contract data from the next payment after the date on which the overdue programme has been submitted.
- 27.4 The Engineer's approval of the programme shall not alter the Contractor's obligations. The Contractor may revise the programme and submit it to the Engineer again at any time. A revised programme is to show the effect of Variations and Compensationsevents.

28. Extension of the Intended CompletionDate

- 28.1 The Engineer shall extend the Intended Completion Date if a compensation Event 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 additionalcost.
- 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 under Clause24.1

29. Deleted

30. Delays Ordered by theEngineer

- 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/ Defect liability period

33.1 : Defect liability period: The contractor shall be responsible to make good and remedy at his own expense any defect which may develop or may be noticed before the period mentioned hereunder from the certified date of completion. The Engineer in charge shall give the contractor a notice in writing about the defects and the contractor shall make good the same within 15 days of receipt of the notice. In the case of failure on the part of the contractor, the Engineer-in-charge may rectify or remove or re-execute the work at the risk & cost of the contractor. The Engineer-in-charge shall be entitled to appropriate the whole or any part of the amount of security deposit towards the expenses, if any, Incurred by him in rectification, removal or re-execution. The Defects Liability period shall be as under....

- (a) For all works costing up to Rs. 50,000 (amount put to tender), the period shall be 3 Months from the certified date of completion.
- (b) For all works costing more than Rs. 50,000 and up to Rs. 1 crore (amount put tender), the period shall be 12 (Twelve) months from the certified date of completion or one monsoon, whichever is later.
- (c) For major projects costing more than Rs. 1 crore, the period shall be 36 Months from the certified date of completion which should include three monsoons.
- (d) For original building works the defect liability period will be 4 years or elapse of 4 monsoon period following date of possession of building taken over by user agency following the certified date of completion, whichever is later. For the purpose of deciding the monsoon period, the 30th September shall be treated as the last date.

33.2 Free maintenance guarantee period for works of building and allied system construction

(a) Deleted

(b) Deleted

- (c) Building and allied system of ~~MCPS, MOT, CSSD, Lift~~, Electrification, ~~ELV~~, Water Supply System, Drainage System, ~~HVAC contractor~~ shall maintain in operational condition by repairing, replacing, renovating of any component of building or allied system above as per mention period Cl.33 (D) also contractor shall deploy the qualified manpower for the operation of the system as per requirement

However, this amount shall be released against fixed deposit or bank guarantee pledged in the name of Executive Engineer after completion certificate of work is issued.

(1) Deleted

(2) Deleted

(3) Deleted

(4) Deleted

further that such interruption and diversion shall be undertaken by the Contractor only with the prior written approval of the Executive Engineer which approval shall not be unreasonably withheld. For the avoidance of doubt, it is agreed that the Contractor shall at all times be responsible for ensuring safe operation of the road.

- 33.3 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.

- 34.2 #1% of the amount of **work done** should be deducted from R.A. Bill of the contractor for testing the quality of material workmanship, irrespective of actual charges. We may allow testing certificates of GERI or Government approved Lab by R&B Department/ PIU.

- 34.3 Agency has to establish testing laboratory on site for the various test to be carried out in the work for this purpose agency shall construct a pukka laboratory building with all facility on site at location specified by the engineer incharge. Penalty as per R&B Circular no. _____ Dt. _____.

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 constructions, 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. Change in the Quantities

- 38.1 The Engineer shall have power to make any alterations in or addition to the original specifications, drawings, designs and instructions that may appear to him to be necessary or advisable during the progress of the work and the contractor shall be bound to carry out the work in accordance with any instruction in this connection which may be given to him in writing signed by the Engineer and such alteration shall not invalidate the contract and any additional work which the contractor may be directed to do in the manner above specified as part of the work shall be carried out by the contractor on the same conditions in all respects on which he agreed to do the main work and at the same rate as are specified in the tender for the mainwork.

Except that when the quantity of any item exceeds the quantity as in the tender by more than 130%, the contractor will be paid for the quantity in excess of 130%, at the rate entered in the SOR of the year during which the excess in quantity is first executed.

39. Variations

- 39.1 All Variations shall be included in updated programmes produced by the Contractor.

40. Payments for Variations

- 40.1 If the additional or altered work includes any class of work for which no rate is specified in this contract, then such class of work shall be carried out as under.

- (i) At the rate derived from the item within the contract which is comparable to the one involving additional or altered class of work; where there are more than one comparable items, the item of the contract which is nearest in comparison with regard to class or classes of the work involved shall be selected and the decision of the Superintending Engineer as to the nearest comparable item shall be final and binding on the contractor.
- (ii) If the rate cannot be derived in accordance with (i) above, such class of works shall be carried out at the rate entered in the Schedule of Rates of the division

for the year in which the tender was received, increased or decreased by the percentage by which the tender amount is more or less as compared to the amount arrived at the rates in the "Schedule of Rates" of the Division in the year in which the tender was received. If the Schedule of rates of the Division does not contain all the items, the percentage increase or decrease of the tender shall be calculated considering such items which were included in the "Scheduled Rates" of the division for the year and for materials consumed on such item the rate to be charged would be the basic rate taken into account for fixing the rate in S.O.R. referred to above.

- (iii) If it is not possible to arrive at the rate from (i) and (ii) above, such class of work shall be carried out at the rate decided by the competent authorities on the basis of detailed rate analysis after hearing the contractor before a Committee of two Superintending Engineers stationed at the same place or the nearest place.
- 402 If the additional or altered work, for which no rate is entered in the "Schedule of Rates" of the Division is ordered to be carried out before the rate is agreed upon, then the contractor shall within seven days of the date of receipt by him of the order to carry out the work, inform the Engineer-in-charge of the rate, which it is his intention to charge for such class of work and if the Engineer in charge does not agree to this rates, he shall by notice in writing be at liberty to cancel his order to carry out such class of work and arrange to carry it out in such manner as he may consider it advisable, provided always that if the contractor shall commence work or incur any expenditure in regard thereof before the rates shall have been determined as lastly herein before mentioned, then in such cases he shall only be entitled to be paid in respect of the work carried out or expenditure incurred by him prior to the date of the determination of the rate as aforesaid according to such rate or rates as shall be fixed by the Engineer-in-charge. In the event of the dispute, the decision of the Superintending Engineer of the Circle shall be final.

Where, however, the work is to be executed according to the designs, drawings and specifications recommended by the contractor and accepted by the competent authority, the alternation above referred to shall be within the scope of such designs, drawings and specifications appended to the tenders.

The time limit for the completion of the work shall be extended in the proportion that the increase in the cost occasioned by alterations bears to the cost of the original work and the certificate of the Engineer-in-charge as to such proportion shall be final and conclusive.

41. Cash Flow Forecasts

- 41.1 When the programme is updated, the contractor is to provide the engineer with an updated cash flow forecast.

42. Payment certificates.

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

~~422 The Engineer shall check the Contractor's monthly statement within 14 days and certify the amount to be paid to the Contractor after taking in to 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 32.3 of the Contract Data (secured Advance).~~

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

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

425 The value of work executed shall include the valuation of variations and compensation events.

426 The Engineer may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information

43. Payments

431 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.

432 Payment of GST (prevailing rates) on the amount payable under the contract to the Contractor will be made by the Employer. Hence, it is the responsibility of the contractor to pay the GST to the concerned Authority of Government. We should decide policy for estimate base on R&B SOR other than 2023-24 and other RA items and electrical items.

433 Items of the works for which no rate or price has been entered in will not be paid by the Employer and shall be deemed covered by other rates and prices in the Contract.

44. Compensation events

441 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 Contract data to the Contractor

442 In case of compensation event occurs and it prevents the work being completed beyond the Intended Completion Date then Authority will approve Extension of Time with eligible contractual price escalation.

45. Tax

- 45.1 The rates quoted by the Contractor must be inclusive of all taxes prevailing on due date of bid submission except GST. However, any subsequent changes in the tax structure by Government after due date of bid submission will be compensated (+/-) on availability or submission of actual documentation. Contractor will have to intimate Engineer regarding changes occurred in the tax structure after bid submission. If the contractor fails to provide such information and if any financial obligation may arise due to change in tax structure, same will be recovered from the contractor.
- 45.2 GST will be paid separately on the bills. Hence, it is the responsibility of the contractor to pay the GST to the concerned Authority. Ref. 43.2

46. Currencies.

- 46.1 All payment shall be made in Indian Rupees.

47. Price Adjustment

- 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 up to 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 attributable 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 during 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 clause 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

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

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

In case, Contractor requests for refund of the Retention Money deducted by the Employer under the provision of this clause, Employer shall consider the said request of the Contractor provided that the refund hereunder shall be made in tranches of not less than 1% (One Percent) of the Contract Price and Contractor furnishes an irrevocable and unconditional Bank guarantee for an equal amount substantially in the format of Bank Guarantee for Performance Guarantee enclosed with SBD and valid up to 60 day beyond the scheduled / extended Defects Liability Period. On completion of the whole works, the contractor has however an option to submit a fresh irrevocable and unconditional Bank Guarantee for an amount equal to 5% of the total value of work executed substantially in the format of Bank Guarantee for Performance Guarantee enclosed with SBD and valid up to 60 days beyond the Defect Liability Period and yet refund the Retention Money Bank Guarantee submitted for refund of Retention Money.

49. Liquidated Damages

- 491 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 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 payment due to the Contractor. Payment of liquidated damages does not affect the Contractor's liabilities.
- 492 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 not be entitled for any interest on the over payment calculated from the date of payment to the date of repayment.
- 493 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.

- 494 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—Bonus

- 501 ~~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 every completed month but subjected to maximum amount as stated in Contract Data; which shall elapse between the date of completion of all items of works as stipulated in the contract, including variations ordered by the Engineer and the time prescribed in Clause 17.~~
- 502 ~~Bonus shall be paid only to works amounting to above INR 5 crore with time limit of the works is equal or more than 6 months. The bonus would be paid as under~~

% of Time Saved	% of Initial Contract Price entitled for Bonus
50 %	5%
40 %	4%
30 %	3%
20 %	2%
10 %	1%
Less than 10%	0%

51.—Advance Payment.

- 511 ~~The Employer shall make advance payment (not to be paid less than two installments except in special circumstances for which the reason to be Recorded in writing) to the Contractor of the amounts stated in the Contract Date by the date stated in the Contract Date, 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 be at least 110% of 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. The Mobilization advance would be deemed as interest bearing advance at an interest rate of 10 % to be compounded, quarterly.~~

~~512 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.~~

~~513 The advance payment shall be repaid by deduction proportionate amount 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.~~

514 Deleted

52. Securities

521 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 60 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.

53. Deleted

54. Cost of Repairs.

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

E. FINISHING THE CONTRACT

55. Completion

- 55.1 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.

56. Taking Over

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

57. Final Account

- 57.1 The Contractor shall supply to the Engineer a detailed final account of the total amount that the Contractor considers payable as full and final settlement of all claims under the Contract for items 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.
- 57.2 If reversal in characteristic of tender (L1 becoming L2) on account of excesses and savings in final account is observed, the Engineer/Employer shall be at liberty to restrict the final payment of BOQ items to the lowest amount evaluated of the bids considering the final quantities and the rates quoted including the rebates if any. Payment of variation items shall however be made at the rates approved by the Employer, within 90 days from the physical completion of work. (Applicable for item rate tender only)

Operating and Maintenance Manuals

- 57.3 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.
- 57.4 If the Contractor does not supply the Drawings 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.

58. Termination

- 58.1 The Employer or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract.

582 Fundamental breaches of Contract include, but shall not be limited to the following:

1. 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
2. The Engineer instructs the Contractor to delay the progress of the Works and the instructions is not withdrawn within 28 days;
3. The Employer or the Contractor is made bankrupt or goes into liquidation other than for a reconstruction or amalgamation
4. A payment certified by the Engineer is not paid by the Employer to the Contractor within 56 days of the date of the Engineer's certificate
5. 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;
6. The Contractor does not maintain a security which is required;
7. 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
8. 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.

583 When either party to the Contract gives notice of a breach of contract to 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.

584 Notwithstanding the above, the employer may terminate the Contract for convenience.

59. Payment upon Termination

59.1 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 up to the date of the issue of the

certificate, less other recoveries due in terms of the contract, less taxes due to 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.

- 592 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 cost of protecting and securing the Works and less advance payment received up to the date of the certificate, less other recoveries due in terms of the contract and less taxes due to deducted at source as per applicable law.

60. Property

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

61. Release from Performance

- 61.1 If the Contract is frustrated by the outbreak of war 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. SPECIAL CONDITIONS OF CONTRACT

62. 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 of 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 numbers 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.

63. COMPLIANCE WITH LABOUR REGULATIONS

During continuance of the contract, the Contractor and his sub-contractor shall abide at all times by all existing labour enactments and rules made thereunder, regulations, notification 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 notifications 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 the 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 thereunder, 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 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 the 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 to time.

SALIENT FEATURES OF SOME MAJOR LABOUR AND OTHER LAWS APPLICABLE TO ESTABLISHMENTS ENGAGED IN BUILDING AND OTHER CONSTRUCTIONS 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:
1. Pension or family pension on retirement or death, as the case maybe.
 2. Deposit linked insurance on the death in harness of the worker.
 3. 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 1970**: 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. Construction of Building, Roads, Runways are scheduled employment.
- G) **Payments 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 remunerations 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 matter of transfer, training and promotion etc.
- I) **Payments 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 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 resolutions 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 get the same certified by the designated Authority.
- L) **Trade Unions Act 1926:-**The Act lays the procedure for registration of trade unions of workmen and employers. The Trade Unions registered under the Act have given 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 process 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, is 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 constructions work and employ 10 or more workers are covered under this Act.
All such establishments are required to pay cess at the rate not 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 building or construction work and other welfare measures, such as canteens, First Aid facilities, Ambulance, Housing accommodations for workers near the workplace etc. The Employer to whom the Act applies has to obtain a registration certificate from the Registering Officers 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 the manufacturing process.
- Q) **Royalty charges-**The contractor shall pay the royalty to the competent authority as per rule. The **royalty** charges paid shall be borne by the contractor and shall not be reimbursed by the Employer.
- R) **Following Pollution control Acts and amendments made thereof from time to time shall be applicable.**
1. Water (Preservation and control of Pollution) Act, 1974
 2. Air (Prevention and Control of Pollution Act) 1981
 3. Environmental (Protection) Act 1986

The contractor must commit to adopting Environmental management plan for best energy use, waste management, the reduction of pollution as in EMS (Environmental Management system) ISO-14001- 2015

64. ARBITRATION (GCC Clause 24)

The procedure for arbitration will be as follows: -

- 24.1 If the Contractor is of the view 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 **#Superintending Engineer** (Higher Authority) within 14 days of the notification of the Engineer's decision. If the issue is not resolved, any party can refer the matter for conciliation within 15 days from the decision given by the #Superintending Engineer.

24.2

- (a) For the work up to Rs.250 Cr., if any of the parties is not satisfied with the decision of the #Superintending Engineer, both the parties have to refer to the #Chief Engineer concerned for the conciliation process.
- (b) For the work more than Rs.250 Cr., if any of the parties is not satisfied with the decision of the Chief Engineer, both parties have to refer to the #Secretary, Health Department, Government of Gujarat for the conciliation process.

If the dispute is not resolved through the conciliation process, contractor may refer the dispute to Gujarat Public Works Contract Dispute Arbitration Tribunal. If the Contractor fails to refer a claim / dispute to the Higher Authority within 14 days of the notification of the Engineer's decision, the Contractor shall not be entitled to any additional payment/claim if he doesn't follow the above sequence in stipulated time. However, during such period, he would not stop the work in any case.

SECTION - 4
CONTRACT DATA

#CONTRACT DATA

Clause Reference With respect to section 3

Item marked "N/A" do not apply to this Contract.

1. The Employers is [CL.1.1]
Name: Principal Secretary, Health and Family Welfare Department
Address:
Name of authorized Representative (Chief Engineer, PIU)
2. The Engineer is Superintending Engineer.
Name of Authorized Representative: Executive Engineer
3. The Defects Liability Period is years from the date of completion. [CL.1.1&33]
4. The Start Date shall be 1st days for the date of issue of the Notice to proceed with the work. [CL.1.1]
5. The Intended Completion Date for the whole of the works is [CL.1.1,17&2]
..... **Months** after start of work with the following milestones:
Milestone dates: [CL.2.2& 49.1]
Physical works to be completed Period from the start date
Milestone1 i.e.%days.
Milestone2 i.e.%days.
Milestone3 i.e.%days.
Milestone4 i.e.%days.
6. The Site is located at..... [CL.1.1]
7. The name and identification number of the Contract is: [CL.1.1]
8. The works consist of with items as per [CL.1.1]
B.O.Q. The works shall, inter alia, include the following, as Specified or as directed:

(A) Road Works

~~Site clearance; setting – out and layout; widening of existing carriageway and strengthening including camber corrections; construction of new road/ Parallel service road; bituminous pavements remodeling/construction of junctions, intersections, bus bays, lay bays; supplying and placing of drainage Channels, flumes, guard posts and guard other related items; construction/extension of cross drainage works, bridge, approaches and other related stones; protective works for roads/bridge; all aspects of quality assurance of various components of the works; rectification of The defects in the completed works during the Defects Liability Period; submission of "As built" drawings and any other related documents; and other item of work as may be required to be carried out for completing the work in accordance with the drawings and the provisions of the contract and to ensure safety.~~**Delete**

(B) Bridge Works

~~Site clearance; setting out, provision of foundations, piers abutments and bearing; prestressed/reinforced cement concrete superstructure; wearing coat, hand railings, expansion joints, approach slabs, drainages spouts/ downtake pipes, arrangements for fixing light posts, water mains, utilities etc; provision of suitably designed protective works; providing wing/return walls; provision of road markings, road signs etc.; all aspects of quality assurance; clearing the site and handing over the works on completion; rectification of the defects during the Defects Liability Period and submission of "As built" drawings and other related documents; and other items of work as may be required to be carried out for completing the works in accordance with the drawings and the provisions of the contract and to Insure safety~~**Delete**

(C) Building Works

[CL.1.1]

(D) Other Items

Any Other Items as required to fulfill all contractual obligations as per the Bid documents.

10. The following documents also form part of the Contract: [CL.2.3(9)]
As per clause 2-3
11. The law which applies to the Contract is the law of Union of India [CL.3.1]
12. The language of the Contract documents is English [CL.3.1]
13. Limit of subcontracting 25% of the Initial Contract Price [CL.7.1]
14. The Schedule of Other Contractors [CL.8]
15. The Schedule of Key Personnel As per Annex – II to Section I [CL.9]
16. The minimum insurance cover for physical property, injury and death is Rs. 5 lakhs per occurrence with the number of occurrences limited to four. After each occurrence, the contractor will pay an additional premium necessary to make insurance valid for four occurrences always. [CL.13]
17. Site Investigation report [CL.14]
18. The Site Possession dates shall be [CL.21]
19. The period for submission of programme for approval of the engineer shall be 21 days from the issue of Letter of Acceptance. [CL. 27.1]
20. The period between program updates will be days. [CL.27.3]
21. The amount to be withheld for late submission of an updated programme shall be Rs lakhs [CL. 27.3]
22. The following events shall also be Compensation Events [CL. 44]
Substantially adverse ground conditions encountered during the course of execution of work not provided for in the bidding document.
 - (i) ~~Removal of underground utilities detected subsequently~~
 - (ii) ~~Significant changes in classification of soil requiring additional mobilization by the contractor, e.g. ordinary soil to rock excavation,~~
 - (iii) ~~Removal of unsuitable material like marsh, debris dumps, etc. not caused by the contractor.~~

- (iv) ~~Artesian conditions~~
 - (v) ~~Seepage, erosion landslide~~
 - (vi) ~~River training requiring protection of permanent work~~
 - (vii) ~~Presence of historical, archeological or religious structures, monuments interfering with the works~~
 - (viii) ~~Restriction of access to ground imposed by civil, judicial, or military authority~~
23. The currency of the Contract is Indian Rupees [CL. 46]
24. **The formula (e) for adjustment of prices are as under:** [CL.47]
- ~~If any of the commodities like Cement, Steel or Bitumen are not found applicable in a work, the weight component of that commodities {i.e. 'Cement' (Pc), 'Steel' (Ps) or 'Bitumen' (Pb) as indicated in SBD for the purpose of Price Adjustment} shall be clubbed with the weight component of 'Other Material' (Pm), such that the gross % weight of the components shall remain as 100%.~~
- R = value of work as defined in Clause 47.1 of Conditions of Contract

Adjustment for labour component

- (i) ~~Price adjustment for increase or decrease in the cost due to labour shall be paid in accordance with the following formula:~~

$$V_L = \frac{0.85 \times (P_i/100) \times R \times (L_i - L_0)}{L_0}$$

~~V_L = Increase or decrease in the cost of work during the month under consideration due to changes in rates for local labour~~

~~L₀ = The consumer price index for industrial workers for the State on 28 days preceding the scheduled date of opening of technical Bids as published by Labour Bureau, Ministry of Labour, Government of India~~

~~L_i = The consumer price index for industrial workers for the State for the month under consideration as published by the Labour Bureau, Ministry of Labour, Government of India.~~

~~P_i = Percentage of labor component of the work.~~

Adjustment for cement component.

- (ii) ~~Prices adjustment for increase or decrease in the cost of cement procured by the contractor~~

$$V_c = \frac{0.85 \times (P_c/100) \times R \times (C_i - C_0)}{C_0}$$

~~V_c = Increase or decrease in the cost of work during the month under consideration due to changes in rates for cement.~~

~~C₀ = The all India wholesale price index for Ordinary Portland Cement on 28 days preceding the scheduled date of opening of technical bid as published by the Office of the Economic Adviser, Department for Promotion of Industry and Internal Trade, Ministry of Commerce & Industry.~~

~~C_i = The all India average wholesale price index for Ordinary Portland Cement for the month under consideration as published by Office of the Economic Adviser, Department for Promotion of Industry and Internal Trade, Ministry of Commerce & Industry.~~

P_c = Percentage of cement component of the work

Adjustment for steel component

(iii) — ~~Price adjustment for increase or decrease in the cost of steel procured by the contractor shall be paid in accordance with the following formula~~

$$V_s = 0.85 \times (P_s/100) \times R \times (S_i - S_0)/S_0$$

~~V_s = Increase or decrease in the cost of work during the month under consideration due to changes in the rates for steel~~

~~S₀ = The all India wholesale price index for steel (Mild Steel – Long Products Rebars) on 28 days preceding the date of opening of Bids as published by the Office of the Economic Adviser, Department for Promotion of Industry and Internal Trade, Ministry of Commerce & Industry.~~

~~S_i = The all India average wholesale price index for steel (Mild Steel – Long Products Rebars) for the month under consideration as published by Office of the Economic Adviser, Department for Promotion of Industry and Internal Trade, Ministry of Commerce & Industry.~~

P_s = Percentage of steel component of the work

Note : For the application of this clause, the index of **Mild Steel – Long products Rebars** has been chosen to represent the steel group.

Adjustments of bitumen component

(iv) — ~~Price adjustment for increase in the cost of bitumen shall be paid in accordance with the following formula~~

$$V_b = 0.85 \times (P_b/100) \times R \times (B_i - B_0)/B_0$$

~~V_b = Increase or decrease in the cost of work during the month under consideration due to changes in rates for bitumen.~~

~~B₀ = The official retail price of bitumen at the IOC depot at the nearest centre on the day 28 days prior to the scheduled date of opening of technical bid.~~

~~B_i = The official retail price of bitumen of IOC depot at the nearest centre for the 15th day of the month under consideration.~~

P_b = Percentage of bitumen component of the work

Adjustment of POL (fuel and lubricant) component

- (v) ~~Price adjustment for increase or decrease in cost of POL (fuel and lubricant) shall be paid in accordance with the following formula~~

$$V_f = 0.85 \times (P_f/100) \times R \times (F_i - F_0)/F_0$$

~~V_f = Increase or decrease in the cost of work during the month under consideration due to changes in rates for fuel and lubricants.~~

~~F₀ = The official retail price of High Speed Diesel (HSD) at the existing consumer pumps of IOC at the nearest centre on the day 28 prior to the date of opening of Bids.~~

~~F_i = The official retail price of HSD at the existing consumer pumps of IOC at the nearest centre for the 15th day of the month of the under consideration.~~

~~P_f = Percentage of fuel and lubricants component of the work~~

~~Note: For the application of this clause, the price of High Speed diesel Oil has been chosen to represent the fuel and lubricants group.~~

Adjustment for Construction Machinery

- (vi) ~~Price adjustment for increase or decrease in the cost of plant and Machinery spare procured by the Contractor shall be paid in accordance with the following formula~~

$$V_p = 0.85 \times (P_p/100) \times R \times (P_i - P_0)/P_0$$

~~V_p = Increase or decrease in the cost of work during the month under consideration due to changes in rates for plant and machinery spares~~

~~P₀ = The all India wholesale price index for **manufacturer of machinery for mining, quarrying and Construction** for the month under consideration as published **Office of the Economic Adviser, Department for Promotion of Industry and Internal Trade, Ministry of Commerce & Industry.**~~

~~P_i = The all India average wholesale price index for **manufacturer of machinery for mining, quarrying and Construction** for the month under consideration as published **Office of the Economic Adviser, Department for Promotion of Industry and Internal Trade, Ministry of Commerce & Industry.**~~

~~P_p = Percentage of plant and machinery spares component of the work.~~

~~Note: For the application of this clause, index of Heavy Machinery and parts has been chosen to represent the Plant and Machinery Spares group~~

Adjustment of other materials Component

- (vii) ~~Price adjustment for increase or decrease in cost of local materials other than cement, steel, bitumen and POL procured by the contractor shall be paid in accordance with the following formula~~

$$V_m = 0.85 \times (P_m/100) \times R \times (M_i - M_0)/M_0$$

~~V_m = Increase or decrease in the cost of work during the month under consideration due to change in rates for local materials other than cement, steel, bitumen and POL.~~

~~M_0 = The All India wholesale price index (all commodities) on 28 days preceding the scheduled date of opening of technical Bids, as published by the **Office of the Economic Adviser, Department for Promotion of Industry and Internal Trade, Ministry of Commerce & Industry.**~~

~~M_i = The All India wholesale price index (all commodities) for the month under consideration as published by the **Office of the Economic Adviser, Department for Promotion of Industry and Internal Trade, Ministry of Commerce & Industry.**~~

~~P_m = Percentage of local material components (other than cement, steel, bitumen and POL) of the work.~~

The following percentage will govern the price adjustment for the entire contract:

	SC	PHC	CHC	Other s
Labour P_l %				
Cement P_c %				
Steel P_s %				
Bitumen P_b %				
POL P_f %				
Plant & Machinery Spares P_p %				
Other Materials P_m %				
Total	100 %	100 %	100 %	100%

Note— 1) Delete

2) for new construction of SDH/DH/Medical Colleges and Other building works % shall be applicable as mentioning tender documents.

25. The proportion of payments retained (retention money) shall be 6% {CL. 48} from each bill subject to a maximum of 5% of final contract price.
26. Amount of Liquidated damages for delay in completion of works For Whole of work {CL.49} $(1/2000)^{th}$ of the Initial contract price, rounded off to the nearest Thousand, per day. For sectional-

Completion (wherever specified In item 6 of Contract data) (1/2000)th of initial contract price for #5 km- Section, rounded off to the nearest thousand per day.

27. Maximum limit of liquidated damages For delay in completion work 10 percent of the Initial {CL.49} Contract Price rounded off to the nearest thousand

28. ~~Amount of Bonus for early completion~~ Amount of bonus for early completion of work shall be given as per CL.50 of Section-3

29. ~~Maximum limit of bonus for early Completion of work~~ **5 percent** of the Contract {CL. 50} Price

30. ~~The amount of the advance payment are: {CL. 51 & 52}~~

#Nature of Advances **Amount (Rs.) Conditions to be fulfilled**

i ~~Mobilization 10% of the contract Price~~ On submission of unconditional Bank Guarantee. (to be drawn before the end of 20% of the contract period). The contractor may furnish four bank guarantees of 2.5 % of each valid for the full period.

ii ~~Equipment 90% for new and 50% of depreciated value for old equipment. Total amount will be subject to a maximum of 5% of the Contract Price~~ After equipment is brought to site (provided the Engineer is satisfied That the equipment is required for performance of the contract) and on submission of unconditional Bank Guarantee for amount of advance

iii ~~Secured Deleted~~
Advance for
Non-perish-
able material
Brought to site

(The advance payment will be paid to the Contractor no later than 28 days after fulfillment of the above conditions).

~~31. Repayment of advance payment for mobilization and equipment {CL.51.3}~~

~~The advance loan shall be repaid with percentage deduction from the interim payments certified by the Engineer under the Contract. Deduction shall commence in the next Interim Payment Certificate following that in which the total of all such payments to the Contractor has reached not less than 20 percent of the Contract Price or 6 (six) months from the date of payment of first installment of advance, whichever period concludes earlier, and shall be made at the rate of 20 percent (collectively for both Mobilization Advance and Equipment Advance) of the amounts of all Interim Payment Certificate until such time as the loan has been repaid, always provided that the loan shall be completely repaid prior to the expiry of the original time for completion pursuant to Clause 17 and 28.~~

32. Deleted

33. The securities shall be for the following minimum amounts equivalent {CL. 52}

As a percentage of the Contract Price:

Performance Security for 5 percent of contract price plus Rs. (to be decided after evaluation of the bid) as additional security in terms of ITB Clause 29.5

The standard form of Performance security acceptable to the Employer shall be an unconditional Bank Guarantee of the type as presented in Section 8 of the Bidding Documents.

34. The Schedule of Operating and maintenance Manuals.....N/A. {CL.58}

35. The date by which "as- built" drawings (in scale as directed) in 2 sets {CL. 58} are required within 28 days of the issue of certificate of completion of the whole or section of the work, as the case maybe.

36. The amount to be withheld for failing to supply "as built" drawings {CL. 58} by the Date required is Rs Lakhs.

37. The following events shall also be fundamentals breach of contract: {CL.59.2}
"The Contractor has contravened Sub- clause 7.1 and Clause 9 of GCC"

38. The percentage to apply the value of the work not completed representing {Cl 60} the Employer's additional cost for completing the Works shall be 20 percent.

SECTION - 5
TECHNICAL SPECIFICATION

Item no: 2404

Providing and laying ordinary cement concrete 1:2:4 (1cement : 2 coarse sand : 4graded stone aggregates 20 mm. nominal size) and curing complete including the cost of form work and excluding the cost reinforcement for reinforced concrete work in **C.C. COPING**

1.0 Material and Workmanship:

The relevant specifications of item no 5.4.1. shall be followed for concrete work as specified in item for C.C. 1:2:4 and relevant specifications of item no. 9.1 shall be followed for the formwork and centering work.

2.0 Mode of measurements and payments

- 2.1 The relevant specification of item no 5.4.1 shall be followed except that the item includes the cost of formwork and centering work for any cross sectional area.

Mode of Measurement: on Cu.mt basis. . Of concrete

Mode of Payment: on Cu.mt basis. . Of concrete

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Item no:2405,2406,2407,2408,2409,2410

Providing and laying controlled cement concrete 1:1.5:3 and curing etc. complete including the cost of form work but excluding the cost of reinforcement for RCC work up to **floor two level (A) For p. beam, footing, column, coping etc. Beams, lintels, chhajja, Slabs, sill, shelves**

1.0 Material and Workmanship:

The relevant specifications of item no 5.8.2 shall be followed for controlled concrete work as specified in item for M-200 and relevant specifications of item no 9.1 shall be followed for the formwork and centering work.

2.0 Mode of measurements and payments

- 2.1 The relevant specification of item no 5.8.2 shall be followed except that the item includes the cost of formwork and centering work for any cross sectional area.

Mode of Measurement: on Cu.mt basis of concrete

Mode of Payment: on Cu.mt basis of concrete

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**Executive Engineer
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Zone-II,Junagadh**

Item No 2411

Providing & fixing in position standard extrude Aluminum Two track with Two sliding shutters in which both shutter with Stainless Steel Mosquito net In window section with colour anodized in which Periphery Pipe Frame Section 92.00 x 29.5 X 1.20 mm (having wt per Rmt 1.005 Kg) Pipe Frame section should be Used for Supporting three track top, sides and Bottom section is to e used of size 92.00 x 29.50 x 1.20 mm size (having wt per Rmt 0.907 Kg) Rail Sections all around For Sliding should be Used of 92.00 X 31.50 X 1.20 mm (having Standard wt per Rmt) and top section for all Two Sliding shutters Top and Bottom rail 20.00 x 50.00 x 1.50 mm (having weight per Rmt = 0.642 Kg) handle section of size 20.00 x 50.00 x 1.50 (having weight per Rmt = 0.571 Kg) and interlock rail 20.00 x 50.00 x 1.50 mm (having weight per Rmt = 0.697 Kg) of approved shade & sliding shutters and providing heavy handle, heavy lock, bracket, stoppers.

1.0 MATERIAL

1.1 Aluminium standard section

1.1.1 Main outer frame of rectangular tube

Aluminium alloy used in the manufacture of extruded Window section shall confirm to I S designation HEA-WP of I S 733-1975 and also Designation WVG -WP of I S 1285-1975 section shall be as specified in the drawing and design

All sections shall be Free from any scratches or holes or any damages on surface. All section shall have finished lustre surface on all sides

1.1.2. Two track channel frame for window portion

Aluminium alloy used in the manufacture of extruded Window section shall confirm to I S designation HEA-WP of I S 733-1975 and also Designation WVG -WP of I S 1285-1975 section shall be as specified in the drawing and design

All channels shall be Free from any scratches or holes or any damages on surface. All section shall have finished lustre surface on all sides

1.1.3 Window shutter frame :Aluminium alloy used in the manufacture of extruded Window section shall confirm to I S designation HEA-WP of I S 733-1975 and also Designation WVG -WP of I S 1285-1975 section shall be as specified in the drawing and design

All sections shall be Free from any scratches or holes or any damages on surface. All section shall have finished lustre surface on all sides

1.3 Mosquito net

The Mosquito net shall be of approved make having stainless steel

1.6. Fixtures

1.6.1 Hinges,

Hinges shall be of approved make. shall be Free from any scratches or holes or any damages on surface. and shall have finished lustre surface on all sides

1.6.2 Handles,

handles shall be of approved make. shall be Free from any scratches or holes or any damages on surface. and shall have finished lustre surface on all sides

1.1.4 Bolts,

All bolts shall be of approved make. shall be Free from any scratches or holes or any damages on surface. and shall have finished lustre surface on all sides

1.6.5 Stoppers,

stoppers shall be of approved make. shall be Free from any scratches or holes or any damages on surface. and shall have finished lustre surface on all sides

2.0 WORKMANSHIP

The Work of aluminium window shall be done with extreme finishing. The partial board shall be fixed in the bottom panel and glass shall be fitted on top panel as directed by Engineer in charge using glazing clips and rubber gaskets as required All the fixtures and fastenings shall be fitted at right place and as directed by Engineer in charge. Floor spring shall be fitted properly so as to align the window properly and shall be given trial of opening and closing properly.

3.0 Mode of Measurement & Payment :

3.1. The unit rate of aluminium windows shall include the cost of all materials, cost of anodizing, cost of all necessary fixtures and fastenings, labour charges for fixing frames, doors and fixing the door in wall at the

place shown in drawing and as instructed by Engineer in charge, all tools and plant required for assembling and fixing in position, finishing as per direction of the Engineer-in-charge, and all other incidental expenses for preparing window frame and shutter of specified size to complete the door structure or its components as shown on the drawings and according to these specifications. They shall also include the cost of making, fixing and making walls good by plaster patch colour etc as required

6.4. The aluminium windows shall be measured for its **length and height** limiting dimensions to those specified on plan or as directed. The rate shall be for a unit of one cubic meter.

6.5. The payment will be made on square Meter basis of the finished work.

3.2. The rate shall be for a unit of one square meter.

**Dy. Executive Engineer
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Item no .2412

Providing and fixing 90 CM high MS railing with 40 mm medium grade G.I. pipe for balconies terrace parapets ramp stairs etc. with 20 X 20 mm square bars balusters @ spacing 10 cm c/c as per approved pattern incl. cutting bending welding fixing and applying three coats of approved brand of primer and two coat of paint etc. complete.

1.0. MATERIAL**1.0. STRUCTURAL STEEL****1.1. G.I. Round pipes**

The round pipes shall be of 40 mm size with medium grade of quality .

1.2 M.S. square bars

All structural steel shall confirm I S 226 – 1985. The steel shall be free from the defects mentioned in IS 226-1975 and shall have a smooth finish. The material shall be free from loose mill scale rust pits or other defects affecting the strength and durability

2.0. OIL PAINTS

2.1. Oil paint shall be of specified colour and as approved by the Engineer in charge The ready mix paints shall only be used however, if ready mixed paint of specified shade or tint is not available white ready mixed paint with approved strainer will be allowed in such a case the contractor shall ensure that the shade of the paint so allowed shall be uniform.

2.2. All paints shall meet with the following general requirements

2.3 The paint shall not show excessive setting in a freshly opened full can and shall easily be redistricted with a paddle to a smooth homogeneous shade

2.4. The paint shall show no curdling levering caking or colour separation and shall be free from lumps and skins

2.5. The paint shall not skin within 48 hours in a three quarters filled closed container

2.6. The paint shall dry to a smooth uniform finish free from roughness grit unevenness and other imperfections

2.7. Ready missed paint shall be used exactly as received from the manufacturers and other imperfections

2.8. Enamel paints shall satisfy in general requirements in specification of oil paints Enamel paint shall confirm to I S 2933-1975

3.0. WORKMAN SHIP

3.1. The railing shall be so welded that welding spots does not appear on the surface. All welding spots shall be grinded by a machine grinder to give a smooth surface

3.2. The railing shall be fabricated in true shape and angles meeting the shape of the location where it is to be fitted

3.3. When railings are supplied by the contractor test certificate of the manufacturers shall be obtained according to IS 226-1975 and other relevant Indian standards

3.4. The railing shall be fitted in position as mentioned in drawing and as directed by Engineer in charge. after railing is fitted in wall or concrete by means of hold fasts etc the wall of concrete shall be finished with necessary cement mortar work etc complete

3.5 The pipe should be fixed at both the ends. i.e. at starting and the end of the stair.

4.0. PAINTING WITH COLOUR

4.1. Material required for work of painting work shall be obtained directly from approved manufacturers or approved dealer and brought to the site in maker's drums. Kegs. etc. in sealed and unbroken condition.

4.2. All materials not in actual use shall be kept properly protected lids of containers shall be kept in closed and surface of the paint in open or partially open containers covered with a thin layer of turpentine to prevent formation of skin

4.3. The material which have become state or flat due to improper and long storage shall not be used

4.4. the paint shall be stirred thoroughly in its container before purring into small containers

4.5. While applying also the paint shall be continuously stirred in smaller container,

4.6. No left over paint shall be put back into stock tins When not in use the container shall be kept properly closed

4.7. If for any reason thins is necessary the brand of thinner recommended by the manufacture shall be used

4.8. The surface to be painted shall be thoroughly cleaned and dusted All rust dirt and grease shall be thoroughly removed before painting is started No painting on exterior or other exposed part of the work shall be carried out in wet damp or otherwise unfavorable weather and all the surfaces shall be thoroughly dry before painting work is started.

4.9. Application of paint

4.9.1. Brushing operations are to be adjusted to the spreading capacity advised by the manufacturers of particular paint The paint shall be applied evenly and smoothly by means of crossing and laying off. The crossing and laying off consists of covering the area over with paint, brushing the surface hard for the first time over and then brushing alternatively in apposite direction two or three times and then finally brushing lightly in a direction at right angles to the same in this process no brush marks shall be left after the laying off is finished The full process of crossing and laying off will constitute one coat.

4.9.2. Each coat shall be allowed to dry completely and lightly rubbed with very fine grade of sand paper and loose particles brushed off before next coat is applied Each coat shall very slightly in shade and shall be got approved from Engineer in charge before next coat is started.

4.9.3. Each coat shall be lightly rubbed down with sand paper of fine pumice stone and cleaned of dust before the next coat is applied No hair marks from the brush of clogging of paint puddles in the corners of panels, angles of moldings etc.

4.9.4. Special care shall be taken while painting over bolts nuts rivets overlaps etc Approved best quality brushes shall be used for painting work

5.0 MODE OF MEASUREMENT & PAYMENT :

5.1. The unit rate of M S Railing shall include the cost of all materials, tools and plant required for fabrication, fitting the same to specified position as per drawings, finishing, painting with three coats including priming

coat, etc, and all other incidental expenses for producing M S Railing work to complete the structure or its components as shown on the drawings and according to these specifications. They shall also include the cost of making, fixing and removing of all scaffolding and forms required for the work.

5.2. The rate of M S Railing shall include the cost of all labour, materials tools and plant scaffolding and all incidental expenses as described herein above.

5.3. The work shall be measured for its **length** limiting dimensions to those specified on plan or as directed. The rate shall be for a unit of one square meter

5.4. The payment will be made on running meter basis of the finished work.

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**Executive Engineer
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Zone-II,Junagadh**

Item no: 2413

Providing and fixing 3mm thick PVC sheets as signage and display of health signs/information of required size having retro reflective letters/design as per requirement, fixing the same through approved adhesive etc. complete, work shall be carried out as per instruction of engineer-in-charge. (Approved make PVC foamed sheets only) (45 x 15 cms)

Materials:

Approved 3mm thick PVC sheets specified manufacturer

Workmanship:

The PVC signage of 3mm thick of 45 cms x 15 cms shall be prepared. Various signage and letters shall be prepared on this sheets by using retro reflective colour as per instruction of Engineer-in-charge. The work shall be carried out in best workman like manner as directed by Engineer-in-charge.

Mode of Measurement and Payment:

The rate includes for all labour, materials, tools and equipment required to complete the work in satisfactory manner.

The rate shall be for an unit of one number.

Mode of measurement: on Each basis

Mode of Payment: no basis

**Dy. Executive Engineer
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Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item no : 2414

Providing & fixing in position standard extruded Aluminium Partition with Color anodized hollow section frame of approved shade of without shutter fabricated from alluminium standard section for outer frame size 101 mm x 44.5 mm (of app. Wt. 1.2 kg / Rmt.) and door styles and top rail of alluminium section size 47.5mm x 44.5 mm (of app. Wt. 1.05 kg/ Rmt.) Bottom rail & lockrail for door of size 114mm x 44.5mm (of app. Wt Kg./Rmt.) and providing rubber gasket and glazing chips around the glass allover including providing heavy handle, heavy lock, bracket, stoppers. 5 mm th. transparent float glass of copper/ gray tint (Structural Glass) fixed with transparent silicon gasket including all required materials labours and equipments as per detailed drwg. as directed.

Materials:

Aluminum alloy in the manufacturing of exuded section for partition confirms to IS designation HEP/WP of I-5733-1975 and also confirm is gradation WVG-WP-PF ISI 1285-1975. The section shall be as specified in the drawing and design. Aluminum section of approved weight shall be secured at site. Fabrication shall be done as per drawing or as directed.

Details specification anodized section to be used is as under:

Section Vertical	101.60 mm x 44.45 mm
Section Horizontal	101.60 mm x 44.45 mm

5mm thick plain glass shall confirm M38 page no 12 of standard specification booklet of building works.

Necessary glazing clips rubber packing shall be of approved quality.

Approved glazing patta if any required shall be used & fixed.

Section to be used shall be single or double type as per requirement 19 mm thick both side laminated Nova pan of equivalent laminated particle board shall be of approved quality and color. It shall confirm to M40/Page no 13 of specification.

Workmanship:

Partition shall be prepared as per drawing or as directed by Engineer-in-charge. Whole framework shall be done in true line and level. The section shall be fixed with necessary screws wooden peg nails required and approved.

Size of glass for glazing at top panel shall be as per size of top panel shall be fixed in such a way so as allow a clearance of 2.5mm between the edges and alluminium glazing clips surrounds. Clearance may be increase if directed. Stains from the surface of glass shall be removed and cleaned with thinner or without any extra payment.

Bottom panel shall be fixed by using 9mm thick Nova pan or equivalent board of approved colour.

The whole work shall be executed as directed and to the full satisfaction of Engineer-in-charge spacing between two section shall be as directed.

Mode of Measurement:

Visible measurement shall be taken in Sq.M. the contract rate includes of materials, labour fixture fastenings

required to complete the item.

The rate shall be for a unit of one Sq.M.

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**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item no. 2415

Providing & fixing in position partly fixed and partly openable standard extruded **Aluminium door** with color anodized hollow section frame of approved shade & pivoted double shutter fabricated from aluminium standard section for outer frame size 101 mm x 44.5 mm X 2 mm Thick (of app. Wt. 2.60 kg / Rmt) and door styles and top rail of aluminium section size 47.5mm x 44.5 mm X 2.00 mm Thick (of app. Wt. 1.25 kg/ Rmt) Bottom rail & lock rail for door of size 114mm x 44.5mm X 2 mm Thick (of app. Wt 1.75 Kg/Rmt) and providing rubber gasket and glazing chips around the glass all over including providing heavy handle, heavy lock, bracket, stoppers. Floor Spring, Aldrop (Color anodised) 5 mm th. transparent float glass of copper tint (Structural Glass) fixed with rubber gasket and 19 x 17 mm size Glazing Clip same in Bottom Portion with providing 9 mm thick decorative water proof Both side pre-laminated pressed wood based board with fixing Glazing clips 19 X 17 mm including all required materials labours and equipments as per detailed drwg. as directed.

Materials:

Aluminum alloy in the manufacturing of extruded section for partition confirms to IS designation HEP/WP of I-5733-1975 and also confirm is gradation WVG-WP-PF ISI 1285-1975. The section shall be as specified in the drawing and design. Aluminum section of approved weight shall be secured at site. Fabrication shall be done as per drawing or as directed.

Details specification anodized section to be used is as under:

Section Vertical	101 mm x 44.5 mm
Section Horizontal	47.5mm x 44.5 mm

transparent float glass of copper tint (Structural Glass) shall confirm M38 page no 12 of standard specification booklet of building works.

Necessary glazing clips rubber packing shall be of approved quality.

Approved glazing putty if any required shall be used & fixed.

Section to be used shall be single or double type as per requirement 19 mm thick both side laminated Nova pan or equivalent laminated particle board shall be of approved quality and color. It shall confirm to M40/Page no 13 of specification.

Workmanship:

Partition shall be prepared as per drawing or as directed by Engineer-in-charge. Whole framework shall be done in true line and level. The section shall be fixed with necessary screws wooden peg nails required and approved.

Size of glass for glazing at top panel shall be as per size of top panel shall be fixed in such a way so as to allow a clearance of 2.5mm between the edges and aluminium glazing clips surrounds. Clearance may be increased if directed. Stains from the surface of glass shall be removed and cleaned with thinner or without any extra payment.

Bottom panel shall be fixed by using 9mm thick Nova pan or equivalent board of approved colour.

The whole work shall be executed as directed and to the full satisfaction of Engineer-in-charge spacing between two sections shall be as directed.

Mode of Measurement:

Visible measurement shall be taken in Sq.M. the contract rate includes of materials, labour fixture fastenings

required to complete the item.

The rate shall be for a unit of one Sq.M.

**Dy. Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item No 2416

Providing and fixing aluminium colour anodized single shutters having standard extruded aluminium door with colour anodized hollow sections frame of size 101 mm x 44.5 mm (approximate wt 1.2 kg per Rmt) and door styles and top rail of aluminium section size 47.5 mm x 44.5 mm (approximate wt 1.05 kg per rmt) and bottom rail and lock rail per door of size 114 mm x 44.5 mm (approximate wt 1.3 kg per rmt) and providing rubber gasket and glazing clips around the glass all over including providing 12 mm thick both side pre laminated partial board with fixing U type 2 mm thick and 35 mm x 25 mm special shaped channel and 3 mm x 10 mm thick M S runners on edges of board for properly secured to side of board including providing heavy locks handles stoppers pivots door closers and 5 mm thick frosted glass on top including all labour and equipments etc complete.

1.0 MATERIAL

1.1 Aluminium standard section

Aluminium alloy used in the manufacture of extruded Door section shall confirm to I S designation HEA-WP of I S 733-1975 and also Designation WVG -WP of I S 1285-1975 section shall be as specified in the drawing and design

All sections shall be Free from any scratches or holes or any damages on surface. All section shall have finished lustre surface on all sides

1.1.1 size of the style shall be 44.50 x 47.50 mm size having minimum Wt 1.55 Kg per meter

1.1.2. The size of top member shall be 44.50 mm x 47.50 mm having minimum wt 1.00 Kg per meter

1.1.3. The size of the bottom member shall be 114 mm x 44 .50 mm having minimum weight 1.77 kg per meter

1.2 Partial board.

The partial board shall be pre-laminated surface on both sides. Partial board shall confirm 9 mm thickness and of approved make. The both side pre-laminated board shall be provided at bottom shall be Free from any scratches or holes or any damages on surface. and shall have finished lustre surface on both sides

1.3 Glass

The glass shall be of approved make having thickness of 5 mm The glass shall be clear and free form scratches and cracks The glass shall be provided on the top

1.4. Glazing clips

Glazing clips shall be of size 19.00 x 17.00 mm. shall be Free from any scratches or holes or any damages on surface. All section shall have finished lustre surface on all sides

1.5. Rubber Gasket

Rubber gasket shall be of approved make. shall be Free from any scratches or holes or any damages on surface. and shall have finished lustre surface on all sides

1.6. Fixtures

1.6.1 Hinges,

Hinges shall be of approved make. shall be Free from any scratches or holes or any damages on surface. and shall have finished lustre surface on all sides

1.6.2 Handles,

handles shall be of approved make. shall be Free from any scratches or holes or any damages on surface. and shall have finished lustre surface on all sides

1.6.3 Bolts,

All bolts shall be of approved make. shall be Free from any scratches or holes or any damages on surface. and shall have finished lustre surface on all sides

1.6.4 Door closer screws,

Door closer shall be of approved make. shall be Free from any scratches or holes or any damages on surface. and shall have finished lustre surface on all sides

1.6.5 floor spring

Pivot floor spring shall be of approved make. shall be Free from any scratches or holes or any damages on surface. and shall have finished lustre surface on all sides

The spring shall be approved by Engineer in charge and shall be fixed in floor and at top of frame as directed by Engineer in charge The spring shall be fitted to give smooth operation of door as directed by Engineer in charge

1.6.6 Mortise lock etc.

Mortise lock shall be of approved make. shall be Free from any scratches or holes or any damages on surface. and shall have finished lustre surface on all sides

1.7 WORKMANSHIP

The Work of aluminium door shall be done with extreme finishing. The partial board shall be fixed in the bottom panel and glass shall be fitted on top panel as directed by Engineer in charge using glazing clips and rubber gaskets as required All the fixtures and fastenings shall be fitted at right place and as directed by Engineer in charge. Floor spring shall be fitted properly so as to align the door properly and shall be given trial of opening and closing properly.

1.8 Mode of Measurement & Payment :

8.1. The unit rate of aluminium door shall include the cost of all materials, cost of anodizing, cost of all necessary fixtures and fastenings, labour charges for fixing frames, doors and fixing the door in wall at the place shown in drawing and as instructed by Engineer in charge, all tools and plant required for assembling and fixing in position, finishing as per direction of the Engineer-in-charge, and all other incidental expenses for preparing door frame and shutter of specified size to complete the door structure or its components as shown on the drawings and according to these specifications. They shall also include the cost of making, fixing and making walls good by plaster patch colour etc as required

8.2. The door shall be measured for its **width** and **height**, limiting dimensions to those specified on plan or as directed.

8.3. The rate shall be for a unit of one square meter.

**Dy. Executive Engineer
Project Implementation Unit
Zone-II, Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II, Junagadh**

Item no: 2417

Providing, fixing and construction of sandwich type platform with 25mm thick double polished Kota of uniform size and colour for top & supports at 50 cm interval in Kitchen/Pantry/Counter/Laboratory etc with fascia patty 100mm wide including necessary cement mortar 1:2. Kota shall be fixed over 25 mm thick rough Kota bottom, cement joints and pointing as specified with necessary making of edges, polishing curing daily mopping with water and kerosene as directed for at least 15 days or up to the satisfaction of engineer-in-charge.

Polished Kota stone 25mm thick shall be of approved size in length and width. Pieces shall not be allowed in width. Pieces in length shall be not more than 1.0mt length of as directed by Engineer-in-charge.

Specification in general for Kota stone shall be as per item no. M-49, page no 16 of Standard Specification booklet for building works.

Necessary groove shall be made in wall polish kota stone fixing bottom will be first laid in line & level on vertical partition made of 25mm thick kota sandwich type in cement mortar 1:2 (1 cement : 2 sand) shall be laid on Polished Kota Stone and Polished Kota Stone facing top shall be laid on top in line and level.

100mm high fascia of Kota stone shall be fixed with cement and solution Araldite etc.

Necessary cut for sink shall be left while laying polished Kota stone.

Necessary polishing shall be done polished Kota stone at top and as directed by Engineer-in-charge. Edges & corners of stone shall be made round by cutting as directed. Groove made in wall shall be made good and finished with white cement mixed with pigment to match with colour of stone.

Work includes cost of materials and labour with polishing complete.

Measurement shall be taken for visible top polished kota stone only in length and width.

Rate shall be paid for a unit of 1 sqmt for top surface.

Mode of Measurement: on Smt basis. Of finished work.

Mode of Payment: on Smt basis. . Of finished work

**Dy. Executive Engineer
Project Implementation Unit
Zone-II, Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II, Junagadh**

Item no: 2418

Providing and laying machine cut free edges machine polished Kota stone for shelves in cupboard and walls in single piece 25 mm including cutting grooves in walls and fixing the stone with cement mortar 1:4 and finishing the same with neat cement slurry in true line and level and front edge Full round polishing as directed etc. complete. for Shelves

Polished Kota Stone 25mm thick shall be approved quality size and specification in general for Kota stone shall be as per Item no. M -49/ Page 16 of standards specification booklet for building works.

Polished Kota stones are approved size shall be machine cut at front side with necessary groove shall be made in wall and polish kota stone shall be laid in line and level. Polish Kota stone shelves shall be fixed in cement mortar 1:3 (1 cement : 3 coarse sand) size of the polished kota stone shall be obtained as per the site measurement.

Necessary polishing shall be done to polish kota stone top and sides and as directed by Engineer-in-charge. Outer edges of stone shall be made round by polishing as directed groove made in wall shall made good fixed with white cement mixed with pigments to match with colour and stone.

Work includes cost of materials and labour with polishing complete.

Measurement shall be taken for visible dimensions in length and width and shall be paid for a unit of 1 sqmt.

Mode of Measurement: on Smt basis of finished work

Mode of Payment: on Smt basis of finished work

**Dy. Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item no: 2419

Providing and fixing sand which type platform including supplying and fixing black granite stone 18 mm thick mirror polished stones in top and side position and vertical strip at front over 25 mm thick polished kotah stone platform fixing in top and sides and intermediates supports sandwiched fixing with cement mortar and adhesive and finishing including To make hall for fixing Kitchen/Laboratory sink , (ceramic sink) 600 mm x 450 mm x 150 mm size(as directed by engineer in charge) at required position etc complete

Polished Kota stone 25mm thick shall be of approved size in length and width. Pieces shall not be allowed in width. Pieces in length shall be not more than 1.0mt length of as directed by Engineer-in-charge.

Specification in general for Kota stone shall be as per item no. M-49, page no 16 of Standard Specification booklet for building works.

Necessary groove shall be made in wall polish kota stone fixing bottom will be first laid in line & level on vertical partition made of 25mm thick kota sandwich type in cement mortar 1:2(1 cement : 2 sand) shall be laid on Polished Kota Stone and Polished Kota Stone facing top shall be laid on top in line and level.

100mm high fascia of Kota stone shall be fixed with cement and solution Araldite etc.

Necessary cut for sink shall be left while laying polished Kota stone.

Necessary polishing shall be done polished Kota stone at top and as directed by Engineer-in-charge. Edges & corners of stone shall be made round by cutting as directed. Groove made in wall shall be made good and finished with white cement mixed with pigment to match with color of stone.

Work includes cost of materials and labour with polishing complete.

Measurement shall be taken for visible top polished kota stone only in length and width.

Rate shall be paid for a unit of 1 sqmt for top surface.

Mode of Measurement: on Smt basis of finished work.

Mode of Payment: on Smt basis of finished work

**Dy. Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item no: 2420

Providing and fixing brass chromium plated surgical handle cock of approved size 15 mm dia etc complete.

Materials and Workmanship:

The work shall be carried out as per Item no 23.92(A), page 170 except that CP surgical handle cock of approved make shall be used in place of bib taps

Mode of Measurement and Payment:

As per item no 23.92(A), page no 150

Mode of measurement: on No basis

Mode of Payment: on No basis

**Dy. Executive Engineer
Project Implementation Unit
Zone-II, Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II, Junagadh**

Item no: 2421

Construction of Concrete Road using Tremix system with 12.5 CM thick M-200 concrete mixing complast P 211 water reduction concrete admixture @ 100 M.L. per bag of cement with mixing of Recon - 3S fibers [Reliance or equivalent product] at 125 gms per bag of cement with providing and fixing & removing of "C" Channel having size 75 mm x 75 mm as per required level slope and thickness of concrete road floor levelling of placed concrete with surface vibrator finishing the surface with power floater and trowel light brooming on the surface as directed with providing expansion joint size 20 x 125 MM & filling the expansion joint having size 20 mm x 20 mm by using Colpar 200 as per manufacturer specification with making of construction joint by cutting of joint of size 3 mm x 20 mm by using of concrete cutter machine incl.curing etc. complete.

1. MATERIALS :

Water shall conform to M-1, cement shall conform to M-3, Sand shall conform to M-6, Grit shall conform to M-8 and coarse aggregate shall conform to M-12, CONPLAST-P.211 water reducing concrete admixture & Recron-35 fibbers shall be of approved quality. Colpor-200 expansion joints materials shall be of approved quality.

2. WORKMANSHIP

- [i] 11.5cm thicker M-200 grade concrete is being placed over the prepared sub-base Conplast P.211 (Water reducing concrete admixture) @ 100 Mt. per bag of cement and Racron-3s fibers Polyester fibre of Reliance or equivalent make at 125 Gms per bag of cement shall be use in M-200 concrete mix. The relevant specification of Item No.5.8.2(General Specification for Building) shall be followed for M-200 mix concrete and the same is attached herewith relevant specification No.9.1(A) shall be followed for from work required for concreting.
- [ii] Levelling of the surface is done using TREMIX surface vibrator. The vibrator runs over channels, placed as per required level and slope and simultaneously level surface of the concrete.
- [iii] Vacuum dewatering follows the leveling of concrete. The purpose of vacuum processing is to provide quicker setting and high early strength by removing surplus water from the concrete. The process is follows as per instruction of site Engineer in charge & attached guide line.
- [iv] Immediately after dewatering, the surface is floated with a skim power floater as per instruction of Engineer-in-charge. The surface shall be prepared as per requirements and instructions. For smoother surface requirement, the surface is trowelled with same machine mounted with trowelling blades. If required floor hardener " Nitoflor Hardtop" a Fostoc product shall be used at the rate of 3 to 5 Kg/Sqm to get hard wearing surface.
- [v] Construction joints upto 1/4 of the slab depth are cut afterwards. They give clear and straighter theoretical cracking line in the case of unexpected stresses. m Groove cutting is done within 48 hours from casting at the floor.
- [vi] After surface vibrator and finishing the surface with power floater and trowel light brooming on the surface, expansion joint size 20 x 115 MM shall be provided with filling the expansion joints having size 20 x 20 MM by using COLPOR-200 as per manufacturers specification and directed by Engineer-in-charge. The expansion joints filled with Nitoseal-200.
- [vii] Making a construction joints by cutting of joints of size 3 MM x 20 MM by using of concrete cutter machine construction joint are filled with "MITOSEAL-280" an esoteric cold applied joint sealant, which ensures performance of expected functions at the joints.
- [viii] Concrete should be cured in normal way (Water pending) or the surface is covered with a plastic sheet or gunny bags. In any method, the surface should be always kept wet with water. Curing must be done for atleast 14 days or as per directed by Engineer-in-charge.
- [ix] The machineries used for the above process shall be of standard technical specification attached separately herewith. (i.e. surface vibrator, vacuum pump, suction mal top cover, filter pad, skim floater etc.)
- [x] The Workmanship and process for vacuumed dewatering, water cement ratio concrete placing, surface vibration, vacuum processing floating. Trowel ling and curing shall be carried out as per attached literatures and as per instruction of Engineer-in-charge.

STANDARD TECHNICAL SPECIFICATION

- A. **SURFACE VIBRATOR**
- | | | |
|-----------------------|---|---|
| Beam Lengths (meters) | : | 4.2 meters |
| Weights (Kgs) | : | 41 Kgs |
| Beam Spacing (mm) | : | 300 |
| Beam Height (mm) | : | 100 |
| Vibrator Unit | : | Electrically operated on 3 phase V,
415V,50 Hz.A.C. Supply |
| Power input (Watts) | : | 450 |
| Vibrator (Vib/min) | : | 2860 |
| Rated current (Amp.) | : | 1.5 |
| Centrifugal Force (N) | : | 1350-4600 |
| Weight (Kg) | : | 19 |
- B. **VACUUM PUMP**
- | | | |
|----------------------------------|---|---|
| Drive | : | Electrically operated on 3 Phase V,
415V,50Hz. A.C. Supply |
| Power (Kw) | : | 4 |
| Current (Amp) | : | 7.5 |
| Pump Capacity (Lit/Min) | : | 1850 |
| Max.Vacuum(mm Hg) | : | 680(90%) |
| Overall Length (mm) | : | 1300 |
| Overall Width (With empty Tank): | : | 125 |
- C. **SUCTION MAT TOP COVER**
- | | | |
|--------------|---|----|
| Length (Mt.) | : | 6 |
| Width (Mt.) | : | 4 |
| Weight (Kg) | : | 31 |
- D. **FILTER PAD**
- | | | |
|-----------------------|---|-----|
| Length / Pieces (Mt.) | : | 3.8 |
| Width (Mt.) | : | 1.2 |
| Weight (Kg) | : | 4 |
- E. **SKIM FLOATER**
- | | | |
|-------------------------------|---|----------------------------------|
| Supply | : | 3 Phase V, 415V,50 Hz.A.C.Supply |
| Power (Kw) | : | 2.1/1.8 |
| Current (Amp.) | : | 6/4 |
| Motor Speed (rpm) | : | 3000/1500 |
| Final Speed (rpm) | : | 115/57 |
| Working Diameter (mm) | : | 1000 |
| Max.Reach (Meter) | : | 3 |
| Diameter of Floating Disc(mm) | : | 985 |
| Weight of Floating Disc(Kg) | : | 16 |

MODE OF MEASUREMENT :

- [i] The rate shall be include all materials, formworks, machineries and labour charges.
- [ii] The rate shall be for a unit of One Sq.m.

1.0CONCRETE PLACING :

Concrete can be placed & distributed by transit mixer, or else sufficient man power is required. It is important to distribute the concrete evenly & as near the final level as possible.

2.0POKER VIBRATION :

As a first step, concrete is vibrated with an immersion vibrator in order to remove entrapped air & voids & make the concrete homogeneous. Please ensure that the areas close to channels & stop ends are carefully vibrated. Do not distributed the concrete with the poker vibrator as it would create a risk of over vibration & segregation. We recommended poker vibration

along with the surface vibration.

3.0 SURFACE VIBRATION :

Surface vibration should always start as soon as there is enough concrete in front of surface vibrator. Two passes with the surface vibrator are required. During, the first pass, concrete must be distributed evenly in front of surface vibrator. There should always be a roll of concrete of about 10-20 mm in front of leading beam along the entire length of the vibrator. When the concrete has been placed and vibrated to a length of about 5 maximum 1 mtr./min and without interruption to avoid linings on the surface. Keep the surface of the channel, clean from concrete.

4.0 VACUUM PROCESSING :

Place the filter pads as soon as the sufficient concrete surface is vibrated. Please note that the vacuum dewatering process must start within 30 minutes from the time of starting concrete pouring. Filter pads are placed in such a way that there is at least 100mm fresh concrete visible around the filter pads on all four sides. Filter should be overlapped with each other by at least 250mm. (all filter pads are marked with block line to ensure proper overlapping).

The recesses or other obstacles within the area to be vacuum processed must be covered & sealed using polyethylene sheet before the filter pads are placed in the obstacles are flush with the surface level or above, filter pad must be folded.

The rolled up top cover is placed centrally on the filter pads, It is rolled out in such a way that it covers all the filter pads & exposed concrete on the sides of the filter pads. Please note that this exposed concrete will ensure perfect sealing of the top cover from the top.

Connect the central pipe of the top cover to the suction hose, which in turn is connected to the vacuum pump. When the pump is started, vacuum will be created between the top cover & filter pads. Excess water from the water will be taken in to the vacuum pump tank & discharged. Normal suction cycle is 1-1.5 min. per 10 mm of concrete thickness. Guidelines for selecting dewatering time @ normal condition are shown in the following table.

Thickness		
mm	Inch	Dewatering Time (min.)
50	2	7
100	4	15
125	6	20
150	8	30
200	10	30
250	12	40

Please note that dewatering time largely depends upon ambient conditions viz. temperature, humidity, etc. During the course of dewatering, the concrete surface gradually hardens & can be felt from the top of the top cover. The extent of hardness achieved by the concrete decides when to stop dewatering process.

When the vacuum processing is over, the top cover is rolled up to 100mm so that the sides of the filter pads are visible. This will remove the water that may have remained on the concrete surface, filter pads & in the suction hose. After about 30 seconds, the top cover is rolled completely & vacuum pump is switched off. Simultaneously, the suction hose & the top cover pipe are disconnected. Do not run the pump while the ball valve is open as likely that small aggregate are sucked in to the pump due to vacuum. The entire process is repeated on the next concrete panel.

After first patch in any given panel is dewatered; care should be taken while placing filter pad on the concrete surface next to the dewatered; care should be taken while placing filter pad on the concrete surface next to the dewatered concrete. First filter pad should start from the edges of last filter pad of the previously dewatered concrete. The remaining filter pads then can be placed as explained above.

While repeating dewatering process subsequently, in order that top cover should get proper scaling against the side already vacuum processed, it should be rolled out at least 300mm over the vacuum dewatered area. Before spreading the top cover on the dewatered area, it is essential to give one pass of skim floater (with disc,) along the edges of the dewatered concrete. The concrete surface will become wet as some will come on the top surface. This will provide the necessary scaling.

Subsequently roll out top cover completely. Check that there are no wrinkles on the top cover.

5.0 FLOATING :

The first finishing operation is floating where floating disc is used. Only those areas that cannot be reached by skim floater are floated by hand, Care should be taken while floating near channels & from edges. The skim floater is run over the channel up to the disc. Center in order to avoid unevenness at the joints. All four sides of dewatered panel must be floated first & the remaining central area is to be floated later. Any corrections, if required, are to be made at the sludge with the concrete collected at the time of raking only. Never use any cement paste, mixture of cement & sand or fresh concrete for patch work. Such material will peel off & leave block patches after the concrete floor is brought to use.

6.0 TROWEL LING :

Trowel ling is carried out with the same machine running on trowel ling blades, normally, two pass of trowel ling blades are required for the smooth surface finish. However, the number of passes can be decided depending upon the surface finish required. The first trowel ling operation can start after the about 30 minutes are the final floating operation & surface is sufficiently dry. This pass is to be made using low speed & minimum blade angle. Please also use the lower space when trowel ling near the channels, from edges obstacles, etc. Blade angle & the speed can be increased for the subsequent passes to achieve smoother surface finish.

7.0 CURING :

Concrete has to be protected from too rapid drying which may result in cracking. Curing can be done by ponding, covering with plastic sheet or gunny bags. In any method, the surface should be always kept wet with water. Curing can also be done by application of curing compound. Curing must be done for at least 7 days.

**Dy. Executive Engineer
Project Implementation Unit
Zone-II, Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II, Junagadh**

Item no :2422

Providing and fixing hydraulic door closer of approved size and made such as EVERITE / HYPER / EGL/GODREG or equivalent as directed all lift, level and leads.

Materials:

Hydraulic door closer shall be of GODREJ or equivalent brand.

Workmanship:

As per item no 12.4 page no 72

Mode of measurement and payment:

As per item no 12.4 page no 72

Measurement will be: on Each. basis

Payment will be made: on Each. basis

**Dy. Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item no 2423

Providing and fixing 25 mm thick good quality flush door shutter with 01 mm laminated sheet of Royal Touch, Durian ,Green lam or equivalent both side including 12 cm x7 cm Indian Teak wood frame and necessary aluminium fixtures and fastening as per satisfaction of Engineer in charge and applying primer putty and two coat of oil paint etc. complete

Materials

Plywood for shutter shall confirm to M-30 except that it should be water and termite proof. Indian teak wood shall conform to M-21 Formica should be 1.0 mm thick of approved make, quality, and colour, get approval before purchase, from engineer in charge. Teakwood decorative batten Patti & teakwood fixture fastening shall be iron oxidized or equivalent.

Fixture fastening should be as specified in the Technical specification booklet as specified in tabular form and handle 10 cm, locks, magnetic lock, stopper, hinges.

Workmanship

The work shall be carried out as per pattern and design shown in a drawing with teakwood frame of 12 cm X 7 cm finishing colour , varnishing, polishing etc. complete.

Mode of Measurement and Payment:

Measurement shall be done on a sq mt basis. of finished work

Payment shall be done for unit of one sq mt of finished work.

**Dy. Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item no 2424

Providing and fixing 19mm thick water proof plywood shutters with both side 1 mm thick Formica for kitchen / cupboard cabinet including using approved Formica on shutter and teakwood decorative batten Patti in front portion with necessary fixtures and fastening including polishing work etc. complete and direction of engineer in charge.

- (A) For Kitchen Cabinet
- (B) For Cupboard Cabinet

Materials

Plywood for shutter shall confirm to M-37 except that it should be water and termite proof. Formica should be 1.0 mm thick of approved make, quality, and color, get approval before purchase, from engineer in charge. Teakwood decorative batten Patti & teakwood fixture fastening shall be iron oxidized or equivalent.

Fixture fastening should be as specified in the Technical specification booklet as specified in tabular form and handle 10cm, locks, magnetic lock, stopper, hinges.

Workmanship

The work shall be carried out as per pattern and design shown in a drawing with teakwood frame of 5cm X 3cm finishing colour, varnishing, polishing etc. complete.

Mode of Measurement and Payment:

Measurement shall be done on a sqmt basis. of finished work

Payment shall be done for unit of one sqmt of finished work.

**Dy. Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item no 2425

Providing and fixing 25mm thick water proof plywood shutters with both side 1 mm thick Formica for kitchen / cupboard cabinet including using approved Formica on shutter and teakwood decorative batten Patti in front portion with necessary fixtures and fastening including polishing work etc. complete and direction of engineer in charge.

For Cupboard Cabinet

Materials

Plywood for shutter shall confirm to M-37 except that it should be water and termite proof. Formica should be 1.0 mm thick of approved make, quality, and color, get approval before purchase, from engineer in charge. Teakwood decorative batten Patti & teakwood fixture fastening shall be iron oxidized or equivalent.

Fixture fastening should be as specified in the Technical specification booklet as specified in tabular form and handle 10cm, locks, magnetic lock, stopper, hinges.

Workmanship

The work shall be carried out as per pattern and design shown in a drawing with teakwood frame of 5cm X 3cm finishing colour , varnishing, polishing etc. complete.

**Dy. Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item no. 2426

Providing and fixing Godrej Type powder coating Steel cupboards in wall with steel frames size 38mm X 38mm and shutters using 18 gauge M.S. steel sheet including necessary fixtures , fastening like locks handles, hinges with approved shade of sparay painting etc complete as directed.

1.1. steel cupboards

Readymade steel cupboards of specified size and of approved brand shall be supplied as directed by Engineer in charge

Steel cupboards shall be painted with spreycolour of approved shade The steel cupboards shall be made of 18 gauge steel sheets

steel cupboards shall be having two shutter and specified storage space inside it made from 18 gauge steel sheets

Cupboards shall be having standard godrej type locking arrangement

3.0 MODE OF MEASUREMENT & PAYMENT :

3.1. The unit rate steel cupboards shall include the cost of all materials, tools and plant required for lifting to required height with all lead and lift, placing & fixing in position, all required specials and jointing adhesive compound, finishing as per direction of the Engineer-in-charge, and all other incidental expenses for producing steel cupboards work of specified size to complete the structure or its components as shown on the drawings and according to these specifications. They shall also include the cost of making, fixing and removing of all scaffolding and forms required for the work.

3.2. The steel cupboards work shall be measured for its SqMt limiting to specified capacity to those specified on plan or as directed. The rate shall be for a unit of SqMt.

3.3. The payment will be made on SqMt basis of the finished work.

**Dy. Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item No 2427

Providing & fixing in position standard extrude Aluminum Three track with Three sliding shutters in which Two Shutters with Glass and one shutter with Stainless Steel Mosquito net In Opening Position always one of Mosquito net shutter should be in Close Position all window section with colour anodized in which Periphery Pipe Frame Section 92.00 x 29.5 X 1.20 mm (having wt per Rmt 1.005 Kg) Pipe Frame section should be Used for Supporting three track top, sides and Bottom section is to be used of size 92.00 x 29.50 x 1.20 mm size (having wt per Rmt 0.907 Kg) Rail Sections all around For Sliding should be Used of 92.00 X 31.50 X 1.20 mm (having Standard wt per Rmt) and top section for all Three Sliding shutters Top and Bottom rail 20.00 x 50.00 x 1.50 mm (having weight per Rmt = 0.642 Kg) handle section of size 20.00 x 50.00 x 1.50 (having weight per Rmt = 0.571 Kg) and interlock rail 20.00 x 50.00 x 1.50 mm (having weight per Rmt = 0.697 Kg) of approved shade & sliding shutters and providing rubber gasket and Glazing Clips if necessary around the glass all over including providing heavy handle, heavy lock, bracket, stoppers.

1.0 MATERIAL

1.1 Aluminium standard section

1.1.1 Main outer frame of rectangular tube

Aluminium alloy used in the manufacture of extruded Window section shall confirm to I S designation HEA-WP of I S 733-1975 and also Designation WVG -WP of I S 1285-1975 section shall be as specified in the drawing and design

All sections shall be Free from any scratches or holes or any damages on surface. All section shall have finished lustre surface on all sides

1.1.2. Two track channel frame for window portion

Aluminium alloy used in the manufacture of extruded Window section shall confirm to I S designation HEA-WP of I S 733-1975 and also Designation WVG -WP of I S 1285-1975 section shall be as specified in the drawing and design

All channels shall be Free from any scratches or holes or any damages on surface. All section shall have finished lustre surface on all sides

1.1.3 Window shutter frame :Aluminium alloy used in the manufacture of extruded Window section shall confirm to I S designation HEA-WP of I S 733-1975 and also Designation WVG -WP of I S 1285-1975 section shall be as specified in the drawing and design

All sections shall be Free from any scratches or holes or any damages on surface. All section shall have finished lustre surface on all sides

1.1.4 PVC two track rubber top and bottom sliding channel

Top and bottom channel of rubber shall be of approved make and quality and shall be Free from any scratches or holes or any damages on surface.

All channels shall have finished lustre surface on all sides

1.3 Glass

The glass shall be of approved make having thickness of 5 mm The glass shall be clear and free from scratches and cracks The glass shall be provided on the top

1.5. Rubber Gasket

Rubber gasket shall be of approved make, shall be Free from any scratches or holes or any damages on surface. and shall have finished lustre surface on all sides

1.6. Fixtures

1.6.1 Hinges,

Hinges shall be of approved make. shall be Free from any scratches or holes or any damages on surface. and shall have finished lustre surface on all sides

1.6.2 Handles,

handles shall be of approved make. shall be Free from any scratches or holes or any damages on surface. and shall have finished lustre surface on all sides

1.1.4 Bolts,

All bolts shall be of approved make. shall be Free from any scratches or holes or any damages on surface. and shall have finished lustre surface on all sides

1.6.5 Stoppers,

stoppers shall be of approved make. shall be Free from any scratches or holes or any damages on surface. and

shall have finished lustre surface on all sides

2.0 WORKMANSHIP

The Work of aluminium window shall be done with extreme finishing. The partial board shall be fixed in the bottom panel and glass shall be fitted on top panel as directed by Engineer in charge using glazing clips and rubber gaskets as required. All the fixtures and fastenings shall be fitted at right place and as directed by Engineer in charge. Floor spring shall be fitted properly so as to align the window properly and shall be given trial of opening and closing properly.

3.0 Mode of Measurement & Payment :

3.1. The unit rate of aluminium windows shall include the cost of all materials, cost of anodizing, cost of all necessary fixtures and fastenings, labour charges for fixing frames, doors and fixing the door in wall at the place shown in drawing and as instructed by Engineer in charge, all tools and plant required for assembling and fixing in position, finishing as per direction of the Engineer-in-charge, and all other incidental expenses for preparing window frame and shutter of specified size to complete the door structure or its components as shown on the drawings and according to these specifications. They shall also include the cost of making, fixing and making walls good by plaster patch colour etc as required

6.4. The aluminium windows shall be measured for its **length and height** limiting dimensions to those specified on plan or as directed. The rate shall be for a unit of one cubic meter.

6.5. The payment will be made on square Meter basis of the finished work.

3.2. The rate shall be for a unit of one square meter.

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Item no. 2428

Providing & fixing mosquito net to existing windows with frame of salwood and section of finished size 0.05 x 0.035 and one horizontal member of the same size and filled with mosquito net of 18 gauge thickness and painting the same with lappi, one coat of primer and two coats of oil paint etc complete

The work in general shall be carried out as per following specification as describe in item or as per directive of the Engineer – in – charge are to be for this item or as per the detailed drawings supplied by the Architect to the Govt.

The shall s.s. mosquito net of 18 gauge thickness be uniform and smooth and as per std. and approved by the Engineer – in – Charge.

The Frame of windows shall be as per the requirements of site conditions and detailed architectural drawings.

1.0 S.S. Mosquitonet

S.S. mosquito net of 18 gauge thickness and fixed with beading of necessary hardware like fevicol, screws, handles etc. and painting the same with lappi, one coat of primer and two coats of oil paint etc complete

2.0 WORKMANSHIP

The frame of windows shall be wooden battens beading pattis. Surroundig the frame fixing S.S. mosquito net of 18 gauge thickness and fixed with beading necessary hardware like fevicol, screws, handles etc. and painting the same with lappi, one coat of primer and two coats of oil paint etc complete

3.0 MODE OF MEASUREMENT AND PAYMETS.

1.0 The rate shall include the cost of all materials Mosquito net wooden battens beading pattis and wellcrow surrounding the window and labour and scaffolding etc. involved in the operation said above. 2.0 The windows shall be measured in Sqmt correct to a centimeter of outer edge of frames.

2.0 The rate shall be for a unit of One Sqmt.

**Dy. Executive Engineer
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Zone-II,Junagadh**

Item No 2429

Providing and fixing precast R.C.C cover including angle frame of 40mmx 40mmx3mm section and C.C 1:1.5:3 precast R.C.C cover for I.C and M.H chamber etc. including 8mm HYSD steel at 15mm c/c both way and oil painting of angle frame and finishing of concrete with C:M 1:3 etc. complete. finished dimension of concrete cover shall be 0.60mx0.60mx0.07m size. Rate are inclusive of cost of angle frame, reinforcement concrete, finishing work and two pieces of M.S flat 25mm x3mm size as a handle.

- 1.0 Materials :
- Water shall confirm to M-1 cement shall confirm to M-3, sand shall confirm to M-6 mortar shall confirm to M-11, mild steel shall confirm to M-18, point shall confirm to M-30, Aggregate shall conform to M-12, mild steel shall conform to M-20 and structural steel shall conform to M-20A.
- 2.0 Workmanship :
- General :
- 2.1 I.C./Manhole frame should be made of ISA 40 x 40 x 5 mm section which is fixed to manhole slab as directed by site in charge.
- 2.2 Precast R.C.C. cover casting in C.C.(1:1.5:3) with using 8mm steel reinforcements both ways 15cm C/c distance
- 2.3 R.C.C. cover shall be finished in CM 1:3, frame painted with one coat of primer and two coats of oil paint. Each coat of paint shall be allowed to dry before laying of next coat.
- 3.0 Mode of measurement & payment :
- The rate shall be paid per number basis. This includes providing and fixing steel frame and a precast cover.

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Zone-II,Junagadh**

Item No 2430

Providing and laying machine cut free edges machine double polished Granite stone for shelves/sill/jam in walls in single piece 18 mm thick including cutting grooves in walls and fixing the stone with cement mortar 1:4 and finishing the same with neat cement slurry in true line and level as directed. etc. complete. (All Open edges should be full round polished)

Double Polished granite stone 18mm thick shall be approved quality size and specification in general for granite stone shall be as per Item no. M -52/ Page 17 of standards specification booklet for building works.

Polished granite stones of approved size shall be machine cut at front side with necessary groove shall be made in wall and granite stone shall be laid in line and level. granite stone shelves shall be fixed in cement mortar 1:3 (1 cement : 3 coarse sand) size of the polished granite stone shall be obtained as per the site measurement.

Necessary polishing shall be done to polish granite stone top and sides and as directed by Engineer-in-charge. Outer edges of stone shall be made round by polishing as directed groove made in wall shall made good fixed with white cement mixed with pigments to match with colour and stone.

Work includes cost of materials and labour with polishing etc.complete.

Measurement shall be taken for visible dimensions in length and width and shall be paid for a unit of 1 sqmt.

Mode of Measurement: on Smt basis of finished work

Mode of Payment: on Smt basis of finished work

**Dy. Executive Engineer
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Item No 2431

Providing and fixing PVC bib tap of 15mm dia.

Materials and Workmanship:

The work shall be carried out as per Item no 23.92(A), page 170 except that PVC bib tap of approved make shall be used in place of bib taps

Mode of Measurement and Payment:

As per item no 23.92(A), page no 150

Mode of measurement: on No basis

Mode of Payment: on No basis

**Dy. Executive Engineer
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Item No 2432

Supplying and filling in foundation and plinth with RUBBLE including filling voids with sand and watering etc. complete.

1. MATERIALS :

Water shall conform to M-1, Sand shall conform to M-6, and Rubble shall conform to M-16

2 WORKMANSHIP

- [i] Approved quality rubble shall be bought on site and placed in foundation and plinth so as less voids remains in the pit and voids remains then also shall be filled up by approved quality sand and whole mass shall be watered and compacted thoroughly .

Mode of Measurement: on Cu mt basis. Of finished work.

Mode of Payment: on Cu mt basis. . Of finished work

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Item No 2433

Providing and fixing fire extinguishing grade FRP fiber glass reinforced sheet thickness of 3mmav. On roof with gel coat of required color and design and sheet to be water proof weather proof and mild acid / alkali resistance including fixing with clamps bolts nuts etc. complete

Materials:

All material such as FRP sheet of 3 mm thickness shall be of ISI and fire extinguishing grade. It should be water proof, weather proof and acid/alkali resistance , and should be procured from reputed manufacturers..

WORKMANSHIP

fire extinguishing grade FRP fiber glass reinforced sheet of 3 mm thick shall be fixed on the roof with gel coat of required color and design as approved by Engineer in charge. It shall be fixed with the help of good quality clamps , bolts and nuts.

Mode of Measurement: on Smt basis of finished work.

Mode of Payment: on Smt basis of finished work

**Dy. Executive Engineer
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Item No 2434

Providing and laying integrated cement based proofing treatment of required thickness over the roof including 10mm thick waterproofing cement plaster in cement plaster in cement mortar 1:3 and china mosaic fitting and finally finishing the surface with white cement slurry and slopping out terrace slabs with following specification laid to required slope not flatter than 1:80 (the thickness of water proofing treatment near rainwater outlet or the lowest point of the finished slope shall not be less than 45mm, including treating the vertical surface of the parapet wall up to 20cms . height above finished level of terracing including finishing the top with joint less water proofing plaster , curing , testing etc. complete. Rate is including ten years performance of guarantee bond to be given on stamp paper. (No extra shall be paid for increase in thickness for proper slope).

(A) Applying and grouting a slurry coat of neat cement using 2.75 kg/sqm. of cement admixed with properly water proofing compound conforming to IS -2645 and 10 mm thick water proofing cement plaster in Cement mortar 1:3 over the R.C.C.slab incl. cleaning the surface before treatment

(B) Laying cement concrete using broken brick bats 25mm to 40mm size with 50% of cement mortar 1:4 (1 cement :4 coarse sand) over 10mm thick water proofing cement plaster in cement mortar 1:3 (1 cement ,3 coarse sand) admixed with proprietary water proofing compound conforming to IS 2645 to required slope and treating similarly the adjoining walls up to 200mm height incl. rounding of junction of walls. C) After Two Days of proper curing applying a second floor of cement slurry

(D) Finishing the surface with china mosaic pieces laid on 10mm thick joint less cement plaster of mix 1:3(1 cement :3 coarse sand)admixed with proprietary water proofing compound conforming to IS :2645 and finally finishing the surface with trowel with neat cement slurry

(E) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing for final taste

All above operation to be done in order and as directed and specified by the Engineer in Charge.

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Item No 2435

Cleaning of manhole and pipe line between two manhole with flushing, clining, dewatering of mane hole and pipe line including disposal of waste material up to all lead and lift.

Existing manhole of any size cleaning by steelrod or bamboo. Between two manhole existing pipe (stoneware or any pipe) cleaning by steelrod or bamboo and disposal of unserviceable materials away from premises . If any storme water in manhole or pipeline than dewatering and flush fresha water.

Mode of Measurement and Payment:

Measurement shall be done on a No.basis.

Payment shall be done for unit of one No.

**Dy. Executive Engineer
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Item No 2436

Providing and fixing fiber PVC dome fixed on G.I hollow pipe 35 X 35 MM frame with all labour including welding, painting priming coat with two coat of oil paint, fixing etc. complet.as per instruction given by engineer in charge.

Material:

Dome to be fixed by approved make good quality ISI marked fibre pvc .Galvanised iron pipes shall confirm to M 56 of GTS Book.Oil paint to the frame shall confirm to M 44 of GTS Book.

Workmanship :

35mm X 35mm hollow Galvanized iron frame shall be made by proper welding of pipes .After completing the framework red lead metal primer shall be applied to the frame .After drying of priming coat, two coats of good quality approved brand oil paint shall be applied on the frame.

After proper oil painting is done, approved quality Fiber pvc sheet shall be fixed on the GI frame as per instruction of Engineer in charge.

Mode of measurement and payment:

Item shall be measured and paid per Sq. m basis

**Dy. Executive Engineer
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Item No 2437

Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth up to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of 50 m outside the periphery of the area cleared.

Material and workmanship:

Area to be cleared shall be made clean by uprooting of rank vegetation, grass, brush wood, trees and saplings of girth up to 30 cm measured at a height of 1 m above ground level and all rubbish shall be removed 50 m outside the periphery of the site.

Mode of measurement and payment:

Item shall be measured and paid per Sq. m basis

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Item No 2438

Providing & laying cement concrete 1:3:6 (1 Cement: 3 fine sand: 6 graded stone aggregate 20 mm nominal size) and curing complete, excluding cost of form work in Foundation and plinth. (A) Foundation and plinth

Relevant specification of GTS Book item No 5.3.4(A) shall be followed.

Mode of Measurement :

Item shall be measured and paid per Cu m

**Dy. Executive Engineer
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Item No: 2439

Providing and fixing chickenmesh jali at R.C.C.-Masonry joints at any height with all labour and materials etc. complete.

MATERIALS

Galvanized Expanded shall be in the form of rhombus with its opening diagonals 20 X 60 mm and strands 3.25 mm wide and 1.6 mm thick.

WORKMANSHIP

The expanded metal shall be cut in 15 cm sizes from the rolls and straightened properly before fixing.

MODE OF MEASUREMENT & PAYMENT

The length and breadth of chickenmesh jali shall be measured correct to a cm. The actual area of expanded metal shall be calculated in square meter nearest to the places of two decimal.

The rate shall include the cost of labour, materials, scaffolding required for all the operations describe in above.

Mode of Measurement: on Sqmt basis. Of finished work.

Mode of Payment: on Sqmt. basis. Of finished work.

**Dy. Executive Engineer
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Item No 2442

Supplying and fixing stainless steel hand Railing of Grade 304 with glossy finish consisting of 38 NB or nearest size vertical posts 900 Height at maximum spacing 900c/c with suitable cups at bottom and top rail of 50 NB or nearest size & intermediate rails of 20 NB or nearest size etc. complete at all levels including bending to required profile. Tungsten insert gas welding & all required accessories, grinding & labour etc complete as per design fixing with base slab/concrete or side wall/RCC by suitable fastener and plates as per instruction of Engineer-in-Charge.

Material:

Stainless steel of 304 grade shall be used having 2 mm thickness. It shall have dia. of 50 mm. It shall be fixed on the wall at height suggested by Engineer in charge. It shall be fixed on SS solid brackets.

SS Pipe and related accessories shall be properly polished and buffing shall be done to it. After fixing pipe and brackets on the wall as per satisfaction of Engineer in charge, the wall shall be made good and finished in all respect.

Mode of measurement and payment:

The item of SS Railing shall be measured and paid per running meter of Pipe length

**Dy. Executive Engineer
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Item No 2443

Providing and laying machine cut free edges machine double polished kotastone for shelves / sill / jam in walls in single 20 TO 25mm thick including cutting grooves in walls and fixing the stone with cement mortar 1:4 and finishing the same with neat cement slurry in true line and level as directed etc. complete. (All Open edges should be full round polished).

Double polished kota stone as per NBO no. M49

Plywood for shutter shall confirm to M-37 except that it should be water and termite proof.
Formica should be 1.5mm thick of approved make, quality, and color.

Hollow mosquito proof Jali of 3" x 2" or smaller shall be used for air circulation.

Fixture fastening shall be iron oxidized or equivalent.

Fixture fastening should be as specified in the Technical specification booklet as specified in tabular form.

Workmanship

The work shall be carried out as per pattern and design shown in a drawing.

Mode of Measurement and Payment:

Measurement shall be done on a sqmt basis.

Payment shall be done for unit of one sqmt

**Dy. Executive Engineer
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Item No 2445

Providing and fixing 35 mm thick good quality flush door shutter with 01 mm laminated sheet of Royal Touch, Durian, Green lam or equivalent both side and necessary S.S. fixtures and fastening etc. complete as per instruction of Engineer in charge.

Materials

Plywood for shutter shall confirm to M-35 except that it should be water and termite proof. Indian teak wood shall conform to M-21 Formica should be 1.0 mm thick of approved make, quality, and colour, get approval before purchase, from engineer in charge. Teakwood decorative batten Patti & teakwood fixture fastening shall be iron oxidized or equivalent.

Fixture fastening should be as specified in the Technical specification booklet as specified in tabular form and handle 10 cm, locks, magnetic lock, stopper, hinges.

Workmanship

The work shall be carried out as per pattern and design shown in a drawing with teakwood frame of 12 cm X 7 cm finishing colour, varnishing, polishing etc. complete.

Mode of Measurement and Payment:

Measurement shall be done on a sq mt basis of finished work

Payment shall be done for unit of one sq mt of finished work.

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Item No 2447

Utility shifting for any type of G.I., PVC, UPVC any size or dia pipe shifting during the Excavation work or any type of work.

➤ **Material**

New material to be consumed during shifting of utility shall be confirmed to the General technical specification. For non SOR items, quality and standards shall be finalized by engineer in charge. The new material required to be provided shall be paid separately.

(Excavation required for the work and making the surface wall shall be paid separately.)

➤ **Workmanship**

The existing utility shall be disconnected carefully making neither any harm to human being nor damage to government property. As far as possible, work shall be carried out so carefully that the existing material can be reutilized during shifting. After shifting of utility, the surface shall be made good with all respect.

➤ **Mode of measurement and payments**

Mode of measurement and payment shall be done on RMT basis.

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Item No 2448

Providing and fixing in position cowl went to "U" PVC pipes with all material and labour complete as per the instruction of Engineer in charge. (B) 110mm dia.

Material :

Cowl Went of 110mm dia to UPVC pipes shall be of IS standard and should be fixed as per instruction of Engineer in charge.

Mode Of Measurement :

Mode of measurement and payment shall be done on No. basis.

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Item No 2450

Providing and fixing stainless steel kitchen sink with pillar tap of approved make with MS or CI brackets including cutting and making good the walls and floors wherever required complete as per direction. (Size 600mm X 450mm X 200mm)

Material:

Kitchen sink of Size 600mm X 450mm X 200mm from approved make shall be used. Pillar tap of approved make shall be used.

Workmanship:

Stainless Steel sink shall be fixed at a height of 80cm from FFL. It should be fixed on good quality MS or CI brackets. 15mm dia pillar tap shall be fixed in such a way that sink can be used conveniently and it should be fixed as per instruction of Engineer in charge.

Mode of Measurement:

The rate shall be for a unit of one number.

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Item No 2451

Providing & fixing gun metal check or non-return full way wheel valve [F] 50mm dia.

1.0 Workmanship:

The relevant specification of NBO no. 23.99 shall be followed.

2.0 Mode of measurements and payments

2.1 The relevant specification of NBO no. 23.99 shall be followed .Mode of Measurement: on Each basis.

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Item No 2452

Providing & fixing of Jet Spray, with all accessories to complete the item in its respected manners as per directed by engineer in charge. JET SPRAY: CHILLY OR EQU. - Cera

1. Material and Workmanship:

Approved quality of Jet spray shall be fixed at all European pans and in respected manners as per directed by engineer in charge.

2. Mode of measurements and payments

Mode of Measurement: on each basis.

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Item No 2454

Providing and fixing (600 X 450 X 150 mm) size vitreous china laboratory sink with CI or MS brackets painted white including cutting holes in wall and making good the same 40 mm dia CP waste coupling rails etc. complete.

Material:

Kitchen sink of Size 600mm X 450mm X 150mm from approved make shall be used.

Workmanship:

China sink shall be fixed at a height of 80cm from FFL. It should be fixed on good quality MS or CI brackets and it should be fixed as per instruction of Engineer in charge.

Mode of Measurement:

The rate shall be for a unit of one number.

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Item No 2455

Providing and fixing stainless steel angle 40mm X 40mm X 3.00mm to the corners of wall etc. with all necessary fittings with all material and labour etc. complete as per the instruction of engineer in charge.

1. Material and Workmanship:

Approved quality of stainless steel angle 40mm X 40mm X 3.00mm shall be used and should be fixed in respected manners as per directed by engineer in charge.

2. Mode of measurements and payments

Mode of Measurement: Rmt basis.

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Item No 2456

Dismantling glazed tiles in dado and cleaning the surface including disposal of debris as per the instruction of engineer in charge.

Glaze tiles shall be dismantled and debris shall be disposed up to any lead and lift as per instruction of engineer in charge

Mode of Measurement : SqMt Basis

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Zone-II,Junagadh**

Item No 2458

Removing and refixing anytype of existing door, window OR CUPBOURD with frame and shutters including making good the damaged wood work and any type of aluminum work etc complete..

1. Defective shutter due to expansion and contraction effect style panels and frame and rails to be opened and re-fixed in proper manner as per instruction of engineer in charge.
2. Any un-serviceable fixtures and fastenings in the shutter should be replaced properly by contractor will all required procedure.
3. Adhesive materials, mails and screws etc. are used if required for repairing if shutters and cupboard shutters.
4. Completed item is measured and paid on Square meter basis.

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Item No 2459

Providing & fixing 150 mm X 150mm S.S. jali for floor or nahni trap etc. complete as approved by the engineer in charge.

Material and Workmanship:

Approved quality 150 mm X 150mm S.S. jali for floor or nahni trap shall be used and fixed on floor and nahni trap as per directed by engineer in charge

Mode Of Measurement and payment: Each Basis

**Dy. Executive Engineer
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Zone-II,Junagadh**

**Executive Engineer
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Zone-II,Junagadh**

Item No 2461

Cleaning of pipe line of any diameter up to 150mm including all labor, required tools, tackies and disposing of all debris as directed by Engineer in charge.

Pipe line of any diameter up to 150mm shall be cleaned as per instruction of Engineer in charge.

Mode Of Measurement and Paid : Rmt Basis

**Dy. Executive Engineer
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Item No 2462

Rubbing with cleaning and removing the existing spots with approved acid or other chemical as not damage the existing surface with all material and labour complete as per the instruction of engineer in charge.

Floor should be rubbed, cleaned and finished by using acid or other chemical as not damage the existing surface as per the instruction of engineer in charge.

Mode Of Measurement and Payment : SqMt Basis

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Item No 2463

Repairing EZ Section door and window including replacing any section, required welding patt, patta removing and refixing of window including all labour, all required material i.e. screws, pavan akdi, stopper to take out in function with one coat of priming coat and two coat of oil paint etc complete.

Damaged EZ section Door and Window shall be removed from its position. New EZ section part shall be properly welded as per instruction of engineer in charge. It should be painted by approved quality oil pant after applying priming coat. After painting work is over it should be fixed in its original position and accessories shall be fixed as per instruction engineer in charge.

Mode Of measurement and Payment : SqMt Basis

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Item No 2465

Providing and fixing S.S. railing using S.S. 304 tubes having dia. 50 mm for handrail, 25 mm dia posts placed that 600 mm center to center fixed in wall as per the detailed drawing including erecting in position grouting / fixing etc. complete

Material:

Stainless steel of 304 grade shall be used having dia. of 50 mm. It shall be fixed on the wall at height suggested by Engineer in charge. It shall be fixed on SS solid brackets.

SS Pipe and related accessories shall be properly polished and buffing shall be done to it. After fixing pipe and brackets on the wall as per satisfaction of Engineer in charge, the wall shall be made good and finished in all respect.

Mode of measurement and payment:

The item of SS Railing shall be measured and paid per running meter of Pipe length

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**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item No 2468

Felling trees from the wall including cutting of trunks and branches removing the roots, pouring the required chemical to destroy the roots, repairing the wall including disposal of all the material.

After cutting of trunks and branches including roots in the wall in all respect strong acid or chemical material should be poured at the place to destroy the roots completely . All trunks and branches shall be disposed off from the site upto any lead. Damaged wall shall be repaired by a skilled mason as per satisfaction of Engineer in charge.

Mode of measurement and payment:

The rate shall include all taxes, labor tools, tackles
Payment shall be done per unit of No. basis

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Zone-II,Junagadh**

Item No 2469

Providing & fixing PVC waste pipe to wash basin, laboratory sink with labour and material etc. complete as approved by the engineer in charge.

PVC waste pipe for wash basin, laboratory sink shall be of IS standard and quality shall be approved by Engineer in charge before fixing it in its position.

Mode of Measurement and Payment:

The rate shall include all taxes, labor tools, tackles
Payment shall be done per unit of No. basis.

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Item No 2470

Trimming the branches of trees carefully including stacking the serviceable wood and disposal of unserviceable material like leaves, sub branches etc. with all tools and tackles as per the instruction of engineer in charge.

Cutting of branches of trees shall be done in such a way as less damage occurs to the surrounding property or electric cables. All trunks, branches and serviceable materials shall be stacked and disposed of from the site and shall be sent to the crematorium. Unserviceable materials like leaves and sub branches shall be removed from the site upto any lead and site shall be cleaned as per satisfaction of Engineer in charge.

Mode of measurement and payment:

Item shall be measured and paid per no. basis.

**Dy. Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item No 2471

Providing and connecting to main line including cutting, threading, supplying and fixing fittings like union, pipe nipple hex nipple, tee, reduce tee, elbow, or bend etc. to the required length and diameter of required connection pipe job including valve operation minor civil works, U/G excavation, dewatering, and restoration of same job completing all respects.

(a) 25 to 50 mm

Material and workmanship:

25mm,32mm,40mm and 50 mm pipes shall confirm to M 56 of GTS book. Excavation shall be done so as less damage occur to the existing water line .Water deposited in the pit shall be removed from it .All pipe and its respective fittings shall be fixed by a skilled plumber and pipe shall be joined with main line. Inspection chamber if damaged by this repairing work shall be finished by a skilled mason.

Mode of Measurement and Payment:

The rate shall include all taxes, labor tools, tackles

Payment shall be done per unit of Rmt basis.

**Dy. Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item No 2472

Providing & fixing PVC Connection for wash basin with labour and material complete as approved by the engineer in charge.

PVC Connection for wash basin shall be of IS standard and quality shall be approved by Engineer in charge before fixing it in its position.

Mode of Measurement and Payment:

The rate shall include all taxes, labor tools, tackles
Payment shall be done per unit of No. basis.

**Dy. Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item No 2473

Removing, Repairing and refixing of existing PVC water tank fittings & connection making like tee, elbow, socket, reducer, union, hex nipple, pipe nipple etc. including cutting, threading and connecting the branch connection with water tank and main line for GI Pipe line / UPVC pipe line. Job complete with all required consumables, tools, tackles etc. complete as per direction of site engineer.

Material and workmanship :

GI material and its parts shall confirm to M 56 of GTS book. UPVC pipes shall be of ISI make and of approved brand. PVC water tank shall be removed in workman like manner .It should be repaired in a proper way by authorized person and joined by proper pipe, connected to main line and then re fixed it in a position as it was before in working condition.

Mode of Measurement and Payment:

The rate shall include all taxes, labor tools, tackles , transportation..

Payment shall be done per unit of No. basis.

**Dy. Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item No 2474

Cleaning of terrace of courtyards with booming or other necessary tools and tackles whichever are required including collecting the garbage and disposal of the same where instructed as per the instruction of engineer in charge.

Terrace, courtyards and other open areas shall be cleaned by booming properly. All garbage so collected must be stacked at one place and it shall be loaded, unloaded and thrown away up to any lead from site through tractor, trolley or other vehicle. All areas shall be cleaned as per satisfaction of Engineer in charge

Mode of Measurement and Payment:

The rate shall include all taxes, labor tools, tackles , transportation..

Payment shall be done per unit of Sq mt. basis.

**Dy. Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item No 2476

Providing and fixing garden fencing with chain link galvanized 50MM X 50MM wire jali and precast R.C.C. post of size 10 x 10cm with chain link of height 1.50mt and precast R.C.C. pole of height 2.10mt including cost of M.S. flat 40 x 6mm for fixing pole in C.C. 1:2:4 and one coat of primer and two coat of oil painting etc. complete.

A. Material

S.S.wire 304 grade 18 gauge.

M.S. bracket as per detail drawing.

B. Workmanship

Fixing of four row of SS wire with M.S. bracket properly fixing at wall including all labour, material, misc. Item, screw etc. complete as per instruction of Engineer in charge.

Mode of measurement and payment :

Measurement will be: on RMT. basis

Payment will be: on RMT. basis

Item No 2477

Providing and fixing scaffolding with H-frame and pipe, clamp system including to and fro transportation, loading/unloading erection and dismantling after completion of repair/ replacement job. Work includes all material, consumable, tools, tackles complete as per direction of site engineer.

Workmanship

Cost of H-Frame it's loading, unloading and transporting of all required spares tools, tackles to work site. Required safety to be arranged by the contractor as per instruction of Engineer in charge.

Mode of Measurement and Payment:

The rate shall be include of all taxes, labor tools, tackles , transportation..

Payment shall be done for unit of Cum basis.

**Dy. Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item No 2478

Collecting and disposing of the dismantled material, waste etc. conveying by tractor and trolley including loading unloading place as and where as directed with one trip upto any lead.

Materials:

All tools and tekies shall be provided by contractor.

Workmanship:

The serviceable or unserviceable material shall be collected, conveyed by means of trolley, tractors or other means, disposed away the dismantled material up to any lead so as to clear the site. Number of all trips shall be in notice of representative of Engineer in charge and chalan shall be given to the representative before leaving site after every trip.

Mode of measurement and payment:

Measurement will be: on recorded by trip. basis

Payment will be: on recorded by trip. basis

**Dy. Executive Engineer
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Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item No 2479

Welding at site including loading and unloading of welding machine all labor and materials etc. complete.

Workmanship

Cost of loading , unloading and transporting of welding transformer machine to work site. Making electrical connection cleaning of welding area by wire brush prepare the welding area to proper alignment by hammering / jacking or any other suitable method. Welding the same with required size welding rods job complete under satisfaction of Engineer in charge.

Mode of Measurement and Payment:

The rate shall be include of all taxes, labor done on a Centi meter basis.

Payment shall be done for unit of Centi meter basis.

**Dy. Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item No 2480

Providing waterproofing treatment on terrace of exposed slab including cleaning, washing, crack filling and providing and applying two coats of acrylic based polymer liquid such as URP of Pidilite, Rainlight of Sikka, Zycosil or equivalent as per guide line of manufacturer complete with material and labour as per the instruction of Engineer in charge.

Material:

Cement shall be used as per M-3. The chemical shall be used acrylic based Polymer liquid like Rain tight of Sikka, URP of pidilite, zycosil, perma shield or equivalent, Water shall be used as per M-1.

Workmanship:

Surface must be even and free from pot holes.

Surface to be treated shall be cleaned thoroughly with wire brush and all dirt, dust, old residue material mortar stuck with surface shall be removed thoroughly. Then surface shall be washed thoroughly. Spalled and deeply disintegrated concrete or mortar must be removed to a sound substrate and repaired suitably before coating. Visible cracks shall be opened with cutter machine. Then all loose particles shall be removed with air blower. The opened cracks shall be filled up with flexible material and the surface shall be levelled with existing RCC slab. Apply two coats of acrylic based polymer liquid with brush on cleaned washed and prepared surface with drying interval of 5 to 6 hours. The acrylic based polymer liquid shall be mixed with ordinary Portland cement and non-shrink additives as per manufacture's guide line. Lump formation shall not be done during application. The surface shall be let dry for 24 hours preventing from washing out. Also, any type of abrasion shall not be done during this period.

Mode of measurement & payment:

Measurement and payment shall be made on square meter base of clear surface area.

**Dy. Executive Engineer
Project Implementation Unit
Zone-II, Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II, Junagadh**

Item No 2481

Providing and fixing PVC water tank cover of syntax or equivalent brand as approved including necessary nut bolt etc. whichever are required as per the instruction of engineer in charge.

Material:

The PVC water tank should be of "SYNTEX" or equivalent brand and shall be got approved by engineer in charge.

Workmanship:

The platform on which water tank is to be rest shall be made earlier in true level and considering size of water tank at raised level from floor as directed. The payment of platform shall be made separately. The connection shall be made to the directed pipe line including necessary clamp, nut, bolt etc without remain any leakage from joint. The total work shall be carried out as per instruction of engineer in charge.

Mode of measurement & payment:

The work should measure on per unit.

The rate should be given per each.

**Dy. Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item No 2482

Dismantling of Platform including disposing off the debris at all floors as directed by Engineer in charge.

WORKMANSHIP

The relevant specification of item no. 20.1 (1) shall be followed except plaster work lime or cement masonry is to be removed

After removing the platform all the joints of the masonry shall be raked out for approximately 20 mm depth.

After dismantling the platform and it's all parts all serviceable / unserviceable material, debris shall be removed from the site as directed by Engineer in charge.

MODE OF MEASUREMENT AND PAYMENT

All work shall be measured in decimal system as fixed in its place. Dimensions shall be measured to the neared 0.01 sqm. Area shall be worked out to the neared 0.01 sq m.

The rate shall include cost of all labours, tools including scaffolding.

The rate shall also include charges for disposing the materials with all lead and lifts.

The rate also includes providing temp. Enclosures and partitions where considered.

The rate shall be for a unit of one Sq m.

**Dy. Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item No 2483

Providing & fixing gun metal check or non-return full way wheel valve [F] 50mm dia.

Materials and Workmanship:

The work shall be carried out as per Item no 23.92(A), page 170 except that gun metal check or non-return full way wheel valve [F] 50mm dia.

Mode of Measurement and Payment:

As per item no 23.92(A), page no 150

Mode of measurement : on No basis

Mode of Payment : on No basis

**Dy. Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item No 2484

Providing & fixing gun metal check or non-return full way wheel valve [G] 65mm dia.

Materials and Workmanship:

The work shall be carried out as per Item no 23.92(A), page 170 except that gun metal check or non-return full way wheel valve [G] 65mm dia.

Mode of Measurement and Payment:

As per item no 23.92(A), page no 150

Mode of measurement : on No basis

Mode of Payment : on No basis

**Dy. Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item No 2485

Providing & fixing gun metal check or non-return full way wheel valve [H] 80mm dia.

Materials and Workmanship:

The work shall be carried out as per Item no 23.92(A), page 170 except that gun metal check or non-return full way wheel valve [H] 80mm dia.

Mode of Measurement and Payment:

As per item no 23.92(A), page no 150

Mode of measurement : on No basis

Mode of Payment : on No basis

**Dy. Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item No 2486

Providing and fixing Liquid soap dish complete with C.P. brass brackets fixed on glazed tiles with C.P. brass screws etc. complete as per direction of site engineer.

The Stainless steel jet spray of specified and approved make including all Accessories, tools, tolerance fixture and fastening etc. shall be used in all its respected manners and as per directed by engineer in charge.

Payment shall be made on No. basis.

**Dy. Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item No 2487

Providing and fixing 18mm thick telephonic granite stone including fine polishing and wax for takti with writing in golden fonts including fixing in wall with decorative wooden beading and polishing the same etc. complete as per engineer in charge.

Workmanship

The relevant specification of item no. M.52 of GTS shall be followed

Mode of Measurement and Payment:

Payment shall be done for unit of Sq.m. basis.

**Dy. Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item No 2488

P/F SUN CONTROL FILM providing and fixing approved quality of reflective type sun control film including all materials required for the same for the glazed portion of windows ventilation/door etc. at any height all complete as per direction of Engineer-in-charge.

Workmanship

Supplying and fixing GARWARE or Equivalent type sun control film to Glass of doors/windows ventilation etc. up to any height job complete as directed by Engineer in charge.

Mode of Measurement and Payment:

Payment shall be done for unit of **Sq.m.** basis.

**Dy. Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item No 2489

Providing and fixing FRP/PVC sheet chhajja including all required fabrication job with fixing at site by means of fasteners/civil works by chipping and remaking good finish plastering etc. complete. Job includes water proofing treatment on the junction of wall and chhajja with providing required water proof sealant, cement vat etc. complete as per direction of site engineer. (Scaffolding for this item will be paid under relevant item separately.)

Workmanship

The relevant specification of NBO no. 11.4 shall be followed for fabrication work.

Supplying and fixing of FRP Sheet with required 'J' or 'L' bolts.

Joint of brickwork waterproofing to be done as directed engineer in charge.

Mode of Measurement and Payment:

Payment shall be done for unit of **Sqm** basis.

Item No 2490

Dismantling false ceiling of different types including making all necessary arrangement taking care enough for safety and to facilitate for working up to any height including disposal of unserviceable material and stacking of serviceable material at specified place complete as per the instruction of engineer in charge.

1. WORKMANSHIP

1.1 The relevant specification of item no. 20.1 (1) shall be followed except plaster work lime or cement masonry is to be removed

1.2 After removing the false ceiling and roofing the unserviceable material to be disposed as directed by engineer in charge. The material of roofing is to be handing over to the authority as directed by engineer in charge.

1.3 The item includes Dismantling total roofing and existing false ceiling of auditorium roof including wooden material , steel or trusses , A.C. Sheet, water proofing work at site etc.

2. MODE OF MEASUREMENT AND PAYMENT

All work shall be measured in decimal system as fixed in its place. Dimensions shall be measured to the neared 0.01 sq m. Area shall be worked out to the neared 0.01 sq m.

The rate shall include cost of all labours, required tools including scaffolding, transporting

The rate shall also include charges for disposing the materials with all lead and lifts.

The rate also includes providing temp. enclosures and partitions where considered.

The rate shall be for a unit of one Sq m.

**Dy. Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item No 2491

Providing and fixing alluminum grill (50mm square sakkarpara jali) to the existing alluminium partition with necessary cleat etc with material and labour complete as per the instruction of Engineer in charge. (RA)

MATERIAL:

Aluminum grill to be used shall be of chequered type or as approved by the engineer in charge having dia. 5mm and gap between bars shall not exceed 50mm.

WORKMANSHIP:

The Existing materials like glass, Plywood grill etc. Shall be removed from the existing partition carefully. The approved aluminum grill shall be fixed in that gap with accuracy so that no cavities/gap shall be left at outer edges. The required gasket, bidding, cleat. The work total work shall be carried out in such a way that no damaged shall be done. The work shall be carried out as per the instruction of engineer in charge.

Mode of Measurement and Payment:-

The measurement and payments shall be done on square meter base.

**Dy. Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item No 2492

Painting two coats antibacterial paint, brushing, interior to give an even shade including cleaning the surface an even shade including cleaning the surface of all dirt, dust and other foreign matter.

The water shall conform to M-1. Cement water proofing paint shall conform to I.S. 5410-1969
wall primer M-

Anti-bacterial Paint Oily Water modifier based on poly Anti-bacterial Paint Easter latex of std. make. Cement, water base water proof colour

Workmanship

Scaffolding: wooden bellies, bamboos, planks, trestles, and other scaffolding shall be sound. These shall be sound. These shall be properly examined before erection and use. Stage scaffolding shall be provided for ceiling plaster which shall be independent of the walls.

Where scaffolding is required, it shall be erected in such a way that as far as possible no part of scaffolding shall rest against the surface to be distempered. A properly secured and well tied suspended platform (Jolla) may be used for distempering. Where ladders are used, pieces of old gunny bags shall be tied at top and bottom to prevent scratches to the walls and floors. For distempering to ceiling, proper stage scaffolding shall be erected where necessary.

No painting shall be done when the paint is likely to be exposed to a temperature of below 73 c within 48 hours after application. When weather conditions are such as to cause be carried out in the shadow as far as possible. This helps the proper hardening of the paint film by keeping the surface moist for a longer period. To maintain the uniform mixture and to prevent segregation/the paint shall be stirred frequently in the bucket. For undecorated surfaces, the surface shall be treated with minimum two coats of water proof cement paint. Not less than 24 hours shall be allowed between two coats. Next coat shall not be started until the proceeding coat has become sufficiently hard to resist marking by the brush being used. In hot dry weather, the proceeding coat shall be slightly moistened before applying the subsequent coat. The finished surface shall be even and uniform in shade, without patches, brush marks, paint drops etc.

The Anti-bacterial paint shall be applied with a brush with relatively short stiff hog or fibre bristles. The paint shall be brushed in uniform thickness and shall be free from excessively heavy brush mark. The lamps shall be brushed out. Anti-bacterial Paint cement paint shall not be applied on-surface already treated with white wash, colour wash, distemper dry or oil bound varnishes, paint etc. It shall not be applied on gypsum, wood and metal surfaces.

Mode of measurement

The payment shall be made on completion of work.

The unit rate for the Item shall be for a unit of one **smt.**

**Dy. Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item No 2493

Providing and filling with good quality cinder (Steam Coal) as directed by engineer in charge in sunk in layer of 15 cm thick, including watering, placing, ramming well etc. as directed.

Material :

Cinder is well burnt furnace residue, which has been fused or sintered into lumps of varying sizes. Cinder aggregates shall be well burnt furnace residue obtained from furnace using coal fuel only. It shall be sound clean free from clay, dirt ash or other deleterious matter.

The average grading for cinder aggregates shall be as mentioned below:

I.S.Sieve	Percentage	I.S.Sieve	Percentage
Designation	Passing	Designation	Passing
20 mm.	100	4.75 mm.	70
10 mm.	86	2.36 mm.	52

Workmanship :

The Cinder to be used for filling shall be free from salts, organic or other foreign matter, All clods of Cinder shall be broken.

- 1.2.** The sunk shall be similarly filled with Cinder in layers not exceeding 15 Cms adequately watered and consolidated by ramming with iron or wooden rammers. When in filling reaches finished level, it should allow to dry after rammed and consolidated.
- 1.3.** The finished level of filling shall be kept to shape intended to be given to floor.
- 2.1** The rate shall be for a unit of one Cubic meter.

**Dy. Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item No 2494

Removing and refixing wall, ceiling & floor G.I. / PVC/UPVC/APVC/M.S. pipes of confirming to IS standard of the following nominal bore including fittings as required for completion of job, clamps including making good the wall, ceiling and floor etc. complete as directed by Engineer in charge.

Material:

The relevant specification of NBO no. 23.8 shall be followed for uPVC of make PRINCE / SUPREME / KISSAN or EQUIVALENT pipe instead of PVC pipe

Workmanship:

Existing broken, damaged PVC or GI pipe line shall be removed carefully after closing its utilization. New pipe line shall be fixed at that place or at suggested place with necessary clamps fittings and adhesives etc as per the instruction of engineer in charge.

Mode of measurement & payment:

Measurement and payment shall be made on basis of one RMT.

**Dy. Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item No 2495

Providing and fixing polycarbonate hollow sheets 10mm thick of approved brand and quality with necessary insulation on roof of steel truss with labour and material complete as per the instruction of engineer in charge.

10 mm th.Fiber sheet shall conform to M - 25and minimum
Self tapping screw
50 mm dia metal pipe

2.0 **Workmanship**

The specification shall be followed as per Item no. 5.38 for B.B.C.C. work + I.No. 9.1 (B) (2)/ P.No. 82 for Form work + I. No. 5.3.3 for P.C.C. + I. No. 5.4.10/P.No. 54 for mild steel of General technical specification booklet for Road & Bridge works. The specification shall be followed as per Item no. 11.2 (A) & 11.4 (D) for iron work of roofing & structure.

- 2.1 The longitudinal edges shall be turned back to the extent of 12 mm & beaten to form a rounded edge. The ends of the sheet at junction of pieces shall be hooked into each other & neaten flush to avoid leakages.
- 2.2 The size of gutters shall 50 mm X 2.92 mm.
- 2.3 The gutter shall be laid with the min. fall in 120. Gutter shall be true in line & slope & shall be supported on fixed M.S. flat iron brackets bent to shape or any other suitable brackets.

Spacing of purlins : One purling shall be provided at the ridge and one at the eaves. The spacing of other purlins for 0.8 mm. thick 10 mm thick Polycarbonate sheet shall not exceed 1.80 meters. The purling shall coincide with the centre line of the end lap. The ridge purling shall be placed in such a way that the ridges can be fixed properly. The portion over hanging the wall support shall not be more than one fourth of, the spacing of purling.

The sheets shall be laid in purling to a true plane with the line of corrugations truly parallel or normal to the sides of area to be covered. The sheets shall not generally be built into gables and parapets. They shall be bent up along their side edges close to the wall, and the junction shall be protected by suitable flushing or by projecting drip course.

Sheets shall be jointed together at the side laps by galvanized Self tapping screws 25 mm. x 6 mm. size, each bolt with a bitumen and G. I. limpet washer filled with white lead. Where the overlaps at the sides extend. In two corrugations these bolts shall be placed Zig-zag over the two overlapping corrugations, so that the ends of the overlapping sheets are drawn tightly towards each other. The spacing of same bolts shall not exceed (100 mm. along each of the staggered rows.

Holes for all bolts shall be drilled and not punched in the ridges of the corrugations from the underside, while the sheets are on the ground the holes in the sheets shall be at least 50 mm. from the edge. Sheets drilled wrongly shall be rejected. The holes in the washers shall be of the exact-diameter of hook, bolts or the seam bolts. The nuts shall be tightened from above to give a leak-proof roof. The roof when complete shall be true to lines and slopes and shall be leak-proof

3.0 **Mode of measurements & payment :**

- 3.1 The measurement of the gutters shall be taken for finished work in length along their center lines. No. laps shall be measured.

The rate of gutter shall include the cost of all labour & material specified above including as angle, junctions, drop ends or funnel shaped connecting pieces, stop ends etc. flat iron brackets & bolts & nuts required for fixing the latter to the roof members.

The rate shall be for a unit of Smt.

**Dy. Executive Engineer
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Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item No 2496

Providing and fixing decorative aluminium rod with SUSPENSION necessary decorative fixture both side and rings for fixing of the curtains (excluding the cost of curtain) complete as per the instruction of engineer in charge.

1.0 MATERIAL

1.1 Aluminum rod

Aluminum alloy used in the manufacture of extruded door section shall confirm to I S designation HEA-WP of I S 733-1975 and also Designation WVG -WP of I S 1285-1975 shall be used.

Rod shall be Free from any scratches or holes or any damages on surface. It shall have finished luster surface on all sides. Decorative fixture both side and rings for fixing of the curtains are of approved Quality and approved by the engineer in charge.

Mode of Measurement and Payment:

The rate includes cost of all labour, tools and materials required for satisfactory completion of this item as described above.

.The measurement shall be on running meter area basis.

The rate shall be for a unit of one Rmt..

**Dy. Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item No 2497

Supplying and fixing "RAMCO or Equivalent" P.P. Rasin Fiber Acoustic Panel of 1200 x 600mm x 9mm approved color supported by 50MM Width x 75mm Height "TEAK WOOD" back by 48 density 50mm Owens corning fiber glass wool in Non Wovan Cloth bag as per detail drawing and specification as directed and approved by Engineer in charge / Consultant etc. complete.

1.1. Materials

- 1.1.1. Micro fiber polyester resin fiber thermally bonded to have 0.72 NRC value.
- 1.1.2. Teak wood shall confirm as approved by Engineer in charge and approved consultant.
- 1.1.3. FGW shall confirm to approved by Engineer in charge and approved consultant.
- 1.1.4. Mess shall confirm to approved by Engineer in charge and approved consultant.
- 1.1.5. Melamine polish shall confirm to approved by Engineer in charge and approved consultant.

1.2. Workman ship

- 1.2.1. Prepare a framing of teakwood 75 x 50 mm space @ 600 x1200 mm in both direction.
- 1.2.2. Above framing would be fixed to be wall panel with self tapped screw and wood gripper.
- 1.2.3. The wooden frame so prepared shall be fixed with 48 density 50 mm thk. fiber glass wool in non woven bag but with mess on one face.
- 1.2.4. Acoustic Panel shall be fixed over the above framing after fiber glass wool as per shown in design and instruction of acoustic consultant.
- 1.2.5. The teak wood patta shall be melamine polished.
- 1.2.6. Over all to be completed with good workmanship as per drg. & as per Acoustic consultant.

1.3. Mode of measurement

- 1.3.1. Elevation area of wood wool fixed would be used for measured.
- 1.3.2. Unit of measurement would be sq.mt.

**Dy. Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item No 2498

Supply and installed special acoustic door AS PER DRAWING with STC-60 as per ASTM having 75 x 50mm solid wood frame with combination of Tecsound 2.5mm on both the side of 12.5mm Hilux board , filled with 48/50 Owens corning fibre glass wool laping patti and special locking at bottom (door seal) by Dorma. One side of a finished door is to be provided with 4mm thick veneer as desired and approved by Engineer in charge / consultant. other side (inside auditorium) with 4mm "U" form covered with desired color fabrics, MS Hold fast, Brass hinges 150mm x 100mm x 6mm selected by Engineer in charge / consultant etc complete.

1	Teak wood M-1
	Teak wood shall confirm to M-1
2	Ghana wood M-7
	Ghana wood shall confirm to M-7
	6mm thk felt lining
3	Fibre Glass Wool M-11
	FGW shall confirm to M-11
4	Plywood M-8
	Ply wood shall confirm to M-8
5	Tecsound M-4
	Techsound shall confirm to M-4
6	Hilux board M-15
	Hilux board shall confirm to M-15
7	Veneer M-12
	Veeneer shall confirm to M-12
8	Door seal M-5
	Door seal shall confirm to M-5
9	Fixtures & Fastening M-9
	Fixture & fastening shall confirm to M-9
	Workmanship
1).	Cut helix board as per the size of door.
2).	Fix 3mm thk. tecsound layer over 12mm thk. helix board on both faces.
3).	Fix Ghana wood framing 75 x 35mm all around.
4).	Fix 35 x 35mm Ghana wood on intermediate area at spacing of max. 600mm in both directions.
5).	Fix 50 mm thk. 48 kg/m ³ glass wool in to the gapes foamed due to wooden framing.
6).	Fix 12mm thk. plywood on both the face of the above door.
7).	Door seal (NN ADB-S 920mm) as applicable would be fixed at the bottom of the door.
8).	Fix veneer, on the outer face of the door as per detail drawing.
9).	Fix heavy handloom type fabric on the inner side of the door.
10).	Edges of the door would be covered by 12mm thk. wooden lapping Patti.
11).	The doorframe on which shutter is to be fixed, the jambs of the frame would be lined width 6mm thk. felt lining on all 3 sides.
12).	All necessary fixtures like door handle, lock, hinges, would be fixed to the door.
13).	Following hardware shall be used for the door.

14).	All the exposed wood work like veneer , door frame, wooden lapping would be melamine polish.
15).	All work to be so completed that the door is in plumb and dimensionally well fitted so that no air gap is visible.
	Mode of Measurement
1	Complete door is consider as unit one & payment will be as per out to out dimension of shutter shall be measure in elevation.
2	Unit of measurement will be in sq.mt.

**Dy. Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item No 2499

Providing and applying hydrophilic crystalline system to the clean, wet open pore concrete surface. The waterproofing system shall be brush applied in two coats on pre-dampened surface including the sunken areas. The coverage shall be 0.8 kg to 1kg/m² in two coat application. The waterproofing system shall include treatment of construction joint & fillets. Testing by ponding water for 48 hrs. It should be hydrophilic in nature, should be able to grow crystals year after year to seal microcracks. The product should confirm to DIN 1048 part 5 and should provide in depth crystallization. with Supplying and admixing 12 mm Polupropylene fibre in the concrete mix at rate of 910g/m³ as per the manufacturer specification

Cementitious hydrophilic based dry crystalline powder capable of creating crystals to seal the pores, intecises, microcracks in the concrete. This system become integral part of concrete and is not affected by surface wear and abrasion. This will be applied on wet saturated new or old concrete surface. The non toxic and suitable for application in drinking water tanks. It will be able to withstand high hydrostatic pressure, stop moisture coming up through concrete to debond any overlay system. It will eliminate the need for surface applied membranes etc. it does not contain stearates, sodium or silicate and is not hydrophobic type. It will be able to grow crystals year after should seal microcracks (not live / moving crack) that may occur from subsequent damage to structure.

Waterproofing

Surface Preparation:

Surface to be waterproofed must be sound, clean, free of dust, paint, curing agents, loose plaster debris etc. honeycombs should be opened up to ensure uninterrupted and even coating of waterproofing application. All final cleaning will be carried out with pressurized water using water jet. Apart from cleaning this will ensure that all pores, capillaries, pores and voids etc will be field with water which is essential prior to treatment with cement based crystalline waterproofing systems.

All static cracks wider than 2mm in the substrate must be opened up to 6mm X 6mm and treated with a mix of cement/sand mix with T2 and water at least 24 hours prior to the application.

Joints

Construction joints treatment - A U - shaped groove will be made of 10mm wide and 15-20 mm deep. 50% of the depth will be filled up with T2 putty consistency 5:1 (5parts of T2 to 1 part of water) and balance 50% of the depth will be filled with Baricote in 3:5:1 (3.5 part of Baricote to 1 part of water)

Fillets:

Similarly at all the junctions of the Horizontal slab and vertical wall, the fillets must be built up with a ix of cement/sand mix with crystalline additive and water at least 24 hours prior to the application.

Down take / Pipe Insertions:

Pipe inserts if any must be installed prior to the waterproofing system. At the opening in the slab around the pipe, the substrate should be similarly opened up by cutting back around the pipes to give sufficient depth and cleaned thoroughly. This must be then built up with a mix of cement/sand mix with bonding emulsion and water at least 24 hours prior to application.

Materials & Standards

It should be hydrophilic crystalline based waterproofing should be able to grow crystals year after year to seal microcracks. The product should confirm to DIN 1048 part 5 and should provide in depth crystallization. The product should be CPWD and EIL approved.

MIXING:

Mix T2 to a slurry consistency (5 parts powder to 2 part clean water by volume) mix only enough material that can be placed in 15 minutes to 20 minutes.

APPLICATION:

Dampen all the surface areas thoroughly with clean water using high pressure water jet apparatus, as this is necessary prior to the application of the system: The dampness in the substrate will ensure that the chemical reaction between the system and the chemicals in the concrete substrate takes place completely. However the application of the T2 system should not be made over standing or running water.

Hydrophilic Crystalline System (First Coat)

The T2 system is brush applied, on to the already damped surface. The surface is allowed for the self curing for 3 Hrs.

Hydrophilic Crystalline System (Second Coat)

Apply second coat of T2 system on the first coat. Total coverage in two coats should be 0.8 to 1 kg per sq. meter. The surface is allowed for the self curing for 8 Hrs. wet curing by sprinkling water to done for 3 days.

Warranty

The material and application warranty to be given by manufacturer's authorized distributor / applicator on prescribed format.

Testing

After 7 days, ponding test can be done for 48 hrs.

Limitation

Concrete should be sound free from structural crack. Honey comb are should be properly grouted.

**Dy. Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item No 2500

Applying epoxy zink prospect primer grey with solvant two coat over new steel and other metel surface after and including preparing the surface by throughly cleaning, oil,grease, dirt and other foreign matter and scoured with brushes fine steel wood, scrapers and sand paper with ready mixed priming paint brushing red lead.

3.0 Material

The material shall be followed as per NBO no. 19.2 for primer epoxy zink.

4.0 Workmanship:

The relevant specification of NBO no. 19.2 shall be followed Applying epoxy zink prospect primer grey with solvant two coat over new steel and other metel surface after and including cleanicg the surface of all dirt, dust and other foreign matter etc as per satisfaction of engineer in charge..

5.0 Mode of measurements and payments

The relevant specification of NBO no. 19.2 shall be followed for for epoxy zink prospect primer.

Measurement will be: on SQM. basis

Payment will be: on SQM. basis

**Dy. Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item No 2501

Providing and fixing 0.70 Meter high fencing with 1.3 Meter long M.S. Angle posts 50mm x 50 mm x 6 mm and oil painting 3 coats fixed at 2.40 Mt, C/c. with five Horizontal lines of galvanized steel barbed wire, strained and fixed to posts with G.I, staples including fixing posts in existing wall with dismantling old masonry work 0.15 x 0.15 x 0.60 depth and cc 1:2:4 etc. complete.

Specification of SOR 2015-16 Item Code 22001 Pg No 185 shall be followed.

Mode of Measurement and payment : Rmt

**Dy. Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item No 2502

Providing & fixing Aluminum composite panel of Alco bond with approved grade of 4 mm thick (0.5+3+0.5).The composite panel should be made of 3 mm thick,100% virgin polyethylene core of LDPE sandwiched between two skins of 0.5 mm thick aluminum sheet of which one side is having three layers of as 02.PVDF coating with kyanar 500 paint to ensure the superior corrosion resistance and weather ability and the other side is service coated with Epoxy paint (Grey).The adhesive used DUBOND for bonding the two skins which can take 8 to 9 kg of weight to separate. This includes structural frames for fixing and finishing etc complete for wall paneling, Colour INCLUDING AS PER DESIGN CNC MACHINE CUTTING CHARGES, as approved by the architect.

Material

The aluminum composite panel shall be stove lacquered coversheet on the front side and Mill finish or stove lacquered coversheet on the reverse side produced in a continuous finishing process as per technical data sheets of Alcomex (Dongshin), Alucobond - West Germany or equivalent. It should be a prefabricated anodized material and surface of the standard panel shall either lacquered, anodized or laminated with a self adhesive foil.

The composite panel shall be light weight with excellent product properties for indoor and outdoor applications.

Technical Specifications of composite panel AS PER ASTM STANDARDS for 3 mm thick panel.

Workmanship :

This work to be executed to cover the Expansion Joint groove. Width of the Panel should be 300 mm wide.

Frame Work : Mild Steel hot dipped galvanized C brackets of size 75mm x 50mm x 1.6mm with slot of 8mm x 35mm are fixed to the existing RCC columns walls or any other backing surface, Aluminum hollow section of size 50mm x 25 mm of 1.6mm thick are fixed to these brackets both vertically and horizontally by using M6 x 75mm stainless steel bolts and nuts. The frame work can easily be aligned for plumb and straightness panel fixing.

Panel Fixing: Composite panels are cut to size, routed, corners notched and bend as per the dimensions specified. After the panels are bend aluminum cleats of size 16mm x 16mm by 25mm length are fixed to the edge of the panels by using aluminum pop rivets. The panels are fixed to the frame work by using stainless steel screws. The gap of 12mm or 16mm between the panels (both vertical and horizontal) are filled with backer rod of size 12mm x 20mm or 16mm x 20mm, weather proof silicon sealant of Wacker, Dowcorning or equivalent make is used to filled the grooves.

Weather sealant

Weather Sealant should have minimum tearing strength 4.0N/mm, shore hardness 20 (ISO 868), joint movement capability + 15% (As per ASTM C-920), one part natural core equivalent to Sika Elastosil 305, Dow Corning 791P or equivalent.

EPDM gasket

EPDM Gasket should not lose its properties of elasticity and it should not become brittle or plastic before 10 years at-least.

Measurement

The measurement of the composite panel cladding will be done in running meter correct to two decimal places having width of 250 mm wide. The rate shall include providing and fixing of pallets, frame work if any, fittings and fixtures and shall include all taxes like sales tax, work tax, if any etc. complete.

Rate

The rate shall be for per Rmt for 250 mm wide of composite panel inclusive of all frame work, wastage, scaffolding, tools, plants, all cost of composite panel i.e. basic, excise and custom duty if any, freight, taxes or any other tax complete.

**Dy. Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item No 2503

Supplying and Apply the materials for the Waterproofing treatment to be done by Dr. FIXIT-TOUCHSHIELD-AP3160 3.00 MM Thick Polyester membrane Dr. Fixit TORCHSHIELD PRIMER/Equivalent & other material and applying One Coat of Bituminous base point.

Material and Workmanship

Dr. Fixit Torch shield AP ranges of polymer modified membranes are modified bitumen waterproofing membranes manufactured by saturating and coating a polyester carrier with a waterproofing compound made of a special grade of modified bitumen with APP polymers. Whereas the modifiers boost the thermal, mechanical and ageing characteristics of the membrane compound, the non-woven polyester carrier establishes the mechanical characteristics as it performs as the reinforcement element that provides the membrane with its significant Tensile Strength, Tear Strength, Puncture Resistance and Elongation properties.

The upper and lower surfaces are laminated with polyethylene film.

Dr. Fixit Torch shield AP membranes are ideal for use in a wide range of waterproofing applications such as foundations, basements, tunnels, roofs, car park decks and other civil works. The chemical resistance of Dr. Fixit Torch shield AP makes it particularly suitable for tanking applications in areas where aggressive ground water conditions prevail.

Areas of Application

Waterproofing and damp-proof membranes for:

- }} Concrete roof (Sloped/Flat roofs)
- }} Basements and swimming pools (Externally)
- }} Car park and irrigation canals lining
- }} Concrete retaining structures
- }} Tunnels and subways

Features & Benefits

High strength reinforcement gives excellent resistance to puncture and stress. Dr. Fixit Torch shield AP is easily torch on applied and adheres well to the substrate. The modified bitumen membranes' coating adheres well to contours, and is dimensionally stable to normal structural movements in the building.

Method of Application

This application procedure is a standard guideline for using the 3 & 4 mm membranes only, which may slightly vary upon the site conditions & different application areas. For details, consult the Dr. Fixit Technical Team.

1 SURFACE PREPARATION

Clean & remove dust, dirt, loose particles and unsound substrate. Make the surface smooth, even & free from local depressions with polymer-modified mortar. Priming can be done over this the next day.

2 PRIMING

Apply one coat of a bitumen based primer Dr. Fixit Torchshield Primer on cleaned & leveled surface @ 3-5 sq. m./ litre / coat.

3 APPLICATION

}}Unroll the Dr. Fixit Torchshield Roll after application of primer.
}} Align the roll correctly & re-roll it in alignment before torching.
}} Use gas burner to heat substrate & underside to softening points. When the embossing disappears, roll forward
& press firmly against substrate to bond from the lower end towards the higher end.
}} Keep overlap margin for minimum 100 mm.
}}Ensure that a constant flow of bitumen is maintained across the whole width of the Roll and that a bead of bitumen is extruded from each edge which demonstrates that a good seal has obtained. DO NOT flatten the bead with trowel.

Dr. Fixit Torch shield AP 3160 / 4160

WATER PROOFING

All angles & abutments up stands should be sealed with extra care to ensure perfect bondage. Seal the edges well into grooves & protect to seal with a poly sulphide / polyurethane or a bit mastic sealant.
Dr. Fixit Torch shield applied all over the terrace, must be finished with a coating of aluminum paint for non-foot traffic area. For foot trafficked area, overlay with concrete screed mortar

Application tools and equipment

The tools and equipment required to apply Dr. Fixit Torch shield AP membrane include a gas torch with the gas cylinder, a knife for cutting the membrane to size, and a trowel with a rounded tip. Protective gloves and goggles are necessary when using the gas torch.

**Dy. Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item No 2504

Supplying the materials being DR. FIXIT NEWCOAT and DR. FIXIT PRIMESEAL, FIBRE NET as per the required quantity and then executing the application by cleaning and then saturating the top substract and then Applying the primer coat with DR FIXIT PRIMESEAL and then applying ONE COAT of DR FIXIT NEWCOAT and then laying the FIBRE NET on top of it and then applying TWO COATS of heavy duty reinforced acrylic coating of DR. FIXIT NEWCOAT by our authorized Applicator.

Dr. Fixit Newcoat is a heavy duty terrace waterproof coating system, composed of specially developed highly elastic & resilient acrylic polymers, properly selected & graded fillers, lightfast & weather durable pigments, micro-fibres, additives & best quality fungicidal in water medium. It is used as a liquid applied waterproofing membrane for all types of building terraces. Dr. Fixit Newcoat is a three-layer system with coats in different colours ensuring proper build-up of the thickness, making it a reliable waterproofing system. The coating performance can be enhanced for large roofs, by providing a fibre mesh that is embedded or sandwiched between the coats.

Areas of Application

}} Building roofs / Terraces- Flat & sloping.
}} Over existing cementitious waterproofing treatments like brickbat coba, concrete screeds, acrylic coatings, etc.

Features & Benefits

}} Film thickness – Provides higher dry film thickness of 1 to 1.25 mm in three coat application
}} Crack bridging - Bridges cracks up to 2 mm width
}} Application advantage - No need to remove existing sound brickbat coba, plaster, concrete surface
}} Suitability - Can be used for flat as well as sloping roofs
}} Strength - Higher tensile strength, tear resistance & bond strength with cementitious substrates
}} Resilience – Forms highly elastic & resilient coating so helps to withstand the structural movements
}} Durability – Resistant to UV & weather conditions
}} Abrasion resistant – No additional protective coating is required for roof subjected to foot traffic
}} Ease of application – Can be applied by brush & roller easily
}} Weight addition – Light in weight does not add extra weight over the roof
}} Toxicity – It is non-toxic in nature
}} Breathability – It is breathable
}} Easy to recoat existing surfaces coated earlier with Dr. Fixit Newcoat

Method of Application

1 SURFACE PREPARATION

}} Prepare the surface thoroughly by cleaning, washing and removing dust, dirt, oil, grease and loose particles.
}} In existing old terraces with brickbat coba or screeds, the substrate must be checked for its soundness. Damaged or hollow portions, sharp edges, etc. must be cut and removed till the mother slab. The slab should be recoated with slurry of Dr. Fixit Pidicrete URP and cement in 1:1 proportion. After drying, the brick bat coba in that portion should be reinstated by mixing Dr. Fixit Pidicrete URP in the base slurry as well as while doing the top coba. In other areas, where the coba is sound, the surface cracks must be filled with Dr. Fixit. Crack-X or polymer-modified mortar in case cracks are wider than 5 mm.
}} Cracks less than 2 mm, should be cleaned free of dust with a vacuum cleaner.

Apply Dr. Fixit Prime seal in the crack and let it dry. Then pour Dr. Fixit New coat into these cracks and wait for it to dry.

}}Ensure that the roof slope of a minimum of 1 in 100, is already provided.

}}Bitumen based waterproofing treatments if existing, must be completely removed by mechanical scarification

or by any other effective mechanical means.

1 APPLICATION

}}Dilute 2 parts of Dr. Fixit Primeseal with 1 one part of water. This dilution will cover 7 to 8 sq.mt. Allow it to dry for

6 to 8 hrs.

}}Apply the first coat of Dr. Fixit Newcoat without any dilution at the rate of 2 m² per litre and allow it to dry before

taking up the second and third coats, the rate of application being the same.

}}In larger roofs, an open woven glass fibre mesh of 2.5 mm x 2.5 mm must be sandwiched between the first and second coat. While the 1st coat is still wet, place the fibre mesh on it. After the coat dries, start applying the 2nd coat of Dr. Fixit Newcoat. This improves the performance of the coating dramatically, to take care of all

movements in cracks and cold joints in the substrate caused by variations of high and low temperatures. This reinforcement with fibre mesh shall be extended up to the drip mould over the angle fillets.

}}The sequence of colours of Dr. Fixit Newcoat can be decided depending on the desired top coat colour.

}}In case only two colours are being used, ensure that the colour of the first and the third coat are the same. This

would ensure correct consumption of material that will deliver a total DFT of 1 mm.

}} Drying time between coats will be 6 to 8 hrs.

}} Allow the system to air cure for 7 days minimum. A total thickness of 1 to 1.2 mm must be achieved when Dr. Fixit Newcoat is dry.

}} 7 days after application of Dr. Fixit Newcoat, it should be checked for its adhesion to the substrate. For this, mark

a square of 5 cm x 5 cm, for every 200 sq. m of the area.

}}Cut the square with a knife diagonally across the square. Rip the coating and check the coating's thickness with

vernier callipers, to see if the dry film has an average thickness of 1 mm. This should be done in every 200 m². over the entire roof. Once these tests are done, reapply Newcoat over these portions, in accordance with the regular procedure.

2 MAINTENANCE & RECOATING OF DR. FIXIT NEWCOAT

Over a period of time or some years, if Dr. Fixit New coat has developed cracks on exposure to weathering or extreme temperature variations, it is extremely easy to recoat over it again, with only one coat of application of Dr. Fixit New coat. Cracks if any, can be treated by placing a fiber mesh over a recoat, while it is still wet.

After

this dries, it would need an additional coat over the mesh to strengthen the area. In rest of the area where there

are no cracks or damage on the surface, you can just go in for only one coat of Dr. Fixit New coat, after properly sanding the surface.

3 POST APPLICATION CHECKLIST

}}Conduct ponding test by filling water up to 50 mm height for 48 hours to ensure leak-free terrace.

}}Testing of the coating thickness can be carried out in an area of 1 meter X 1 meter area of the roof, to check the thickness. In this area mark at least 5 squares of 5 cm X 5 cm. With a knife, each square must be cut diagonally and rip it. The dry film thickness of the membrane shall be checked with a Vernier Calliper, which should

measure 1 mm.

**Dy. Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item No. : 2537

Credit value for old window shutters of fully glazed and removed from site and clean site

Material & Workmanship :-

Dismantled old window shutter with carefully and no damage in frame. If window shutter removed including frame than no damage to existing structure. This old shutter removed from before completion of work.

Mode of Measurement :-

On Sqmt. basis no extra payment for chokhat, frame or order miscellaneous Item

**Dy. Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item No. : 2538

Credit value for old partly pannelled & partly glazed window shutter and removed from site and clean site.

Material & Workmanship :-

Dismantled old window shutter with carefully and no damage in frame. If window shutter removed including frame than no damage to existing structure. This old shutter removed from before completion of work.

Mode of Measurement :-

On Sqmt. basis no extra payment for chokhat, frame or order miscellaneous Item

**Dy. Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item No. : 2539

Credit Value for fully pannelled shutter and removed from site and clean site..

Material & Workmanship :-

Dismantled old window shutter with carefully and no damage in frame. If window shutter removed including frame than no damage to existing structure. This old shutter removed from before completion of work.

Mode of Measurement :-

On Sqmt. basis no extra payment for chokhat, frame or order miscellaneous Item

**Dy. Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item No. : 2540

Credit Value for Door Shutter, Cupboard shutter and removed from site and clean site.

Material & Workmanship :-

Dismantled old window shutter with carefully and no damage in frame. If window shutter removed including frame than no damage to existing structure. This old shutter removed from before completion of work.

Mode of Measurement :-

On Sqmt. basis no extra payment for chokhat, frame or order miscellaneous Item

**Dy. Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item No : 2541

Credit Value for mild steel, T.M.T steel and removed from site and clean site.

Material & Workmanship :-

After removing M S or TMT steel from RCC item , it shall be stacked on one side and weight on weighbridge in the presence of Engineer in charge or his/her representative. This steel is removed from site before completion of work and the amount of weighed steel shall be deducted from respective bill.

Mode of Measurement :-

Item shall be measured and paid on Kg. basis.

**Dy. Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item No : 2542

Credit value for M.S. Grill and removed from site and clean site.

Material & Workmanship :-

After removing M.S. Grill from existing position it shall be stacked on one side and weight on weighbridge in the presence of Engineer in charge or his/her representative. This steel is removed from site before completion of work and the amount of weighed steel shall be deducted from respective bill.

Mode of measurement and payment:-

Item shall be measured and paid on Kg. basis.

**Dy. Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

Item No 2557

Cleaning of all types of Mud including overflow of septic tank / Inspection chamber overflow or soil waste mud with Mechanical mud pump collecting it to a excavated sump including loading to suitable vehicle like Tractor / Trolley or tanker. Transporting and unloading to suitable place with cleaning of surface in all respected and spreading of dry good quality murrum / sand and finally cleaning the surface.

All types of Mud coming out of chamber due to overflow of septic tank / chamber shall be collected and unloaded through suitable vehicle like tractor / trolley or tanker to a designated place for it. Surrounding area shall be cleaned with all respect and spreading of dry good quality murrum / sand and finally cleaning the surface.

Mode Of Measurement and Paid : 1 trip of vehicle

**Dy. Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

**Executive Engineer
Project Implementation Unit
Zone-II,Junagadh**

SECTION - 6
FORM OF BID

FORM OF BID

Description of the Works:

A.R.C. year 2026-27 for civil works for various health care facilities in Junagadh City,

Dist.Junagadh..-----

----- BID

To :

Address :

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 in the Contact within the time stated in the document.
3. We agree to abide by this Bid for the period of 120 Days from the date fixed for receiving the same, and it shall remain binding upon it and may be accepted at any time before the expiration of thatperiod.
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 or any tender you may receive.

Datedthis----- dayof----- 20

Signature ----- in the capacity of -----

----- duly authorized to sign bids for and on behalf of -----

(in block capitals or typed)

Address

Witness

Address

Occupation

SECTION - 7
BILL OF QUANTITIES

BILL OF QUANTITIES

Preamble

1. The bill of Quantities shall be read in conjunction with the Instructions to Bidder, Conditions of Contract, Technical Specifications and Drawings.
2. The quantities given in the Bill of Quantities are estimated and provisional, and are given to provide a common basis for bidding. 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, where applicable, and otherwise at such rates and prices as the Engineer may fix within the terms of the Contract.
3. The rates and 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, layout, 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 rates and prices shall be quoted entirely in Indian Currency.
5. A rate or prices shall be entered against each item in the Bill Quantities, whether quantities are stated or not. The cost of Items against which 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 (in case of Item rate contract).
6. The whole cost of complying with the provisions of the Contract shall be included in the items provided in the priced Bill of Quantities, and where no Items are provided the cost shall be deemed to be distributed among the rates and prices entered for the related items of Work.
7. General direction and descriptions of work and materials are not necessarily repeated or summarized in the Bill of Quantities. References to the relevant sections of the contract documentation shall be made before entering rates or prices against each item in the Bill of Quantities.
8. The method of completed work of payment shall be in accordance with the specification for Road and Bridge works. For building works specifications for building are to be followed.
9. Errors will be corrected by the Employer for any arithmetic errors pursuant to **Clause 29** of the Instructions to Bidder.
10. Rock is defined as all materials which, in the opinion of the Engineer, required blasting, or the use of metal wedges and sledgehammers, or the use of compressed air drilling for its removal, and which cannot be extracted by ripping with a tractor of at least 150 kw with a single rear mounted heavy duty ripper.

BILL OF QUANTITIES

(A) Percentage Rate Tender (Up to INR 50 Cr.) SOR Year 20__-20__

Item No	Description of Item (with brief specification and reference to book of specifications)	Quantity	Unit	Rate In figures	Amount

I/We am/are willing to carry out the work at... % above/below percent (Should be written in figures and words) of the estimated rate mentioned above. Amount of my /our tender works out as under.

Estimated amount put to tender

Estimated amount put to tender

Deduct.....% below

Add.....% Above

Net

Net

In words

In words

(B) For Item Rate Tender (For above INR 50 Cr.): SOR Year 20__-20__

Item No	Description of Item (with brief specification and reference to book of specifications)	Quantity	Unit	Rate		Amount
				In figures	In Words	

(A) Total Tendered Amount

(B) Rebate on above tendered amount (if any) % (in figure)
(in words).....

(C) Net Tendered Amount (A-B) (in figure)
(in words).....

#

1	The Contractor shall exhibit a board with detailed specification and details of work as directed by the Engineer-In-Charge for which no extra payment shall be made.
2	The labour cess will be deducted as per prevailing rules i.e. 1% of the work done.
3	GST and Income tax TDS will be deducted at a source while making payments of bills
4	In all R.C.C. Items in Rate Analysis Standard Cement Consumption has been taken as per Govt. G.R.: PRC-10/2017 Cement Consumption/16/C Date:11/05/2017 as stated in S.O.R. therefore in R.C.C. items where there is a change as per actual mix design the cost of difference of cement consumption have been deducted from the rate of original item at the rate of input rate mentioned in all the tender. Input rate is Rs. _____ MT.
5	GST extra applicable in case of work based on SOR 2023-24 only.

SECTION - 8

SECURITIES AND OTHER FORMS

BID SECURITY (BANK GUARANTEE)

WHEREAS, ----- (name of Bidder) (hereinafter called the "The Bidder") has submitted his bid Dated ----- (Date) for the construction of ----- (Name of Contractor hereinafter called "the Bid")

KNOWALLPEOPLEbythese presents that We -----
(name of Bank) of ----- (name of country) having our registered office at ----- (hereinafter called "the bank") are bound unto PIU General Fund A/C 11-114 (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 these obligations are:

(1) If after Bid opening the Bidder withdraws his bid during the period of Bid validity specified in the Form of Bid;

Or

(2) If the Bidder has been notified of 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 refuse 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 (Correction of Errors)

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 conditions or conditions.

This Guarantee will remain in force up to and including the date----- **
days after the deadline for submission of Bids as such the 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 (Bid Security) 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 SECURITY

TO,
Principal Secretary, Health and Family Welfare Department (Name of Employer)
Chief Engineer (PIU), 4th Floor, NHM, PIU, RDD Bhavan, Civil Hospital Campus, Sector-12,
Gandhinagar (Address of Employer)

WHEREAS ----- (name and address of contractor) (hereafter called "the Contractor") has undertaken, in pursuance of Contracts No. ----- dates ----- to execute -----
----- (name of Contract and brief description of Works) (hereinafter called "The Contract")

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with his obligation in accordance with the Contract.

AND WHEREAS we have agreed to give the Contractors 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 types and 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 it with the demand.

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

This guarantee shall be valid until 60 days from the date of expiring of the Defect Liabilities period.

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 denominated in Indian Rupees.

ADDITIONAL PERFORMANCE SECURITY

[Clause 34.1. (A)]

TO,

Principal Secretary, Health and Family Welfare Department (Name of Employer)
Chief Engineer (PIU), 4th Floor, NHM, PIU, RDD Bhavan, Civil Hospital Campus, Sector-12,
Gandhinagar (Address of Employer)

WHEREAS ----- (Name and address of contractor) (hereafter called "The Contractor") has undertaken, in pursuance of Contracts No. ----- dates ----- to execute -----
----- (Name of Contract and brief description of Works) (hereinafter called "The Contract")

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with his obligation in accordance with the Contract.

AND WHEREAS we have agreed to give the Contractors 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 types and proportions of currencies in which the Contract prices 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 it with the demand

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

This guarantee shall be valid until **28 days** from the project completion date.

Signature and Seal of the guarantor -----

Name of Bank -----

Address -----

Date -----

BANK GUARANTEE FOR ADVANCE PAYMENT

TO,

Principal Secretary, Health and Family Welfare Department (Name of Employer)

Chief Engineer (PIU), 4th Floor, NHM, PIU, RDD Bhavan, Civil Hospital Campus, Sector-12, Gandhinagar (Address of Employer)

----- (Name of Contractor)

Gentlemen:

In accordance with the provisions of the Conditions of Contract, sub-clause 51.1 ("Advance Payment") of the above-mentioned Contract,-----
----- (name and address of Contractor) (hereinafter called "the Contractor") shall deposit with (name of Employer) a bank guarantee his proper and faithful performance under the said Clause of the Contract in an amount of--- (amount of Guarantee)*----- in words).

We, the ----- (bank of financial institution), as instructed by the Contractor, agree unconditionally and irrevocably to guarantee as primary obligator and not as Surety merely, the payment to-----
(name of Employer) on his first demand without whatsoever right of obligation on our part and without his first claim to the Contractor, in the amount not exceeding---
----- (amount of guarantee)* ----- (in words)

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

This guarantee shall remain valid and in full effect from the date of the advance payment under the Contract until ----- (name of employer) receives full repayment of the same amount from the contractor.

YOUR'S TRULY

Signature and Seal _____
Name of Bank/Financial Institution _____
Address _____
Date _____

* An amount shall be inserted by that Bank or Financial Institution representing the amount of the Advance Payment, and denominated in Indian Rupees.

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 dated _____ 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.

You are requested to furnish performance security, in the form detailed in para 34.1 of ITB for an amount equivalent to Rs. _____ within **10 days** of the receipt of this letter of acceptance up to beyond **60 days** from the date of expiry of defects Liability period i.e. upto _____ and the Additional Performance Security for an amount equivalent to Rs. _____ shall be valid beyond 28 (twenty-eight) days of Project Completion Date i.e. upto _____ 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 Employer

* Delete "Corrected and" or and modified if only one of these actions applies. Delete as corrected and modified in accordance with the Instructions to Bidders, if corrections or modifications have not been affected.

Issue of Notice to proceed with the work

(Letterhead of the Employer)

----- (date)

To,

_____(Name and address of the Contractor)

Dear Sirs,

Pursuant to your furnishing the requisite security 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 on 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 contract (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 construed as part of this Agreement.
2. In Consideration of the payment 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 contracts.
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 read and construed as part of this Agreement viz
 - i) letter of Acceptance
 - ii) Notice to proceed with the works:
 - iii) Contractor's Bid

- iv) Conditions of contract: General and Special
- v) Contract Data
- vi) Additional conditions
- vii) Drawings
- viii) Bill of Quantities and
- ix) Any other documents listed in the Contract data as forming part of the Contract.

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

The Commonseal of _____

Was hereunto affixed in the presence of:

Signed, sealed and Delivered by the said _____

In the presence of

Binding signature of Employer _____

Binding Signature of Contractor _____

UNDERTAKING
(For Investment)

I, the undersigned do hereby undertake that our firm M/s
..... would invest a minimum cash up
to **25%** of the value of the work during implementation of the contract.

(Signed by an Authorized officer of the firm)

Title of officer

Name of firm

DATE

UNDERTAKING
(For Validity)

I, the undersigned do hereby undertake that our firm M/s.....
..... agree to abide by this bid for a period days
for 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.

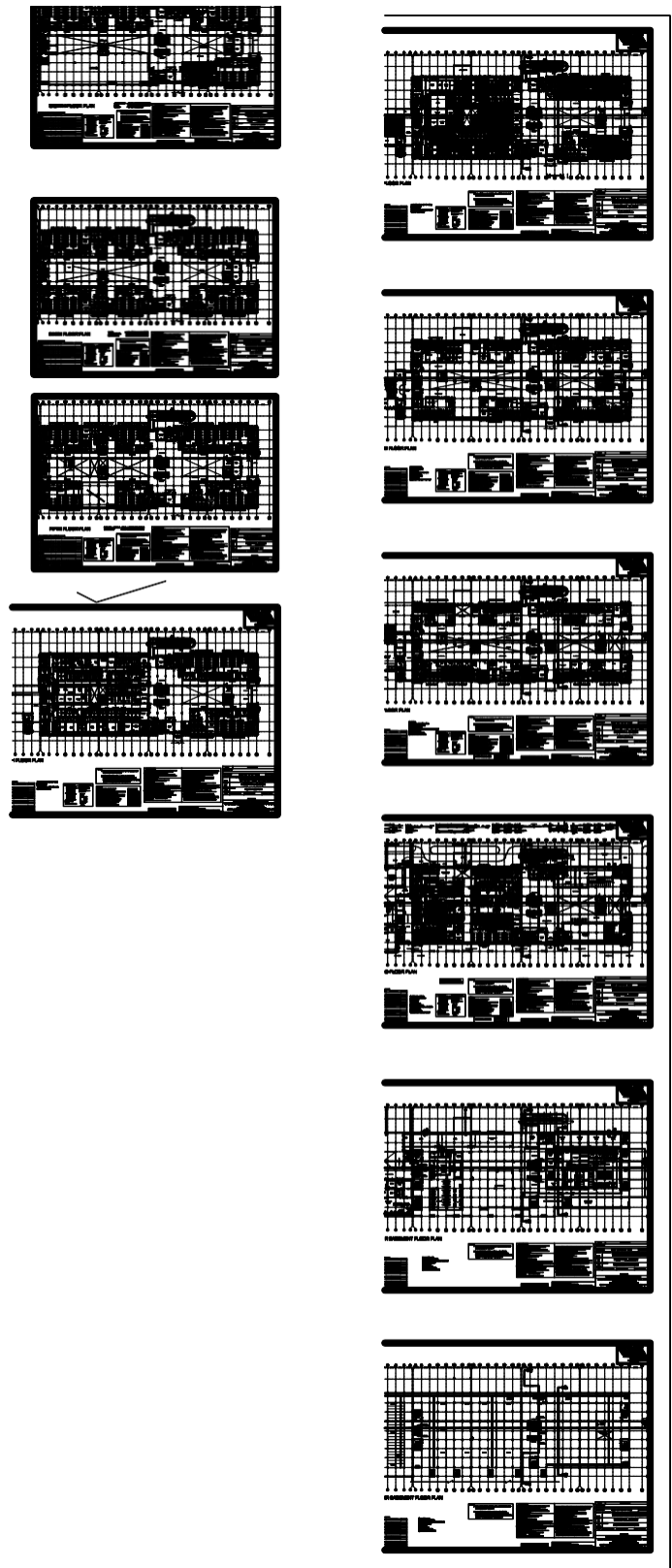
(Signed by an Authorized officer of the firm)

Title of officer

Name of firm

DATE

SECTION - 9
DRAWINGS



SECTION - 10
DOCUMENTS TO BE FURNISHED BY BIDDER