

STANDARD BIDDING DOCUMENT

PROCUREMENT OF

CIVIL WORKS



सत्यमेव जयते

Name of Work: **EPC Contract for Providing Irrigation Water Facility to Filling Kelamul Village Tank by Lifting Water from KLBMC at Ch.8.20 km of Taluka Kadana, Dist. Mahisagar.**

Estimated Cost: **Rs. 2,29,59,228.00/-**

Period of completion: **11 Month**

Dy Executive Engineer
KLBMC Sub Division
Lunawada

Executive Engineer
Kadana Division No. 1
Diwada Colony

Superintending Engineer
Panam Project Circle,
Godhara

GOVERNMENT OF GUJARAT
Narmada, Water Resources, Water Supply and Kalpsar Department,
Panam Project Circle,
Godhara.

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INVITATION FOR BID (IFB)

NATIONAL COMPETITIVE BIDDING

1. The **Executive Engineer, Kadana Division No 1, Diwada Colony** 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

Sr. No.	Name of work	Approximate value of works (Rs.)	Bid security (Rs.)/EMD (Rs)	Cost of document/ Tender Fee (Rs)	Period of completion	Class of Registration / Category of contractor if Required
1	2	3	4	5	6	7
1	EPC Contract for Providing Irrigation Water Facility to Filling Kelamul Village Tank by Lifting Water from KLBMC at Ch.8.20 km of Taluka Kadana, Dist. Mahisagar.	2,29,59,228.00/-	2,30,000/-	3600/-	11 Month	"B" Class & Above

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 **Kadana Division No 1, Diwada Colony** and in favour of '**Executive Engineer, Kadana Division No 1, Diwada Colony**'. Once the Bid is received online, Bid Document / Tender Fee will not be refundable. As Per GoG R&B Department's Circular No. PARACH/102/000/IB/221/(59)/C Dated.24/01/2007

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 # '**Executive Engineer, Kadana Division No 1, Diwada Colony**', within 7 Days from the last day of bid submission.

Penaltative action for not submitting Demand Draft / FDR / Bank Guarantee in original to Executive Engineer / Tender Inviting Authority by bidder shall be initiated. WRD GR No. PRC-102014-1-MICell-K.1 Dated: 29/10/2014.

4. Bids received online, will be opened on the time, date and place as specified in the online NIT at website <https://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 on _____ at _____ hrs. at the office of **Superintending Engineer, Panam Project Circle, Godhara, Civil lines road, Godhara.** to clarify the issues and to answer questions on any matter that may 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 Rs. 7.5 crore (WRD Works), Rs. 7.0 crore (ROAD/

BRIDGE/ BUILDING WORKS), Rs. 0.5 Crore (Electrical Works) kindly refer to GoG NWRWS & K Department's Circular No. Paracha/1097/1397(11)/pa.fa. / MICELL(k-1) dated 18/01/2018 and Dated 30/09/2022

For the works costing under Rs. 7.5 crore for Construction work of Water Resources Department, Rs. 7.0 crore for Roads, Bridges and Building and Rs. 0.50 crore for Electrical work. The 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
- (ii) Bid Security / EMD or Valid EMD Exemption Certificate of Appropriate Class of Registration of Approved Contractors.
- (iii) Registration Certificate of Appropriate Class (B & Above Class)
- ~~(iv) Registration Certificate of special category — Road/Building and Category I/II/III, if required~~
- (v) GST Number and Pan card.
- (vi) Work Experience certificate. (Form 3A or completion certificate)
- (vii) Other Documents (As per NIT Sheet)

SECTION - 1
INSTRUCTIONS TO BIDDERS
(ITB)

Section 1: Instructions to Bidders

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A. GENERAL

1. Scope of Bid

- 1.1 The Employer (Named in Appendix to ITB) 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.
- 1.2 The successful bidder will be expected to complete the works by the intended completion date specified in the Contract data.
- 1.3 Throughout these bidding documents, the terms ‘bid’ and ‘tender’ and their derivatives (bidder/ tenderer, bid / tender, bidding/ tendering, etc.) are synonymous.
- 1.4 The project is proposed to be implemented on Engineering, Procurement and Commissioning (EPC) – Turnkey basis on single point responsibility. Narmada, Water Resources, Water Supply & Kalpsar Department (Govt. of Gujarat) shall give the necessary design parameters for different components based on the conceptual design of the project. The bidder shall be responsible for the detailed engineering, designs, getting approval of the design, technical datasheet, QAP etc. for all components of the project, procurement of all materials and equipment, pipe laying, jointing, testing, construction and installation of all Civil, Mechanical, Electrical and Instrumentation Control works and systems as per the work specifications provided in the bid documents, and commissioning of the project on turnkey basis followed by operation and maintenance of the entire project in the package for a period of ten years from the date of commissioning of the system. The contractor must prepare detail design of his component, get recommended by TPI fixed by department and same shall be approved from department.
- 1.5 The major components of the project covered under this tender package comprises of survey, investigations, design, procurement, erection/installation and construction of Intake structure, pump house with pumping machinery and electrical work, procure & laying of pipeline with associated civil, mechanical, electrical and instrumentation works etc. The work of this pipeline including installation of valves, chambers, structures etc. are to be executed on the land under “Right of Use” permission. The agency shall construct the chambers and other ancillary structures for the pipelines on this land at their own cost. No extra payment shall be made in this respect.

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 Pre-Qualification) As Per GoG NWRWS & K Department's Circular No. Paracha/1097/1397(11)/pa.fa./MICELL(k-1) Dated 18/01/2018

Please refer para 4.5.3 of this document.

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	2026 - 2027	1.00
-1	2025 - 2026	1.10
-2	2024 - 2025	1.21
-3	2023 - 2024	1.33
-4	2022 - 2023	1.46
-5	2021 - 2022	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) Achieved a minimum annual financial turnover of Rs..... crore 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.
- (b) Experience in successfully completing or substantially completing at least one contract of similar work (.....) of at least 40 percent of the value of proposed contract with in the last five financial 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 sub contractor, 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 if work executed jointly the reverse as per the scope of work define in Joint Venture agreement

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.

(the experience certificate should be signed by the officer not below the rank of EE)

- (c) Contractor should have completed 60% of quantity of principal items of work like concrete, earth work, pipeline, pumping station etc. within last five financial years. Certificate of competent authority of work done with detail shall be produced.

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 financial years. A consistent history of arbitration awards/judgements against the Applicant or any partner of a joint venture may result in failure of the applicant. If the details of Litigation History are hidden by the applicant and later on it comes to knowledge of the employer the bidder shall be disqualified for the proposed work and other appropriate actions shall be taken against the bidder.

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.

4.5.10 The bidder who has applied for corporate Debt Restructuring (CDR) / facing recovery proceedings from financial institutions / facing winding up processing / those under BIFR in the last 5 financial year shall be considered for bid qualification. However, if the bank / financial institution has accepted the proposal of debt restructuring on or before the last date of online submission, the same shall be considered for further evaluation. An affidavit by bidder along with certificate from bank must be produced in such cases. In case of Joint Venture agreement, this provision shall be applicable for both lead partner and JV partner.

4.6 **#JOINT VENTURE: (Maximum 3 Members i.e., 1 Lead & 2 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 partner shall meet not less than **50%** of all criteria given in para 4.5.3 & 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%** of the qualifying criteria in para 4.5.3 & 4.5.6 above.
 - (ii) Individually each member must satisfy the requirements of para 4.5.7 & 4.5.8 above.
- (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.**

The bidders must have available bid capacity more than the amount put to tender. (i.e., **2,29,59,228.00/-**) The available bid capacity will be calculated as under:

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

A = Maximum value of work executed in any one year during the last five years (updated to the price level of the year indicated in appendix- i.e., from 2021-22 to 2025-26) 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: -

For the purpose of updating amount of works executed in any year, procedure narrated in above Para 4.5.3.

Existing commitments shall include all such works for which letters of acceptance of the tenders have been received by bidder till the date on which bidder has submitted his bid for the proposed work.

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.

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.

B. BIDDING DOCUMENTS

8. Content of Bidding Documents

- 8.1 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 (Attached as Enclosure)	II
6	Form of Bid	I
7	Bill of Quantities	
8	Securities and other forms	
9	Drawings	IV
10	Documents to be furnished by bidder	I
11	Enclosures I- Vendor List	I
12	Enclosures II- Technical Specification	II (A), II (B), II (C), II (D), II (E)
13	Enclosures III- Price Bid	III

- 8.2 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).
- 8.3 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.

9. Clarification Bidding Documents

- 9.1 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. tender.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.

10. Amendment of Bidding Documents

- 10.1 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

11. Language of the Bid

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

12. Documents Comprising the Bid

12.1 The bid 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

13. Bid Prices

- 13.1 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.
- 13.2 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.

13.3 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)

13.4 Deleted

13.5 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)**

14. Currencies of Bid and Payment

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

15. Bid Validity

15.1 Bids shall remain valid for a period of not less than 120 days after the deadline date for bid submission specified in Clause 20.

15.2 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 favour 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. (Finance Department's Circular No. FD/MSM/e-file/4/2024/2859/D.M.O. Date 01/05/2025).

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.**

- 16.2 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 = 165 Days
- 16.3 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.
- 16.4 The Bid Security of unsuccessful bidders will be returned within 28 days of the end of the bid validity period specified in Sub-Clause 15.1
- 16.5 The Bid Security of the successful bidder will be discharged when the bidder has signed the Agreement and furnished the required Performance Security.
- 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 or
 - (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 Performance Security.
 - (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/22/2017/639/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 working day.
- 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 number 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.
- 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 (Finance Department’s Circular No. FD/MSM/e-file/4/2024/2859/D.M.O. Date 01/05/2025).

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 **Executive Engineer, Kadana Division No 1, Diwada Colony.** [CL.1.1]
2. The last five financial years.
 1. **2025-2026**
 2. **2024-2025**
 3. **2023-2024**
 4. **2022-2023**
 5. **2021-2022**
3. This Annual Financial Turnover Amount is Rs. [CL.4.5.3(a)]
4. Value of Work is Rs. **2,29,59,228.00/-**
5. Deleted
6. The cost of electric work is Rs. **3,15,453.00/-**
7. The cost of water supply / sanitary works is Rs. **1,74,69,993.00/-**
8. Liquid assets and / or availability of credit facilities is Rs. **57,39,807/-** [CL.4.5.6]
9. Price level of the financial year **2026-27** [CL.4.5.2]
10. ~~The pre-bid meeting will take place at: **Superintending Engineer, Panam Project Circle, Godhara, Civil lines road, Godhara. Date & time is as per NIT.**~~ [CL.9.2.1]
11. The technical Bid will be opened at the office of the **Superintending Engineer, Panam Project Circle, Godhara** on dt _____ at _____Hr. as per NIT.
12. Address of the Employer: **Executive Engineer, Kadana Division No 1, Irrigation department, Diwada colony, Ta. Kadana, Dist. Mahisagar. 389250.**
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 as stated on online NIT at website <https://tender.nprocure.com> [CL.23.1]
16. The Bank Draft in favor of "**Executive Engineer, Kadana Division No 1, Diwada Colony.**"
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	2026-2027	1.00
-1	2025-2026	1.10
-2	2024-2025	1.21
-3	2023-2024	1.33
-4	2022-2023	1.46
-5	2021-2022	1.61

**#LIST OF MINIMUM KEY PLANT & EQUIPMENT TO BE DEPLOYED ON
CONTRACT WORK [Reference CL. 4.5.5]**

1.	Excavator	:	1 Nos.
2.	Transit mixture with capacity not less than 5 Cum & pumps	:	1 Nos.
3.	Water Tanker (10,000-litre Capacity)	:	1 Nos.
4.	Generator (Min 40 KVA Capacity)	:	1 Nos.
5.	Water Pump (Min.5HP each)	:	1 Nos.
6.	Needle vibrator	:	1 Nos.
7.	Roller as Compactor (10 Ton)	:	1 Nos.
8.	Crane (10 Ton to 35 Ton)	:	1 Nos.
9.	Shuttering (Steel formwork)	:	50 m ²
10.	Steel props (with accessories)	:	50 Nos.

Note: The contractor shall without any additional payment make provisions and provide for site office space including maintenance over a period of project span for employer's representatives of decent standards having reception/office boy area; Employer room; Engineer room; Manager rooms (two); Staff area with 3-5 workstations; Meeting room (15 pax); Bathrooms; Male & female toilet with fittings, fixtures having water supply & drainage; Pantry; store for samples; suitable furniture & storage cabinets; AC in all habitable areas; electrical fittings and fixtures; and laboratory room with necessary lab testing equipment.

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	Location	Age of Machinery (maximum 15 years)	Make	Capacity	Approximate Value	Remark
1	2(a)	2(b)	3	4	5	6	7

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. Following minimum listed staff in the table shall be deployed when the cost of the work to be executed is more than Rs.50 lakhs.
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.50 lakhs.
3. Minimum Two Diploma Civil Engineer when the cost of work is less than Rs.15 lakhs but more than Rs.5 lakhs.
4. Minimum One 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 this work.

In case the contractor or partner of the contractor firm is a Civil Graduate Engineer, Employment of a separate Engineer will not be necessary provided that the Engineer partner himself attends the execution of the work on the site.

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.**

Sr. No	Designation	Educational Qualification	Experience	No. of Persons to be deployed on project
1	Project Manager	B.E. Civil	Minimum 10+ years of experience in similar nature of work	1
2	Senior Quality Control Engineer	B.E. Civil	Minimum 5+ years of experience in similar nature of work	1
3	Site Engineer (MECHANICAL)	B.E. Mechanical	Minimum 5+ years of experience in similar nature of work	1
4	Site Engineer (Electrical/Instrumentation)	B.E. Electrical/Instrumentation	Minimum 5+ years of experience in similar nature of work	1
5	Civil Supervisor	Diploma in Civil Engineering	Minimum 5+ years of experience	1
6	Mechanical Supervisor	Diploma in Mechanical Engineering	Minimum 5+ years of experience	1

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 2021-2022
Work performed in the last five years 2022-2023
(In Rs. Lakhs) 2023-2024
2024-2025
2025-2026

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 with address and email ID	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.

1.3.2 Experience of O&M of lift irrigation / water supply pipe line project with pumping station.

Sr No.	Name of Work	Cost of Project	Starting Date of O&M	Completion Date of O&M	Duration of O&M

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

Note:

1. Certificate from the client regarding satisfactory completion of the O & M Shall be furnished.

2. Only experience in similar nature of work will be considered for evaluation.
3. All the certificate and supporting documents should be duly signed and Self attested
4. Only Govt./Semi Govt /Public sector undertaking work experience will be considered for evaluation purpose.

1.3.3 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 of work performed km		Remarks* (Indicate contract ref)
			MS/DI pipe supply, laying and commissioning		
			Dia (m)	Length (km)	
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:

Description of 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
1	2	3	4	5	6	7	8

*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.

Item of Equipment	Requirement		Availability Proposals			Remarks (from whom to be purchased)
	No	Capacity	Owned/ Leased to be procured	Nos/. Capacity	Age/ Conditions	

- 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.

Position	Name	Qualification	Year of Experience (General)	Year of experience in the proposed position

- 1.7 Proposed sub-contract and firms involved.

Sections of the works	Value of Sub-Contractor	Sub-Contractor (Name & Address)	Experience in similar 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, telex, and fax numbers 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 is m/s **HOMELAND ENGINEERS**.)

- 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)

1.14 Programme

2. Deleted

3. Additional Requirements

3.1 Bidders should provide any additional information required to fulfil 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.

(Signature)

Name of Bank

Senior Bank Manager

Address of the Bank

AFFIDAVIT

1. I, the undersigned, do hereby certify that all the statements made in the required attachments are true and correct.
2. The undersigned also hereby certifies that neither our firm M/s. _____ have 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 is the party who will employ the Contractor to carry out the Works.

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

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. It is the date when the Contractor shall commence execution of the works. It does not necessarily coincide with any of the Site Possession Dates.

A **Subcontractor** is a person or corporate body who has a Contract with the Contractor to carry out a part of the 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 of Contract.
- 2.2 If sectional completion is specified in the Contract Data, references in the Conditions of Contract to the Works, the Completion date, and Intended Completion Date apply to any Section of the Works (other than references to the Completion Date and Intended Completion date for the whole works)
- 2.3 The documents forming the Contract shall be interpreted in the following order of priority.

- (1) Agreement
- (2) Letter of Acceptance, notice to proceed with works.
- (3) Contractor's Bid
- (4) Contract Data
- (5) Conditions of Contract including Conditions of Contract
- (6) Specifications
- (7) Drawings
- (8) Bills of quantities and
- (9) Any other document listed in the Contract Data as forming part of the Contract.

3. Language and Law

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

4. Engineers Decisions

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

5. Delegation

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

6. Communications

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

7. Sub-Contracting

- 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 not allowed.**
- 7.2 The sub-contractor must be registered in appropriate class and category for the part of work to be subcontracted.

8. Other Contractors

- 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 another 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 such modifications.

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.

- 13.3 If the Contractor does not provide any of the policies and certificates required, the Employer may affect the insurance which the Contractor should have provided and recover the premiums the Employer has paid from payments otherwise due to the Contractor or, if no payment is due, the payment of the premiums shall be a debt due.
- 13.4 Alterations to the terms of an insurance shall not be made without the approval of the Engineer.
- 13.5 Both parties shall comply with any conditions of the insurance policies.

14.Site Investigation 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 30 days 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 (Panam Project Circle, Godhara)** 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 (**Panam Project Circle, Godhara**).

24.2

- a) For the work up to Rs.100 Cr., if any of the parties is not satisfied with the decision of the **#Superintending Engineer (Panam Project Circle, Godhara)**, both the parties have to refer to the Chief Engineer concern for the conciliation process.
- b) For the work more than Rs.100 Cr., if any of the parties is not satisfied with the decision of the **#Superintending Engineer (Panam Project Circle, Godhara)**, both the parties have to refer to the **#Secretary, Water Resources 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 Disputers

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

26.Deleted

B. TIME CONTROL

27. Programme

- 27.1 Within the time stated in the Contract Data the Contractor shall submit to the Engineer for approval a Programme showing the general methods, arrangements orders, and timing for all the activities in the works along with monthly cash flow forecast.
- 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 the activities.
- 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 Compensations events.

28. Extension of the Intended Completion Date

- 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 additional cost.
- 28.2 The Engineer shall decide whether and by how much to extend the Intended Completion Date within 35 days of the Contractor asking the Engineer for a decision upon the effect of a compensation event or Variation and submitting full supporting information. If the Contractor has failed to give early warning of a delay or has failed to cooperate in dealing with a delay, the delay by this failure shall not be considered in assessing the new Intended Completion Date.
- 28.3 The Engineer shall within 14 days of receiving full justification from the contractor for extension of Intended Completion Date refer to the Employer his decision. The employer shall in not more than 21 days communicate to the engineer the acceptance or otherwise of the Engineer's decision. If the employer fails to give his acceptance, the Engineer shall not grant the extension and the contractor may refer the matter under Clause 24.1

29. Deleted

30. Delays Ordered by the Engineer

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

31.Management Meetings

- 31.1 Either the Engineer or the Contractor may require the other to attend a management meeting. The business of a management meeting shall be to review the plans for remaining work and to deal with matters raised in accordance with the early warning procedure.
- 31.2 The Engineer shall record the business of management meetings and is to provide copies of his record to those attending the meeting and to the Employer. The responsibility of the parties for actions to be taken is to be decided by the Engineer either at the management meeting or after the management meeting and stated in writing to all who attended the meeting.

32.Early Warning

- 32.1 The Contractor is to warn the Engineer at the earliest opportunity of specific likely future events or circumstances that may adversely affect the quality of the work, increase the Contract price or delay the execution of works. The Engineer may require the contractor to provide an estimate of the expected effect of the future event or circumstance on the contract price and completion date. The estimate is to be provided by the Contractor as soon as reasonably possible.
- 32.2 The Contractor shall cooperate with the Engineer in making and considering proposals for how the effect of such an event or circumstance can be avoided or reduced by anyone involved in the work and in carrying out any resulting instruction of the Engineer.

C. QUALITY CONTROL

33. Identifying Defects/ 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 works of WRD Except Building

- (a) (1) 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) (1) For WRD works likes Check Dam/ Canal / Drainage / Road Structure tender amount from RS. 50,000 to 10,00,000, the defect liability period shall be 12 months from the certified date of completion.

(2) For WRD work except likes Check Dam/ Canal / Drainage / Road Structure tender amount from RS. 50,000 to 10,00,000, the defect liability period shall be 6 months from the certified date of completion.
- (c) (1) For WRD works likes Check Dam/ Canal / Drainage / Road Structure tender amount more than RS. 10,00,000, the defect liability period shall be 3 Years from the certified date of completion.

(2) For WRD work except likes Check Dam/ Canal / Drainage / Road Structure tender amount from RS. 10,00,000 to 1 Crore, the defect liability period shall be 12 months from the certified date of completion.
- (d) (1) For all WRD works of tender amount more than RS. 1 Crore, the defect liability period shall be 3 Years from the certified date of completion

B. For Building works of WRD: -

For Building works of WRD, Follow the R&B Circular dated.03/12/2009

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.

WRD Circular No. Matas/102013/MICELL(K-1) Dated 13/12/2013

33.2 For Road works:

Free maintenance guarantee period for works of **Road/Bridge construction.**

- (a) For resurfacing work of road free maintenance guarantee period one year from the

date of completion.

- (b) In case of widening of the road/strengthening of the road/bridge, the contractor shall have to give four years free maintenance guarantee from the certified date of completion. During this period the contractor shall visit the site every six months along with the concerned Section Officer / Deputy Executive Engineer and will examine the work already carried out in this contract like road work, jungle cutting, side shoulders, side gutter, road furniture, patta etc. and will prepare Km. wise inspection report duly signed by all concerned and any defect observed shall be done within 15 days by the contractor at his risk and cost as per the direction of Engineer in charge. The contractor needs to do videography of these visits and require to submit at the time of release of FMG. If B.T. the surface during the maintenance period of 4 years is worn out then agency shall have to provide renewal coating as per tender item as directed by the Engineer-in-charge. The amount equivalent to 5% of each running bill shall be withheld and will be released after the free maintenance guarantee period (i.e., 4 years) is over.

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) The flakiness and elongation index (combined) for coarse aggregates under no circumstances shall exceed the allowable limit set forth in the relevant clause for the material in question.
- (2) 2% of the amount eligible for the payment of bituminous items shall be withheld till the miscellaneous items like earthwork in embankment / cutting for side shoulders, side gutters, kilometre / indicator / guard stones, sign boards etc. are completed in all respect by the contractor. After completion of the miscellaneous items, the above said 2% withheld amount shall be released.

(Govt. of Gujarat's G.R. No.: TNC-10-2013-3(Part-3)/C, Dtd. 13/12/2013).

- (3) Videography for the surface under Maintenance Guarantee is to be done as per Govt. letter No.: SSR/10/2015-16/26/C, Dtd. 26/11/15 for the work costing more than Rs. 5.00 Crore.
- (4) Setting up of adequate laboratory & deployment of quality engineers.

The contractor shall have to set up the laboratory with adequate equipment. Till the setting up of adequate laboratory is completed & reported of this to the engineer (subject to due verification by engineer's representative) by contractor in writing, Rs.2,00,000/- shall be withheld. The qualified quality Engineer shall be deployed exclusively for this contract by the contractors. If quality Engineer is not deployed by contractor within one month after the date of work order, the amount equivalent to Rs.20,000 per month shall be recovered till the actual deployment of quality engineer. The amount so recovered towards the deployment of quality engineers shall not be refunded.

- (5) Asphalt work will have to be cross checked as per G.R. No.: RGN/60/2006/35/C, dtd.31/05/07 before final bill is paid.
- (6) Maintenance during Construction Period

During the Construction Period, the Contractor shall maintain, at his own risk and cost, the existing lane(s) of the road so that the traffic worthiness and safety thereof are at no time materially inferior as compared to their condition 10 (ten) days prior to the date of the Agreement, and shall undertake the necessary repair and maintenance works for this purpose; provided that the Contractor may, at his cost, interrupt and divert the flow of traffic if such interruption and diversion is necessary for the efficient progress of works and conforms to Good Industry Practice; provided 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 for works up to Rs. 10 crore of estimate cost should be deducted from R.A. Bill of the contractor for testing the quality of material workmanship. Whereas for estimated cost of works more than 10 crores, the charges for testing of quality of material workmanship shall be deducted from R.A. bill of contractor as per actual charges. As Per GoG NWRWS & K Department's Circular No. PARCH/132023/401/MICELL Dated: 05/10/2023. (Cancel as per NWEWSKD/GCA/e-file/13/2023/13648/section K7, Dt-16/03/2024)
- 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 in charge.

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 main work.

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 is more than one comparable item, 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.

40.2 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.

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

42.2 The Engineer shall check the Contractor's monthly statement within 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).

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

42.4 The value of work executed shall comprise the value of the quantities of the items in the

Bill of Quantities completed.

- 42.5 The value of work executed shall include the valuation of variations and compensation events.
- 42.6 The Engineer may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.

43. Payments

- 43.1 Payments shall be adjusted for deductions for advance payments, retention, other recoveries in terms of the contract and taxes at source, as applicable under the law. The Employer shall pay the Contractor the amounts certified by the Engineer within 28 days of the date of each certificate.
- 43.2 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.
- 43.3 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

- 44.1 The following are compensation Events unless they are caused by the Contractor:
 - (a) The Employer does not give access to a part of the Site by the site Possession date stated in Contract data to the Contractor
- 44.2 In case of compensation event occurs and it prevents the work being completed beyond the Intended Completion Date then Authority will approve EOT 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.

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 to the work done during each month
 R = Total value of work done during the month. It would include the amount of secured advance granted, if any, during the month less the amount of secured advance recovered, if any during the month. It will exclude value for works executed under variations for which price adjustment will be worked separately based on the terms mutually agreed.

- 47.2 To the extent that full compensation for any rise or fall in costs to the contractor is not covered by the provisions of this or other 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.
- 48.2 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.
- 48.3 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

- 49.1 The Contractor shall pay liquidated damages to the Employer at the rate per day stated in the Contract Data for each day that the Completion Date is later than the Intended

Completion Date (for the whole 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.

- 49.2 If the Intended Completion Date is extended after liquidated damages have been paid, the Engineer shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment certificate. The Contractor shall not be entitled for any interest on the over payment calculated from the date of payment to the date of repayment.
- 49.3 If the contractor fails to comply with the time for completion as stipulated in the tender, then the contractor shall pay to the employer the relevant sum stated in the Contract Data as Liquidated damages for such default and not as penalty for everyday or part of day which shall elapse between relevant time for completion and the date stated in the taking over certificate of the whole of the works on the relevant section, subject to the limit stated in the contract data.

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

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

50. Bonus

- 50.1 If the contractor achieves completion of the whole of the works prior to the intended Completion Date prescribed in Contract Data the Employer shall pay to the contractor a sum stated in Contract Data as bonus for 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.
- 50.2 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.

- 51.1 The Employer shall make advance payment (not to be paid less than two instalments 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.
- 51.2 The Contractor is to use the advance payment only to pay for Equipment, plant and Mobilization expenses required specifically for execution of the Works. The Contractor shall demonstrate that advance payment has been used in this way by supplying copies of invoices or other documents to the engineer.
- 51.3 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.
- 51.4 Deleted

52. Securities

- 52.1 The performance Security (including additional security for unbalanced bids) shall be provided to the Employer no later than the date specified in the Letter of Acceptance and shall be issued in an amount and form and by a bank or surety acceptable to the Employer and denominated in Indian Rupees. The performance Security shall be valid until a date 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.

- 54.1 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.

58.Operating and Maintenance Manuals

- 58.1 If "as built" drawings and/or operating and maintenance manuals are required, the Contractor shall supply them by the dates stated in the Contract data.
- 58.2 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.

59.Termination

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

59.3 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.

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

60. Payment upon Termination

60.1 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 fewer 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.

60.2 If the Contract is terminated at the Employer's convenience or because of a fundamental breach of Contract by the Employer, the Engineer shall issue a certificate for the value of the work done, the cost of balance material brought by the contractor and available at site, the reasonable cost of removal of equipment, repatriation of the Contractor's personnel employed solely on the works, and the Contractor's 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.

61. Property

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

62. Release from Performance

- 62.1 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

63.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.

64.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 may be.
 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 promotions 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 up to 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 2% 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.

65.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) (**Panam Project Circle, Godhara**) 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.100 Cr., if any of the parties is not satisfied with the decision of the #Superintending Engineer (**Panam Project Circle, Godhara**), both the parties have to refer to the #Chief Engineer concerned for the conciliation process.
- (b) For the work more than Rs.100 Cr., if any of the parties is not satisfied with the decision of the Superintending Engineer, both parties have to refer to the #Secretary, Water Resources 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: **Executive Engineer, Kadana Division No 1, Diwada Colony.**

Address: **Executive Engineer, Kadana Division No 1, Irrigation department, Diwada colony, Ta. Kadana, Dist. Mahisagar. 389250, Phone no.- 02675-237674.**

Email id: **eekd1diwada@yahoo.com**

Name of authorized Representative (will be intimated later)

2. The Engineer is **Executive Engineer, Kadana Division No 1, Diwada Colony**

Name of Authorized Representative: **Executive Engineer**

3. The Defects Liability Period is **3 (Three) 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 **11 (Eleven) Months** after start of work with the following milestones: [CL.1.1,17 & 2]

Milestone dates: [CL.2.2 & 49.1]

Physical works to be completed Period from the start date.

Project Milestone	Cumulative Time Limit (In Day)	Cumulative Percentage of Contract Value (Financial)
Milestone 1	34 Days	10 %
Milestone 2	118 Days	35 %
Milestone 3	235 Days	70 %
Milestone 4	335 Days	100 %

6. The Site is located at **Taluka-Kadana, District- Mahisagar.** [CL.1.1]

7. The name and identification number of the Contract is: [CL.1.1]

8. The works consist of **EPC Contract for Providing Irrigation Water Facility to Filling Kelamul Village Tank by Lifting Water from KLBMC at Ch.8.20 km of Taluka Kadana, Dist. Mahisagar.** with items as per B.O.Q. The works shall, inter alia, include the following, as Specified or as directed: [CL.1.1]

- | | | |
|--|---|-------------|
| (A) Civil & Pipeline Works: | Site clearance; setting – out and layout; Construction and Maintenance of all types of Pipelines and its component, etc. other WRD works. | [CL.2.3(9)] |
| (B) Mechanical Works: | Project Related all Mechanical work – Supply, Erection, Testing and Commissioning. | [CL.1.1] |
| (C) Electrical Works: | Project Related all Electrical work – Supply, Erection, Testing and Commissioning. | [CL.1.1] |
| (D) Instrumentation Works: | Project Related all Instrumentation work – Supply, Erection, Testing and Commissioning. | [CL.2.3(9)] |
| (E) Operation & Maintenance Work: | Project Related all Operation & Maintenance work including defect liability. | [CL.2.3(9)] |
| (F) Other Items: | Site clearance; setting – out and layout; Construction and Maintenance of all types Civil and Any Other Items as required to fulfil all contractual obligations as per the Bid documents. | [CL.2.3(9)] |
-
- | | | |
|---|--|-------------|
| 10. The following documents also form part of the Contract: | _____ As per clause 2-3 _____ | [CL.2.3(9)] |
| 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 From the Date Work order issue. | | [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 30 days | | [CL.27.3] |
| 21. The amount to be withheld for late submission of an updated programme shall be Rs 2.00 lakhs | | [CL.27.3] |
| 22. The following events shall also be Compensation Events | Substantially adverse ground conditions encountered during the course of execution of work not provided for in the bidding | [CL.44] |

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, archaeological 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 is 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:

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

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

L_0 = 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_l = Percentage of labour component of the work.

Adjustment for cement component.

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

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

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

C_0 = 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) **3.1 Adjustment for steel component for HR Coil/ MS Plates**

Price adjustment for increase or decrease in the cost of HR Coil/ MS Plates steel procured by the contractor shall be paid in accordance with the following formula

$$V_{sh} = 0.85 \times (P_{sh}/100) \times R \times (S_{hi} - S_{ho})/S_{ho}$$

V_{sh} = Increase or decrease in the cost of work during the month under consideration due to changes in the rates for HR Coil/MS plate

S_{ho} = The all-India wholesale price index for HR Coil/ MS Plate steel (**Mild Steel - Flat Products**) 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_{hi} = The all-India average wholesale price index for HR Coil/ MS Plate steel (**Mild Steel - Flat Products**) 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_{sh} = Percentage of HR Coil/ MS Plate steel component of the work

3.2 Adjustment for steel component for Reinforcement Steel

Price adjustment for increase or decrease in the cost of HR Coil/ MS Plates steel procured by the contractor shall be paid in accordance with the following formula

$$V_{sr} = 0.85 \times (P_{sr}/100) \times R \times (S_{ri} - S_{ro})/S_{ro}$$

V_{sr} = Increase or decrease in the cost of work during the month under consideration due to changes in the rates for Reinforcement steel

S_{ro} = The all-India wholesale price index for Reinforcement 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_{ri} = The all-India average wholesale price index for Reinforcement 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_{sr} = Percentage of Reinforcement steel component of the work

Adjustments of bitumen component

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

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

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

B_o = The official retail price of bitumen at the IOC depot at 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

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

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

F_o = 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

P_0 = 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 another 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-Indian 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:

1.	Labour - P_l	8.07%
2.	Cement – P_c	2.85%
3.	Steel - P_s	
	3.1 HR Coil/ MS Plate steel (P_{Sh})	0.71%
	3.2 Reinforcement steel (P_{Sr})	4.75%
4.	Bitumen – P_b	0.00%
5.	POL – P_f	1.70%
6.	Plant & Machinery Spares P_p	16.99%
7.	Other Materials - P_m – (HDPE)	64.93%

Total =		100.00%

Note: - The price adjustment as per clause-47 will be decided at the time of estimation of actual work.

Sr No.	Item	Name of Commodity	Type
1	Cement	Ordinary Portland Cement Lime and Plaster	Individual Commodity
2	MS Plate/ HR Coil	Mild Steel /Flat	Group Item
3	MS/ HYSD/ TMT bar	Mild Steel -long product	Group Item
4	Plants & Machinery	Manufacture of machinery for mining, quarrying and construction	Group Item
5	Other Materials	All Commodity	Group Item

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 10percent 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 Advance for Non-persish able material Brought to site	Deleted	

(The advance payment will be paid to the Contractor no later than 28 days after fulfilment 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 instalment 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 may be.

36. The amount to be withheld for failing to supply “as built” drawings {CL. 58} by the Date required is Rs 5.00 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 per cent.

39. Approved Vendor Lists attached to Enclosure - I

SECTION - 5
TECHNICAL SPECIFICATION
(Attached Separately in Enclosure as
Volume - II)

SECTION - 6
FORM OF BID

FORM OF BID

Description of the Works:

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 Contract 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 that period.
4. Unless and until a formal Agreement is prepared and executed this Bid, together with your written acceptance thereof, shall constitute a binding contract between us.
5. We understand that you are not bound to accept the lowest or any tender you may receive.

Dated this ----- day of ----- 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

Item No	Description of Item (with brief specification and reference to book of specifications)	Quantity	Unit	Rate In figures	Amount
	Attached Separately in Enclosure-III				

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:

Item No	Description of Item (with brief specification and reference to book of specifications)	Quantity	Unit	Rate		Amount
				In figures	In Words	
	Attached Separately in Enclosure - III					

(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 brief 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. NO.: MIS102010/17/K1 Dated:30/07/2018 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.

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")

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

SEALED with the Common Seal of the said Bank this ----- day of -----20

THE CONDITIONS of 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,

----- (Name of Employer)

----- (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 is 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 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,

----- (Name of Employer)

----- (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 is 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 -----

Letter of Acceptance

(Letter head paper of the Employer)

To, _____ (Date)

_____ (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., up to _____ 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., up to _____ and sign the contract, failing which action as stated in Para 34.3 of ITB will be taken.

Yours Faithfully

Authorized Signature
Name and title of Signatory
Name of 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)

To, _____ (Date)

_____ (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 executive 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 ready 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 Common seal 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
(Attached Separately in Enclosure as
Enclosure IV)

SECTION - 10
DOCUMENTS TO BE FURNISHED BY BIDDER

UNDERTAKING FOR ENGAGING TECHNICAL STAFF & MACHINERIES

I/We.....

Age.....

Business (Name of Firm)

Address

Hereby declare, that if our offer for the work of

.....
..... would accept by the competent authority & awarded to us, I/We will engage & employ the technical staff and machineries on site of work, required to complete the work successfully within time limit.

Signature of Bidder

Place: _____

Date: _____

INFORMATION ON LITIGATION HISTORY

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

DATE:

SIGNATURE OF BIDDER

Notes:

1. Describe Company's history of litigation or arbitration from contract executed in the last ten years or currently under execution. Please indicate for each case the year, name of employer, cause of litigation, matter in dispute, disputed amount, and whether the award was for or against the company.
2. Please add any further information that you may consider to be relevant to the evaluation of your application. If you wish to attach other documents, please list below:

DETAILS OF LAST FIVE YEAR'S CIVIL ENGINEERING WORKS TURNOVER

1	Name of Firm			
2	Name of Partner/ Director			
3	Turnover for the Last Five Years, the Contract Receipts of Civil Engineering works.			
Sr. No.	Year	Multiplying Factor	Annual Turnover (Rs in Lakhs)	Amount After Multiplying Factor (Rs in Lakhs)
(1)	2020-2021	1.61		
(2)	2021-2022	1.46		
(3)	2022-2023	1.33		
(4)	2023-2024	1.21		
(5)	2024-2025	1.10		
(6)	2025-2026 (Base year)	1.00		

Signature

(Stamp of Chartered Accountant)

Unique Document

Identification Number: -

DETAILS OF CIVIL ENGINEERING WORKS COMPLETED IN LAST 5 FINANCIAL YEAR

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
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
1								
2								
3								

DATE:

SIGNATURE OF BIDDER

Notes:

1. Bidder shall also attach completion certificate (preferably in form-3A) for all the works listed in above table.

DETAILS OF “WORKS ON HAND” AND “WORKS TENDERED BY BIDDER, FOUND LOWEST (L1) & WORKS LIKELY TO BE AWARDED”

Sr. No.	Name of Work	Place	PART- I Work on Hand					PART-II Works tendered by bidder, found lowest (L1) & Works likely to be awarded				Remarks
			Tendered amount Rs, in Lakh	Date of issue of Work order	Stipulated period of completion (date)	Cost of work executed as on the preceding month in which bid invitation. Rs, in Lakh	Cost of work remaining to be executed During the time limit of an invited bid Rs. In Lakh	Tender Cost Rs. In Lakh	Time limit of work In Months	Date when decision is expected for award of work	Cost of work to be executed during the time limit of the invited bid. Rs, in Lakh	
[1]	[2a]	[2b]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[11]	[12]	[13]
1												
2												
3												

DATE:

SIGNATURE OF BIDDER

Notes:

1. For Part-I, the bidder shall furnish necessary certificates/documents from the concerned department.
2. In Part-II, the bidder shall furnish information for the other tenders wherein bidder's offer is found L1.

1.1.SCHEDULE – I: POWER REQUIREMENT – For Pumping Station

Sr. No.	Description	Rating To be furnished by bidder
1.1	<u>Raw Water Pumping Station</u>	
i	Maximum demand of main pump Machineries in MPS	KW
ii	Maximum demand of pumping plant auxiliaries including Lighting (From schedule- IV-A)	KW
iii	Simultaneous maximum demand	KW

1.2 Total Energy Consumption & Total Water supply at Pumping Station

Sr. No.	Description	To be furnished by bidder	
		(22 hr./day)	Yearly (22 hr. / 100 days)
1.2.1	Overall Energy consumption by Pump Machineries (Working) in KWH		
1.2.2	Overall Energy consumption by pumping plant auxiliaries including Lighting in KWH		
	Total Energy Consumption in KWH		
1.3	Total water discharge from working pumps in m3		
1.4	Ratio of (Maximum Demand in KVA) / (Installed Main Transformer Capacity KVA)		
1.5	Number & Rating of Power Transformer		
1.6	Full load Efficiency of Power Transformer		

$$\text{Power} = \frac{(Q \times H \times 24)}{(367.2 \times \eta_p \times \eta_m)}$$

Where, Q - Discharge in m³/hr., H - Head in meters,
 η_p - Efficiency of pump, η_m - Efficiency of motor.

All the above parameters shall be taken as the guaranteed particulars.

SIGNATURE: _____

NAME: _____

DESIGNATION: _____

COMPANY: _____

DATE: _____

COMPANY SEAL

SCHEDULE – I-A - Auxiliary Electrical Load Calculation at Main Pumping station.

Sr. No.	Equipment detail	Working Quantity (nos)	Running KW	Total connected KW	Diversity factor in %	Maximum Demand KW	Running time (hour)	Total consumption (KWh/ 24 hr)
A	B	C	D	E	F	G	H	I
1								
2								
3								
Total =								
Maximum Load Demand with diversity factor consideration =								

SIGNATURE: _____

NAME: _____

DESIGNATION: _____

COMPANY: _____

DATE: _____

COMPANY SEAL

1.2. SCHEDULE – II: DATA SHEETS FOR MECHANICAL GUARANTEED PARTICULARS FOR PUMPING STATION

Vertical Turbine (VT) pumps (all working 2 nos.)

Sr. No.	Required Specs.	Unit	Required Specs.	Offered Specs.
(a)	Rated Discharge (Q) (At rated speed & at rated frequency, i.e., 50Hz)	m ³ /hr.	408	
(b)	Rated Head Effective (H) (At rated speed & at rated frequency, i.e., 50Hz)	meter	33.40	
(c)	Input to motor at rated condition, i.e., 50 Hz	KW	53	
(d)	Overall Efficiency of Pump Motor set at rated condition	%	78%	

Notes:

- Bidder to furnish GA drawing indicating overall dimensions and height details along with offer for pumps and motors.
- Bidder to furnish Performance curves for pumps i.e., Head V/s Capacity, Efficiency V/s Capacity and Power (BKW) V/s Capacity.
- Bidders have to provide guaranteed particular and technical values equal or better than indicated in the Schedule [of V.T. pumps, motors & transformer] A.
- Successful bidder / EPC Agency has to fill data sheet list given under Data sheet" attached in detail specification, during detail engineering for Mechanical equipment's, Pipeline, Electrical equipment's & instrumentation, etc. The data sheet parameter shall meet tender requirement & shall not affect the guaranteed particulars specified in Schedule - III A&B.

Section - 11
Project Related Information and Conditions

■ **PROJECT INTRODUCTION**

Gujarat State is a water scarce state and has vast variation in rainfall in its own regions; several parts of the State face floods during monsoon, at the same time several parts are drought affected. The Central Gujarat region is scarce in its water resources thereby affecting its overall development.

The Gujarat Government has decided to augment various reservoirs of various region by construction of pipeline / feeder canals. The entire works have been planned to be executed by EPC Contract.

Under this tender, the scope of work covered is defined briefly in below section.

■ **DESCRIPTION OF WORK**

The tenders are invited on a turnkey basis with single-point responsibility from contractors who are registered in the “**B class & above**” in R & B or NWRWS & KD of Government of Gujarat / CPWD / Railway / MES / other State Governments. This tender consists of pre-qualification for " EPC Contract for Providing Irrigation Water Facility to Filling Kelamul Village Tank by Lifting Water from KLBMC at Ch.8.20 km of Taluka Kadana, Dist. Mahisagar.”

The indicative details of ponds to be connected with M.S pipeline and H.D.P.E pipeline are narrated in the scope of work and as instructed by the Engineer in Charge.

■ **SCOPE OF WORK**

The scope of the work broadly comprises the following, although it is not exhaustive. The contractor shall consider all other allied works that are not specified hereunder but are necessary for the satisfactory completion, commissioning, and operation of the project at the desired service level. Please refer to the details under the “Scope of Work” in Volume 1, Pre-Qualification Bid.

A. Detailed Topographical Survey, Detailed Geo-technical Investigation, and Detailed Engineering design including Surge Control System, etc.:

1. The scope of work covered under this Project is to benefit deprived area of Kadana Taluka through Lift Irrigation scheme from Kadana Left Bank Main Canal (KLBMC) at chainage 8.20 km near village Renganiya, Ta. Kadana, Dist. Mahisagar. The contractor shall carry out and submit all the details for this Project and got approved from the Departments / Engineer- In - Charge and then only the construction works shall be commenced.

2. Further to this the contractor shall note the following explicitly:

The main surface sources of irrigation and water supply in villages located in Mahisagar District is based on Mahi River. For The villages situated away of these Irrigation projects, surface water is not available.

The ground water has depleted day by day in this region due to unavailability of surface water. The district is predominately on agricultural and livestock for income of the local rural people. It is envisaged that the proposed lift irrigation scheme from KLBMC will fill about total 01 tanks of 01 villages will supplement the requirement of water to the local villagers besides ensuring a reasonable security of water almost throughout the year. The water recharged through such ponds will in many cases benefit adjoining areas. Presently the department has proposed to LI for 01 village ponds of Kadana Talukas from the proposed LI Scheme. The scheme also proposes to supply irrigation water from the scheme to about 294 Ha area. The main source of water for this proposed pipeline from KLBMC at ch 8.20 km near Renganiya village.

As the planned area cannot be irrigated, this project is proposed to irrigate to meet the requirement of water in Kadana Talukas of Mahisagar district. For this, after the calculation of water requirement of irrigation of above talukas, 0.81 MCM water will be diverted towards deprived area of Kadana Talukas through Lift Irrigation pipelines from KL BMC.

TABLE 1- POND DETAIL

Sr No	Taluka	Village	Tank Name	Code Name	Survey No. (New)	Area of tank (Ha)
1	Kadana	Kelamul	Kelamul tank	1	293	11.9
Total =	1	1	1	1	-	11.9
						Area (Ha)

Note:

The above number of ponds are indicative. The bidder must verify the above ponds as per prevailing norms of government after the work order and submit the related design and drawings accordingly for approval.

- i. The following are the approximate length of pipelines

Sr. No.	Pipe Material	Diameter (mm)	Distance (m)
RAISING MAIN (Header)			
1	MS	457 mm dia, 6.3 mm thick	20.0
RAISING MAIN			
1	HDPE- 6.0 kg/cm ²	450 mm dia	2250.0

- ii. The following Pumping Machinery is proposed for pump house location:

Location of PS	Nos of Pump Set	Discharge (m ³ /hour)	Head in (m)	Approx. KW of each Pump
Renganiya village at KL BMC at ch.8.20 km	2 + 1 W + S	408.0 m ³ /hour	33.40 m	30 KW

1. The pipeline system i.e., main, network, feeder, sub feeder pipelines to be designed for 30 years.
2. Pumps and Motors shall be minimum of 15 years.
3. Electrical works to be designed for 15 years.
4. Instrumentation works to be designed for 15 years.
5. Civil structures and steel structures to be designed for 60 years.
6. The items and consumable which are having life lesser than the O & M period of 05 years shall be replaced as and when their life ends and or as per manufacturer recommendation to upkeep the system operations in good working conditions.

7. The bidder has to design and construct the system considering requirement as per this tender. However, the contractor has to provide minimum pipe dia. (ID) & thickness as per price bid.
8. The E.P.C contractor has to design and provide additional reducer/ reducing orifice to control flow / pressure wherever required as per design requirement.

Note:

1. The above levels are indicative only and shall be reconfirmed by the contractor.
2. “C” Value for MS pipeline to be demonstrated 145 (For 1200 mm dia pipe and above)
3. “C” Value for MS pipeline to be demonstrated 140 (For pipe below 1200 mm dia (I.D))
4. Minimum 3 m residual head is to be provided at delivery sump or Highest point on alignment as per design requirement.

B. CONSTRUCTION OF CIVIL, MECHANICAL, ELECTRICAL AND INSTRUMENTATION WORKS:

This work includes EPC Contract for Providing Irrigation Water Facility to Filling Kelamul Village Tank by Lifting Water from KLBMC at Ch.8.20 km of Taluka Kadana, Dist. Mahisagar.

Adequate fire protection system shall also be provided to give protection to switchyard as per MGVCCL or related authority guidelines.

C. ROLES & RESPONSIBILITIES

In order to clarify the roles & responsibilities of the contractor under this work, following table shall be followed broadly. Though, the details covered in the table are not exhaustive, any items/activities that may be necessary for the satisfactory performance of the system shall have to be executed by the contractor.

Sr No	Scope of Work	For all related works of this project
1	Topographical Survey	
	Pumping Station, Intake well/Underground sump, Plot survey	To be completed within 1.5 month from issue of work order
	Pipe alignment along with the crossings	To be carried-out for rising main (To be completed within 1.5 Month from issue of work order)
	For all the feeders to ponds & off take points (if any)	To be carried-out of network and feeder pipeline (To be completed within 1.5 month from issue of work order)
2	Geo technical Investigation	
	Pumping station, Intake well/ Underground sump at start point	To be completed within 30 Days from issue of work order
	Pipe alignment along with the crossings	To be carried-out for rising main (To be completed within 1.5 month from issue of work order)
	For all Feeders to pond & off take points,	To be carried-out of network and feeder

	(if any)	pipeline (To be completed within 1.5 month from issue of work order)
3	Detail engineering and applications to concern authority of various Crossing (River/ Road/ Nalla/ Drain/ any Pipeline/ Telecommunication & Electrical cables/ railway crossing/ any type of crossings or utility service lines)	To be carried-out for the entire length (All the activities pertaining to necessary approvals/ clearance from the concerned authorities (e.g., Road/ Railway/ Forest etc.) shall be completed within 2 months from approval)
4	Detail Engineering including mandatory connection details for execution of works:	
	For Rising Main and their related all works of this project	(To be completed within 3 months from issue of work order)
	For the Rising main	To be carried-out for Rising Main (To be completed within 2.5 month from issue of work order)
	For all Feeders to pond	To be carried-out of network and feeder pipeline (To be completed within 2.5 month from issue of work order)
5	Surge Control System Design & Details etc.	To be carried-out for Rising Main Pipeline (To be completed within 2.5 month from issue of work order)
6	Design and details for all types of Valves / Fittings, Instrumentation & Automation including drawings such as General arrangement and connection details	
	Pumping Station	To be carried-out of Pumping station at given pumping station location for Pipeline. (To be completed within 3 months from issue of work order)
	Rising Main & distribution networks	To be carried-out for Rising Main & distribution networks Pipeline (To be completed within 2.5 Month from issue of work order)
7	Construction (including design for balance works) of all types of (a) Civil (b) Mechanical (c) Electrical and (d) Instrumentation & Automation (e) other related allied works including Supply, testing, Installation and Commissioning.	To be carried-out for the length of Pipeline up to stipulated time limit from issue of work order.
8	Testing and Commissioning	

	Trial run and Hydro testing of the entire length of rising main, network, and feeder pipelines.	To be carried out by the contractor immediately after completion of work.
	C - Value and other Guaranteed Technical Parameters like Power Consumption, Efficiency, and Transformer Losses etc.	To be carried out by the contractor immediately after Trial run and Hydro testing.
9	Operation & Maintenance as detailed in the tender documents	For the entire scope of work
Note -	Procurement shall be started only after approval of Hydraulic Design, L- Section and completion ROU under section 6 (i) notification of GWGP Act 2000. Prior procurement shall be the sole responsibility of EPC Contractor.	

D. Hydro testing & Commissioning:

1. The contractor shall be responsible for achieving system guaranteed parameters for the work covered under this tender.
2. All system guaranteed parameters specified in this tender shall be measured as per the contract specifications and contract conditions. However, if the desired guaranteed parameters could not be achieved due to reasons attributable to the contractor, the entire responsibility solely lies on the contractor.

CONDITIONS

1. SCOPE OF THE WORK

- i. The project is proposed to be implemented on Construction - Turnkey basis on single point responsibility system. Narmada Water Resources, Water Supply & Kalpsar Department (Govt. of Gujarat) shall give the necessary design parameters for different components based on the conceptual design of the project. The bidder shall be responsible for the detailed engineering, designs, getting approval of the design, technical datasheet, QAP etc. for all components of the project, procurement of all materials and equipment's, pipe laying, jointing, testing, construction and installation of all Civil, Mechanical, Electrical and Instrumentation Control works and systems as per the work specifications provided in the bid documents and commissioning of the project on turnkey basis followed by operation and maintenance of the entire project for a period of (05) five years from the date of commissioning of the system / project. The contractor has to prepare detail design of his component got recommended by TPI and / PMC fixed by department and same shall be got approved from department.
- ii. The major components of the project covered under this tender comprises of survey, investigations, design, procurement, erection/installation, and construction of RCC sump, pump house with pumping machinery and electrical work, procurement & laying of pipeline with associated civil, mechanical, electrical and instrumentation works etc.
- iii. The work of this pipeline including installation of valves, chambers, structures etc. are to be executed on the land used under "Right of Use" permission. The minimum width of ROU shall be considered as table shown below as per site requirement.

Sr. No.	Diameter of Pipe	Width of ROU (Single Pipeline)
1	600 mm and above	30 m
2	All dia below 600 mm	15 m

The payment of standing crops, compensation of wells, bores, buildings, properties, any of such requirements for work for the right of use permission to farmer / other affected persons / owners, NOC and other miscellaneous charges shall be borne by the contractor for the entire period of the contract. The contractor shall have to take enough precaution to see that no adjacent/ surrounding land is damaged/ obstructed/ encroached by them during the execution. Any such dispute / litigation if arise shall be the responsibility of the contractor. Cadastral survey along with detailed Engineering survey shall be carried out by EPC & Land schedule of ROU with village map and ownership record shall be furnished as per final alignment to the department. Also list of crossing and statutory permission details along with cross section / L-section / drawings shall be submitted. However, bidder/contractor shall note that ROU notification shall be issued by the Department and land cost for getting ROU for laying pipeline shall be paid by the department as per Government rules and regulations.

- a. The contractor shall be responsible for acquiring necessary permission from the competent authority for Road/ Railway / Highway / canal / River / crossing/gas-oil-water pipeline crossings / forest clearance / any electrical- telephone cable line crossing/ or any other utility service lines etc. during laying of pipeline at his own cost. In such a case, only correspondence with concerned department shall be facilitated by the Engineer-In-Charge / Department. All the statutory charges

and other charges such as fees, insurance, Deposit (Refundable or non-refundable), miscellaneous charges / expenditure, charges for occurrence of any damages, NOC etc. for laying of pipeline below / across all the above-mentioned crossings are to be borne by the contractor. TPI inspection charges shall be borne by the government during construction period.

- b. However, the concerned department insists to pay such statutory charges through the department/owner, such charges will be paid by the department/Engineer In-charge and such amount shall be adjusted/recovered from the contractor's bill. If any deposit which is reimbursable only after the construction period and completion of Operation & Maintenance of 05 years shall be paid by the department / owner.
- c. All necessary persuasion is to be done by the contractor for getting/ obtaining clearances/ permissions. On satisfactory completion of the work, required NOC is to be obtained by the contractor from the concerned department. The contractor is responsible for obtaining all necessary permissions / clearance / NOC / sanctions etc. Required coordination for sanction from the concerned authority and NOC from the concerned authority / field owner for satisfactory completion shall be provided by the contractor.
- d. Right of Way (ROW) and facilities: The contractor shall bear all costs and charges for special and/or temporary Rights of Way (ROW), which he may require, including those for access to site. The contractor shall also obtain, at his risk and cost, any additional facilities outside the site which he may require for the purpose of the works.
- e. Avoidance of Interference: The contractor shall not interfere unnecessarily or improperly with:
 - i. The convenience of the public, or
 - ii. The access to and use and occupation of all roads and footpaths, irrespective of whether they are public or in the possession of the employer or of others.
- f. The contractor shall indemnify and hold the employer harmless against and from as damages, losses, and expenses (including legal fees and expenses) resulting from any such unnecessary or improper interference.
- g. Access Route: The contractor shall be deemed to have been satisfied as to the suitability and availability of access routes to the site. The contractor shall use reasonable efforts to prevent any road or bridge from being damage by the contractor's traffic or by the contractor's personnel. These efforts shall include the proper use of appropriate vehicles and routes. Except as otherwise stated in these conditions:
 - i. The contractor shall (as between the Parties) be responsible for any maintenance which may be required for his use of access routes.
 - ii. The contractor shall provide all necessary signs or directions along access routes and shall obtain any permission which may be required from the relevant authorities for his use of routes, signs, and directions.
 - iii. The employer shall not be responsible for any claims which may arise from the use or otherwise of any access route.
 - iv. The employer does not guarantee the suitability or availability of particular access routes, and Costs due to non-suitability or non-availability, for the site required by the contractor, of access routes shall be borne by the contractor.
- h. Nitrogen Injection Fire System shall also be provided to give protection to switchyard as per MGCVCL guidelines.

- i. Draft proposals for obtaining "Right of Use (ROU)" for laying of pipeline and other associated activities shall be prepared by the contractor after completing survey of main pipeline alignment as well as survey of network and feeder pipelines. Such proposals shall be prepared as per the prevailing act and norms/practice of department of ROU. On completion of survey of pipeline alignment by the contractor and after publication of the final notification of ROU by the department, further activities under the scope of work shall only be commenced by the contractor.
- j. On behalf of the department, considering the status of work and anticipated date of commissioning of the pumping station, the contractor shall prepare necessary application for obtaining electric connection for the pumping stations. The departmental official will sign the application form and shall pay all statutory charges and application fees. The contractor shall co-ordinate/liaison with the electricity company and shall make all necessary follow up efforts to ensure timely availability of power supply for the pumping stations.

In the case of obtaining electric connection prior to the stipulated/anticipated date of commissioning of the pumping stations, all the charges levied by the electricity company, for that idle period, shall be recovered from the bills of the contractor.

After the completion and commissioning of the project, the bidders will have to operate and maintain the system for 05 years satisfactorily before handing over to Engineer-In-Charge / Department. The defect liability period shall be considered as per tender.

2. CONTRACTOR'S OBLIGATIONS

1. The contractor shall be deemed to have carefully examined the works and site conditions, the Special Conditions, the scope of the work, the specifications, Schedules, and Drawings and shall be deemed to have fully acquainted himself regarding the local conditions.

If he shall have any doubt as to the meaning of any portion of these tender conditions, the scope of the work, the specification or any other matter concerning the contract, he shall in good time before submitting his tender i.e., before pre-bid meeting, submit them to the Engineer-in-charge so that such doubt may be removed.

2. The contractor shall unless in the cases specially provided for, make all payments at his own expenses, undertake to do all things and supply all labour, materials, constructional plant, temporary works, transport, supervision, and everything whether of a temporary nature or permanent nature required in and for construction, completion, operation & maintenance of the works and for performing the obligations of the contract.
3. The contractor shall design, execute, and complete the works in accordance with the contract, and shall remedy any defects in the works. When completed, the works shall be fit for the purposes for which the works are intended as defined in the contract.
4. The contractor shall provide the plant and equipment, documents, man power, goods, consumables and other things & services, whether temporary or permanent in nature, required for this design, execution, completion and remedying of defects.
5. The works shall include any work which is necessary to satisfy the employer's requirements, or is implied by the contract, and all works which (although not mentioned in the contract) are necessary for stability or for the completion, or safe and proper operation, of the works.
6. The Contractor shall be responsible for the adequacy, stability, and safety of (a) all site operations

(b) all methods of construction and (c) all the works.

7. The contractor shall, whenever required by the employer, submit details of the arrangements and methods which the contractor proposes to adopt for the execution of the works. No significant alternation to these arrangements and methods shall be made without this having previously been notified to the employer.

8. Contractor's Representative:

The Contractor shall appoint the Contractor's representative and shall give him all authority necessary to act in the contractor's behalf under the contract.

Unless the contractor's representative is named in the contract, then the contractor shall, prior to the commencement date, submit to the employer for consent the name and particulars of the person the contractor proposes to appoint as contractor's representative. If consent is withheld or subsequently revoked, or if the appointed person fails to act as contractor's representative, the contractor shall similarly submit the name and particulars of another suitable person for such appointment.

The Contractor shall not, without the prior consent of the employer, revoke the appointment of the contractor's representative or appoint a replacement. The Contractor's representative shall, on behalf of the contractor, receive instruction from the Department.

The contractor's representative may delegate any powers, functions and authority to any competent person, and may at any time revoke the delegation. Any delegation or revocation shall not take effect until the employer had received prior notice signed by the contractor's representative, naming the person, and specifying the powers, functions and authority being delegated or revoked. The contractor's representative and all these persons shall be fluent in the language for communications.

3. GOVERNMENT / NWRWS & KSDEPARTMENT TO WITHHELD PAYMENT DUE TO THE CONTRACTORS

The Government / NWRWS & KD shall have a lien over all money payable to the Contractor under this contract and also over his Security Deposit withheld or recoveries made under the relevant clauses of this Contract in respect of any Government Tax or taxes or other moneys which may become payable to Government by the Contractor, either alone or jointly with another, under any provisions of the Government Acts or any other statutory enactments in force, in modification or substitutions thereof. Government / NWRWS&KS shall at all times be entitled to deduct the said sum of taxes due from contractors from the moneys, securities or deposits which may become payable or returnable to the Contractor under this contract.

1. THE EMPLOYER'S REPRESENTATIVE

The employer may appoint any employer's representative to act on his behalf under the contract. In this event, he shall give notice to the contractor of the name, address, duties, and authority of the employer's representative.

The employer's representative shall carry out the duties assigned to him, and shall exercise the authority delegated to him, by the employer. Unless and until the employer notifies the contractor

otherwise, the employer's representative shall be deemed to have the full authority of the employer under the contract.

All these persons, including the employer's representative and assistants, to whom duties have been assigned or authority has been delegated, shall only be authorized to issue instructions to the contractor to the extent defined by the delegation. Any approval, check, certificate, consent, examination, inspection, instruction, notice, proposal, request, test, or similar act by a delegated person, in accordance with the delegation, shall have the same effect as though the act had been as act of the employer. However, unless otherwise stated in the delegated person's communication relating to such act, it shall not relieve the contractor from any responsibility he has under the contract, including responsibility for errors, omissions, discrepancies, and non-compliances.

Any failure to disapprove any work, plant or materials shall not constitute approval, and shall therefore not prejudice the right of the employer to reject the work, plant, or materials: and if the contractor questions any determination or instruction or delegated person, the contractor may refer the matter to the employer, who shall promptly confirm, reverse or vary the determination or instruction.

2. DELEGATED PERSONS

The employer may issue to the contractor, instruction which may be necessary for the contractor to perform his obligations under the contract. Each instruction shall be given in writing and shall state the obligations to which it relates.

The contractor shall take instructions from the employer, or from the employer's representative or assistants to whom the appropriate authority has been delegated.

3. INSTRUCTIONS

The employer may issue to the contractor, instruction which may be necessary for the contractor to perform his obligations under the contract. Each instruction shall be given in writing and shall state the obligations to which it relates.

The contractor shall take instructions from the employer, or from the employer's representative or assistants to whom the appropriate authority has been delegated.

4. CONTRACT DRAWINGS AND SPECIFICATIONS

Supply of sets of contract drawings and certified copy of accepted tender will be governed by Conditions of Contract.

The drawings, which form part of these specifications, show the work to be done in as much details as is possible at the stage of tender invitation. They will be supplemented or superseded by such additional approved detailed working drawings as may be necessary as the work progresses. The contractor shall perform the work on these features and in accordance with these additional approved detailed or revised working drawings at the applicable rates and terms as per the contract. Revised and / or additional drawings will be available for inspection in the office of the engineer-in-charge and copies of the same shall be supplied if required by the contractor. Three sets of such revised and/or additional drawings will be given free of cost on request. Additional copies of the same will be supplied at the discretion of the engineer and the contractor will be charged Rs.100

(One Hundred only) for A4 size, Rs. 300.00 for A3 Size and Size greater than A3 - as per actual cost.

The contractor shall check all drawings and tender specifications carefully and bring to the notice of the engineer-in-charge immediately if any errors or omissions are noticed. [The contractor shall not take undue advantage of any kind of error or omission in the drawings and tender specifications supplied.]

General Design Obligations: The contractor shall be deemed to have scrutinized, the employer's requirements (including design criteria and calculations, if any). The contractor shall be responsible for the design of the works and for the accuracy of such employer's requirements (including design criteria and calculation). The employer shall not be responsible for any error, inaccuracy or omission of any kind in the employer's requirements as originally included in the contract and shall not be deemed to have given any representation of accuracy or completeness of the any data or information. Any data or information received by the contractor, from the employer or otherwise, shall not relieve the contractor from his responsibility for the design and execution of the works.

Technical Standards and Regulations: The design, the contractor's documents, the execution and the completed works shall comply with the Country's technical standards wherever available or with international standards, building construction and environmental Laws, Laws applicable to the product being produced from the works and other standards specified in the employer's requirements applicable to the works or defined by the applicable Laws.

All these Laws shall, in respect of the works and each section, be those prevailing when the works or section are taken over by the employer. References in the contract to published standards shall be understood to be references to the latest edition applicable on the Base Date, unless stated otherwise.

5. BASE LINES AND GRADES

Permanent base line (and cross lines) shall be established at sufficiently close intervals with benchmarks at all corner points to serve as "Reference Grid". The contractor shall provide at his expense, all template, pillars, stacks, equipment, materials, and labour for establishing the grid lines and pillars & preserve during the whole period of construction. These shall be laid out with prior approval of the engineer-in-charge. No base line or benchmark or reference mark shall be used as reference line, or benchmark or level for the work without prior approval of the engineer. The contractor shall maintain certified copies of such approval reference line, marks and levels and shall not remove any of them without prior approval of the engineer.

The Contractor shall further lay out the work from these reference base lines in consultation with the engineer and shall establish level connection therewith, notwithstanding the fact that the same might have been checked by the engineer's staff.

The contractor shall be responsible for proper execution of the work to such lines and grades as may be specified on the drawings or established or indicated by the engineer.

6. LIABILITY OF ACCIDENTS TO PERSONS

Responsibilities and liability of the contractor under “Workmen’s Compensation Act” are given in Clause 64 of section-3 - Conditions of Contract. In addition, following shall also apply,

On the occurrence of an accident which results in death of workmen employed by the contractor, or which is as serious as likely to result in death of any such work, the contractor shall within 24 hours of happening of such accident, intimate in writing to Engineer the facts of such accident. The contractor shall indemnify Government against all loss or damage sustained by the government resulting directly or indirectly from his failure to give intimation in the matter aforesaid, including the penalties or fines, if any, payable by govt. Due to such lapse, the contractor shall be fully responsible for government’s failure to give notice under the Workmen’s Compensation Act or otherwise / to conform to the provision of the said act in regard to such accidents.

In case of an accident in respect of which compensation may become payable under Workmen’s Compensation Act whether by the contractor or by government as principal employer, it shall be lawful for the engineer to retain out money due and payable to the contractor such sum or sums of money as may in the opinion of the engineer be sufficient to meet the liability. The opinion of the engineer shall be final in regard to all matters arising under this clause.

The Contractor shall be bound to provide in writing the details of employments, emoluments paid and status of the workmen concerned as may be required, under the act to the engineer-in-charge.

For the safety equipment for person, Clause 19 of section-3 - Conditions of Contract shall be followed, in addition, the following shall also apply. The contractor shall,

- a. Comply with all applicable safety regulations,
- b. Take care for the safety of all persons entitled to be on the site,
- c. Use reasonable efforts to keep the site and works clear of unnecessary obstruction so as to avoid danger to these persons,
- d. Provide fencing lighting, guarding, and watching of the works until completion and,
- e. Provide any temporary works (including roadways, footways, guards, and fences) which may be necessary, because of the execution of the works, for the use and protection of the public and of owners and occupiers of adjacent land.

7. INTEREST ON MONEY DUE TO CONTRACTORS

Omission by the engineer to pay the amount due upon measurements or otherwise shall not vitiate or make void the contract nor shall the contractor be entitled to any interest upon any guarantee on the Running Account bill & final Payments neither in arrears nor upon balance which may on the final settlement of his account become due to him.

8. PLANS AND DRAWINGS

The contractor shall submit the following information to the engineer in charge for approval within the time stipulated against each item below:

- a. As-built Drawings: As built drawings showing the exact “as built” locations, sizes, and details of works as per actual execution of work overlapping working drawings and designs, including reinforcement details, thickness of walls and dimensions of RCC items, doors, windows, ventilators, layout of water supply, drainage, and electrical wire cable lines within 28 days of the

issue of certificate of completion of the whole or section of the work. The amount to be withheld for failing to supply “as built” drawings {CL. 58} by the Date required is Rs 15 Lakhs.

- b. Operation and Maintenance Manuals: Prior to commencement of the Tests on completion, the contractor shall supply to the employer operation and maintenance manuals in sufficient details for the employer to operate, maintain, dismantle, reassemble, adjust, and repair the plant.

The works shall not be considered to be completed for the purpose of taking-over until the employer has received final operation and maintenance manuals in such detail and any other manuals specified in the employer’s requirement for the purposes.

- c. Design Error: If errors omissions, ambiguities, inconveniences, inadequacies, or other defects are found in the contractor’s documents, same along with work executed and the works shall be corrected at the contractor’s cost. Notwithstanding any consent or approval under this clause.

A general lay-out plan of construction plant and equipment for the execution of the work which the contractor proposed to adopt at site, in triplicate, within 14 days from the date of notice to proceed with work.

Drawings or prints, in triplicate, showing the location of major plants and other facilities which, he proposed to put up at the site, including any change in the general layout, at least 14 days prior to the commencement of the respective work.

- d. Final Bill: The final bill shall be paid only after submission of these documents and information.

9. REFERENCE MARKS, BENCHMARKS, TOPOGRAPHICAL SURVEY, AND GEOTECHNICAL INVESTIGATIONS

The basic centre line, reference points and benchmarks may be fixed by the dept. as a guideline only; however, the contractor has to carry out the Detail Topographical Survey and verify the details furnished by the Department. The contractor also has to carry out the Detail Geo Technical Investigation In case of any deviations in Detail Topographical Survey and Detail Geo Technical Investigation carried out by the contractor; he shall furnish detail engineering based on his surveys. The contractor shall be responsible for the accuracy & sufficiency of such surveys carried out by him & project outcome based on his output.

If during execution of the work, the pipeline alignment is required to be changed due to any reason the E.P.C contractor has to carry out additional survey as per requirement at his cost.

The contractor shall not be entitled for any claim on account of any variation in the details furnished by the Department.

10. PLANT, MATERIAL, AND WORKMANSHIP

- a. Manner of Execution: The contractor shall carry out the manufacture of plant, the production and manufacture of material, and all the execution of the works;
 - In the manner (in any) specified in the contract,
 - In a proper workmanlike and careful manner, in accordance with recognized good practice, and
 - With properly equipped facilities and non-hazardous materials, except as otherwise specified in the contract.
- b. Samples: The Contractor shall submit samples to the employer, for review in accordance with the procedures for contractor’s documents, as specified in the contract and at the contractor’s cost.

Each sample shall be labelled as to origin and intended use in the works.

c. Inspection: The employer's personnel shall at all reasonable times:

- Have full access to all parts of the site and to all places from which natural materials are being obtained, and
- During production, manufacture, and construction (at the site and, to the extent specified in the contract, elsewhere,) be entitled to examine, inspect, measure and test the materials and workmanship, and to check the progress of the manufacture of plant and production and manufacture of materials.

The contractor shall give the employer's personnel full opportunity to carry out these activities, including providing access, facilities, permission, and safety equipment. No such activity shall relieve the contractor from any obligation or responsibility.

In respect of the work which employer's personnel are entitled to examine, inspect, measure and/or test, the contractor shall give notice to the employer whenever any such work is ready and before it is cover up, put out of sight, or packaged for storage or transport, the employer shall then either carry out the examination, inspection, measurement or testing without unreasonable delay, or promptly give notice to the contractor that the employer does require to do so. If the contractor fails to give the notice, he shall, if and when required by the employer, uncover the work and thereafter reinstate and make good, all at the contractor's cost.

Testing: This sub-clause shall apply to all tests specified in the technical specifications, other than the tests after completion (if any)

The contractor shall provide all apparatus, assistance, documents and other information, electricity, equipment, fuel, consumables, instrument, labour, materials, and suitably qualified and experienced staff, as are necessary to carry out the specified tests efficiently. The contractor shall agree, with the employer, the time and place for the specified testing of any plant, materials, and other parts of the works.

The employer shall give the contractor not less than 24 hours' notice of the employer's intention to attend the tests. If the employer does not attend at the time and place agreed, the contractor may proceed with the tests, unless otherwise instructed by the employer, and the test, unless otherwise instructed by the employer, the tests shall then be deemed to have been made in the employer's presence.

The contractor shall promptly forward to employer duly certified reports of the tests when the specified tests have been passed, the employer shall endorse the contractor's test certificate, or issue a certificate to him to the effect. The employer has not attended the tests, he shall be deemed to have accepted the reading as accurate. All testing charges will be borne the contractor.

d. Rejection: If as result of examination, inspection, measurement or testing, any plant, materials, design, or workmanship is found to be defective or otherwise not in accordance with the contract, the employer may reject the plant, materials, design, or workmanship by giving notice to the contractor, with reasons the contractor shall then promptly make good defects and ensure the rejected item complies with contract.

If the employer requirement this plant, materials, design, and workmanship to be retested, the tests shall be repeated under the same terms and condition. If the rejection and retesting cause the employer to incur additional costs, the contractor shall pay these costs to the employer.

e. Remedial work: Notwithstanding any previous test or certification, the employer may instruct the contractor to:

- Remove from the site and replace any plant or material which is not in accordance with the contract.
- Remove and re-execute and other work which is not in accordance with the contract, and
- Execute any work which is urgently required for the safety of the works, whether because of an accident, unforeseeable event or otherwise.

If the contractor fails to comply with any such instruction, which complies with the employer shall be entitled to employ and pay other persons to carry out the work. Except to the extent that the contractor would have been entitled to payment for the work, the contractor shall pay to the employer all costs arising from the failure.

- f. Ownership of Plant and Materials: Each item of plant and materials shall, to the extent consistent with the laws of the country, become the property of the employer at whichever is the earlier of the following times, free from liens and other encumbrances:
 - When it is delivered to the site.
 - When the contractor is entitled to payment of the value of the plant and materials
- g. Royalties: Unless otherwise stated in the employer's requirements, the contractor shall pay all royalties, rents, and other payments as per royalty Clause.

11. CONTRACT DRAWINGS AND SPECIFICATIONS

- a. The contractor may refer the indicative tender drawings and once they approved following the detailed design and approved shall govern.
- b. They indicative drawings shall supplement or superseded by such additional approved detailed working drawings/ approved drawings for the work progress.
- c. Technical Standards and Regulations: The design, the contractor's documents, the execution, and the completed works shall comply with the Country's technical standards wherever available or with international standards, building construction and environmental Laws, Laws applicable to the product being produced from the works and other standards specified in the employer's requirements applicable to the works or defined by the applicable Laws.

12. USE OF SITE

- a. The contractor shall be permitted to use the land as per below specification for the permanent occupation of the work.
 - The NWRWSK Department will make such land, if available with the department within the department limits as may not be required for departmental use, available on rent as per clause 50 of this agreement to the contractor to an extent not exceeding that required for bonafide execution of the work. Should the contractor require additional land outside the Department limits for housing his staff or labour or for construction his office, godown's/s or approach roads, or for storing materials or for any other reasons, he shall make his own arrangements at his cost with the land owners/other govt. departments on such terms as may be mutually agreed between the contractor and the owners.
 - The contractor shall have to abide by the regulations of authorities concerned as well as by the direction of the Engineer-in-charge for the use of site of work.
 - He will also be allowed during the period of his contract the use of any other lands at the rate specified by the department in the vicinity of the works as and when the engineer may consider

such use to be necessary for the classified purpose of work. The contractor shall not commence any operation on such lands without prior approval from department.

- b. All areas of operation including those for his staff and labour colonies handed over to the contractor shall be cleared and handed back in good condition to the engineer except the area under works constructed as per this contract or those which specific approval has been obtained from engineer. The contractor shall make good to the satisfaction of the engineer any damage or alternations made to the areas which he has to hand back or to other property or land handed over to him for the purpose of this work.
- c. The contractor shall preserve all existing vegetation such as trees on or adjacent to the site which does not interfere with the construction as determined by the engineer. The contractor shall take all possible precautions in felling trees authorized for removal to avoid any unnecessary damage to vegetation and the trees not to be fall on structures under construction or workman and shall be responsible for any damage if it occurs in such operations. All produce from cutting of trees; grass etc. shall be the property of government and shall be stacked at the place specified by the engineer. No claim shall be made for such cutting and stacking of trees or grass etc. by the contractor.
- d. The lands shall be herein before mentioned, be handed over back to the department within SIX (6) months after completion of the work under this contract. Also, no land shall be held by the contractor longer than the engineer shall consider or deem it necessary and the contractor shall on due notice by the engineer vacate and return the land which the engineer may certify so as no longer required by the contractor for purpose of the work.

13. WORK ON SITE

1. The work of this pipeline is to be executed on the land acquired under “Right of Use” permission. The width of ROU shall be considered as per this document.

The payment of standing crops, compensation of wells, bores, buildings, properties, any of such requirements for work for the right of use permission to farmer / other affected persons / owners, NOC and other miscellaneous charges shall be borne by the contractor for the entire period of the contract. The contractor shall have to take enough precaution to see that no adjacent/ surrounding land is damaged / obstructed/ encroached by them during the execution. Any such dispute / litigation if arise shall be the responsibility of the contractor. However, bidder/contractor shall note that ROU notification shall be issued by the Department and land cost for getting ROU for laying pipeline (excluding above) shall be paid by the department as per Government rules and regulations. Also, the land cost for the Pumping Station to be borne by the department as per Government rules and regulations.

2. The contractor shall be responsible for acquiring necessary permission from the competent authority for Road/ Railway / Highway / canal crossing / gas / oil / water pipeline / crossings, forest clearance, any electrical cable line crossing, Telecommunications etc. during laying of pipeline at his own cost. However, only the correspondence with concerned department shall be facilitated by the department. All the statutory charges and other charges such as fees, insurance, miscellaneous charges / expenditure etc., charges for occurrence of any damages, NOC etc. (except land cost and rent charged by railway authority) for laying of pipeline below all the above-mentioned crossings are to be paid by the contractor. TPI inspection charges shall be borne by the government during construction period.

However, the concerned department insists to pay such statutory charges through the department /owner, such charges shall be paid by the department / owner and such amounts shall be adjusted /recovered from the contractor's bills. If any deposit which is reimbursable only after the construction period and completion of Operation & Maintenance of 05 years shall be paid by the department / owner.

All necessary persuasion is to be done by the contractor for getting/ obtaining clearances/ permissions.

On satisfactory completion of the work, required NOC to be obtained by the contractor from the concerned department. The contractor is responsible for obtaining all necessary permissions / clearance / NOC / sanctions etc. Required coordination for sanction from the concerned authority and NOC from the concerned authority / field owner for satisfactory completion shall be provided by the contractor.

3. Right of Way (ROW) and Facilities: The contractor shall bear all costs and charges for special and / or temporary Rights-Of-Way (ROW), which he may require, including those for access to the site. The contractor shall also obtain, at his cost, any additional facilities outside the site which he may require for the purposes of the works. The contractor shall have to make the payment to land owner by mutual understanding.
4. Avoidance of Interference: The contractor shall not interfere unnecessarily or improperly with:
 - The convenience of the public, or
 - The access to and use and occupation of all roads and footpaths, irrespective of whether they are public or in the possession of the employer or of others.

The contractor shall indemnify and hold the employer harmless against and from as damages, losses and expenses (including legal fees and expenses) resulting from any such unnecessary or improper interference.

5. Access Route: The contractor shall be deemed to have been satisfied as to the suitability and availability of access routes to the site. The contractor shall use reasonable efforts to prevent any road or bridge from being damage by the contractor's traffic or by the contractor's personnel. These efforts shall include the proper use of appropriate vehicles and routes. Except as otherwise stated in these conditions:
 - The contractor shall (as between the Parties) be responsible for any maintenance which may be required for his use of access routes;
 - The contractor shall provide all necessary signs or directions along access routes, and shall obtains any permission which may be required from the relevant authorities for his use of routes, signs and directions.
 - The employer shall not be responsible for any claims which may arise from the use or otherwise of any access route;
 - The employer does not guarantee the suitability or availability of particular access routes, and
 - Costs due to non-suitability or non-availability, for the site required by the contractor, of access routes shall be borne by the contractor.

14. FORCE MAJEURE

“Force Majeure” means an event beyond the control of the Employer and the Contractor, which makes it impossible or illegal for a party to perform, including but not limited to:

- a. Acts of God
- b. War, hostilities (whether war be declared or not), invasion, act of foreign enemies,
- c. Mobilization, requisition, or embargo;
- d. Rebellion, revolution, insurrection, or military or usurped power, or civil war
- e. Contamination by radioactivity from any nuclear fuel, or from any nuclear waste from the combustion of nuclear fuel, radioactive toxic explosive, or other hazardous properties of any explosive nuclear assembly or nuclear component of such assembly.
- f. Riot, commotion, or disorder, unless solely restricted to employees of the contractor or of his Subcontractors.

If either party is prevented from or delayed in performing any of his obligations under the Contract by any circumstances of Force Majeure, then he shall notify the other party thereof within seven days, and specify how these circumstances are detrimental in the performance of the Contract.

If the performance of the operation is substantially disrupted for a continuous period of three (3) months by virtue of any event of Force Majeure, then the department may by written notice terminate the Contract.

The Employer will indemnify the Contractor against all additional costs incurred as a result of the performance of the operation during circumstances of Force Majeure, as well as for the consequences of the termination resulting there from.

15. QUALITY ASSURANCE PLAN

The EPC contractor shall ask manufacturers to submit the QAP for the equipment manufacture by them as per standard quality practices / procedures and tests followed. The QAP will indicate clearly the tests / inspection to be carried out at manufacture's works which will be as per IS and/ or as specified in technical specifications (Vol. III A / B / C / D) of tender documents. The QAP shall be approved by TPI and client. The Engineer-In-Charge can depute third party inspector / client representative to witness the test as per approval given for Quality Assurance Plan and technical specification of the equipment given in tender, during inspection of the same.

No materials/ equipment shall be dispatched from the manufacture's work before the same is either accepted subsequent to pre-dispatch final inspections (including verification records of all previous test / inspection) by PMC / TPI / Owner representative or such pre-dispatch final inspection is waived by the PMC / TPI / Owner.

All the materials / equipment used or supplied under this project shall be backed up by valid material certificate and test reports.

16. LABORATORY ESTABLISHMENT

The contractor shall have to establish a well-equipped laboratory on site as per requirement of the work and as directed by the Engineer- in- charge. The contractor shall have to submit the proposed

layout plan of laboratory to be constructed on site with the details of equipment shall got approved from the engineer in charge. The building of laboratory shall be as per the approved plan of Engineer in charge.

17. ACCURACY OF LINES, LEVELS, AND GRADES

The various works shall be done true to line, level, and grade. The periodical checking of these works by Government's staff shall not absolve the contractor of his responsibility regarding the accuracy. In case of any deviation or discrepancy in line, level or grade at the meeting faces, the contractor shall make good the discrepancy at his own cost and without any extra compensation for the additional work involved. Whenever such a discrepancy is found to arise at the junction of works of different contractors, the responsibility to set right such discrepancy lies with the contractors concerned. The Engineer shall further have the unquestioned right, if need be, to rectify the discrepancies and recover the costs from the contractor or contractors according to proportion as he may consider reasonable.

18. TESTING OF MATERIALS AND WORKS

All materials before being incorporated in the work shall be inspected and if necessary, tested before being approved by the Engineer-in-charge. Any work on which such materials are used without prior inspection (and when necessary prior testing) and without approval or written permission of the Engineer-in-charge shall be considered as unauthorized, defective, and not acceptable. Points regarding compensation against On-Site Efficiency:

- a. No negative tolerance shall be permitted on pump or motor efficiency guaranteed by the contractor.
- b. The Contractor will have to submit detailed calculations for losses in fittings like BF Valve, NRV, Sluice Valve and pipeline provided up to common header and also in common header up to 10 M beyond connection of last pump.
- c. The estimated figures will have to be guaranteed by the Contractor.
- d. Provision of 150 mm dia. connection with isolation valve will have to be provided on both sides of each valve in delivery pipeline to assess the losses after commissioning.

In case of valves - the flow / frictional losses due to valves exceed more than the estimated losses, and then the contractor shall have to replace the valves with higher size valve at no extra cost and achieve the limit of losses.

All the pumps and motors combined will be tested individually as pump-motor set for efficiency at duty point after installation at pumping stations. The efficiency at pumping station site will not be less than the minimum guaranteed efficiency mentioned in the tender document. If efficiency of pump and motor is lower than guaranteed efficiency, then contractor has to replace pump or motor or make necessary replacement to achieve the guaranteed efficiency at his own cost. Such pumps, after corrective measures will be tested again to confirm efficiency at duty point. All other parameters of pump operation shall have to remain unchanged with these corrective measures. Maximum time allowed for such corrective measures and retest shall not exceed 60 days from the date of first test.

In all cases, the cost of testing charges excluding water and power charges shall be borne by the Contractor. The water and power will be supplied by the department. However, Penalty charges,

if any for not maintaining Power Factor as per requirement of Power Company should be borne by the contractor. The contractor shall supply all materials including calibrated instruments required for tests including temporary arrangement as may be directed by and to the satisfaction of the engineer.

An authorized representative of the contractor shall remain present at the time when the samples or cores etc. are taken and shall authenticate the facts, if so required. When the contractor's agent fails to remain present as aforesaid, the samples or cores etc. taken by the Engineer-in-charge or his representative shall be considered to be authentic. The contractor will however, be informed about the details of such samples and cores etc. having been taken.

The methods of sampling and testing, the procedure and standards shall be as laid down by the Engineer-in-charge for the respective item.

A. CONTRACTOR'S OBLIGATIONS:

Tests on Completion

The contractor shall carry out the tests on completion in accordance with this clause.

The contractor shall give to the employer not less than 21 days' notice of the date after which the contractor will be ready to carry out each of the tests on completion, unless otherwise agreed, tests on completion shall be carried out within 14 days after this date, on such day or days as the employer shall instruct.

Unless otherwise stated in the particular conditions, the test on completion shall be carried out in the following sequence:

1. Any testing which shall include the appropriate inspections and ("dry" or "cold") functional test to demonstrate that each item of plant can safely under- take the Commissioning stage.
2. Commissioning tests, which shall include the specified operational tests to demonstrate that the works or section can be operated safely and as specified, under all available operating conditions; and
3. Trial operation which shall demonstrate that the works or section perform reliably and in accordance with the contract.

During trial operation, when the works are operating under stable conditions, the contractor shall give notice to the employer that the works are ready for any other testes on completion, including performance tests to demonstrate whether the works conform with criteria specified in the employer's requirements and to the performance guarantees.

As soon as the works, or a selection, have passed each of the tests on completion described in this sub-paragraph (1), (2) or (3) the contractor shall submit a certified report of the results of these tests to the employer.

B. PIPELINE HYDRO TESTING

- a. The contractor shall make a request to department for quantity of water and power requirement for the pipe-line hydro testing at least one month in advance in writing for the department facilitation.
- b. All the cost and arrangements pertaining to pipeline hydro testing shall be made by the contractor.
- c. In case the contractor could not perform the hydro-testing in the first time due to what so ever the reasons such as leakage, breakdown or any other fault of the works executed by the contractor,

resulting into wastage of water and power etc. then the water and power charges will be recovered for onward tests.

- d. The rates of water and power prescribed by the government for industrial use at the relevant time shall be applicable. (For recovery to be made from the contractor as referred in the above point)
- e. The contractor shall make necessary arrangements to get the water and power for such testing at his risk from the source of the department.
- f. The department shall provide water and electricity for pipe-line hydro testing from available source for first time testing at free of cost to the contractor.
- g. However, any delay in providing water and power from the department side shall be taken into consideration for time limit extension appropriately for the delayed period. But during this extension period due to the aforesaid reason, no price variation shall become payable. However, any delay on part of the contractor, once water and power are made available as narrated above, shall not be considered as a reason for the time limit extension.

C. DELAYED TESTS

If the tests on completion are being unduly delayed by the contractor, the employer may by notice require the contractor to carry out the tests within 10 days after receiving the notice. The contractor shall carry out the tests on such day or days within that period as the contractor may fix and of which he shall give notice to the employer.

If the contractor fails to carry out the tests on completion within the period of 10 days after the issuance of such notice, the employer's personnel may proceed with the test at the cost of the contractor. These tests on completion shall then be deemed to have been carried out in the presence of the contractor and the results of the tests shall be accepted as final and binding to the contractor.

D. RE-TESTING

If the work, or a section of the work, fails to pass the tests on completion, the contractor shall require carrying out to repeat the same tests. The cost of all such repeated tests including cost of power and water shall be borne by the contractor.

19. LOANS OF GOVERNMENT'S TOOLS, PLANTS & MACHINERY - DELETED

20. ASSISTANCE IN PROCUREMENT OF PROPERTIES, PERMITS, IMPORT LICENSE, EXCHANGE FACILITIES ETC.

No such assistance/facilitation will be given by the department.

21. SECURITY MEASURES

In view of the strategic importance of all the projects and installations, security restriction may be imposed by the Engineer as per the directions of the security authorities and the contractor shall abide by all such instructions scrupulously. In case a system of identity cards is introduced, the contractor shall at his cost provide his persons all such identity cards with photo, if necessary, and get these duly signed by the Engineer or his duly authorized representative. The contractor shall

also keep the Engineer informed regarding all visitors and obtain proper permits for their visits. No unauthorized visitors shall be allowed on the work site.

22. DEWATERING AND DIVERSION AS AND WHERE NEEDED

The works are inclusive of all dewatering and diversion as and when needed. No extra payment shall be made for such items.

23. APPLICABILITY OF SPECIFICATIONS

Considering the common and general items required in execution of Irrigation project, general subject wise Specifications have been drawn and provided separately with the Tender. These provisions suitably provide requirements of execution of each component of work in general, consistent with the present practice of the scope of work, financial limitations are regarding the admissibility of work payment and acceptance of work against the tender requirement etc. are concerned. To avoid descriptive matter suitable reference for the relevant Indian Standards or otherwise is also specified. The whole idea is to guide the tenderer regarding the execution of work so as to base his rates accordingly.

The general subject wise specifications are further supplemented in separate chapter to cover the item wise specifications of work as per tender. These item wise specifications cover the applicable provision of the general specifications, considering the item description. Over and above these, the specific requirement of each item such as applicable leads, lifts, proportion of the mix, description about the execution of the item in details and other applicable aspects have been covered in such specifications. Intending, tenderers are, therefore, requested to read the tender papers on the above lines and quote their rates.

24. PROTECTION OF ENVIRONMENT

The contractor shall take all responsible steps to protect the environment on and off the site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of his methods of operations.

During continuance of the contract, the contractor and his sub-contractors shall abide at all times by all existing enactments on environmental protections and rules made there under, regulations, notifications

and bye -laws of the state or central govt., or local authorities and any other law, bye-law, regulations that may be passes or notifications that may be issued in this respect in future by the state or central govt. or the local authority.

Salient features of some of the major laws that are applicable are given below:

The water (Prevention and control of pollution) act, 1974, this provides for the prevention and control of water pollution and the maintaining and restoring of wholesomeness of water. “pollution “ means such contamination of water or such alteration of the physical, chemical or biological properties of water or such discharge of any sewage or trade effluent or of any other liquid, gaseous or solid substance in to water (whether directly or indirectly) as may, or is likely to, create a nuisance or render such water harmful or injurious to public health or safety, or to domestic,

commercial ,industrial , agricultural or other legitimate uses, or to the life and health of animals or plants or of aquatic organisms.

The air (prevention and control of pollution) act, 1981: This provides for prevention, control and abatement of air pollution “air pollution” means the presence in the atmosphere of any “air pollutant” which means any solid, liquid or gaseous substance (Including noise) present in the atmosphere in such concentration as may be or tend to be injurious to human beings or other living creatures or plants or property or environment.

The environment (protection) act 1986: This provides for the protection and improvement of environment and for matters connected therewith, and the prevention of hazards to human beings, other living creatures, plants, and property. ‘Environment’ includes water. air and land and the interrelationship which exists among and between water, air and land, and human beings, other living creatures, plants, micro- organism, and property.

The public liability insurance act 1991 this provides for public liability insurance for the purpose of providing immediate relief to the persons affected by accident occurring while handling hazardous substance and for matters connected here with or incidental there to. Hazardous substance means any substance or preparations, which is defined hazardous substance under the environment (protection) act 1986, and exceeding such quantity as may be specified by notification by the central govt.

The contractor shall have to take the following measures for the protection of environment.

1. The contractor shall not cut any trees in premises of work, which is not required for the execution of work.
2. The contractor shall not pollute the air or water by any construction activities.
3. The contractor shall have to take the steps to minimize noise pollution.
4. The contractor or his persons shall not disturb the lives of the people of nearby villages by any way.
5. There should not be any hazard to the life of wild animals, birds, and micro-organisms, due to any construction activities by the contractor.

25. TRAINING

The Contractor shall carry out the training of Employer’s Personnel in the operation and maintenance of the Works to the extent specified in the Employer’s Requirements. If the Contract specifies training which is to be carried out before taking-over operation and maintenance, the Works shall not be considered to be completed for the purpose of taking-over until this training has been completed.

Operation and Maintenance Manuals Prior to commencement of the Tests on Completion, the Contractor shall supply to the Employer provisional operation and maintenance manuals in sufficient detail for the Employer to operate, maintain, dismantle, reassemble, adjust and repair the plant. The Works shall not be considered to be completed for the purposes of taking-over until the Employer has received final operation and maintenance manuals specified in the Employer’s Requirements for these purposes.

26. MANAGEMENT MEETINGS

“Either the Employer’s Representative or the Contractor’s Representative may require the other to attend a management meeting. The business of each management meeting shall be to review the anticipated arrangement for future work and to resolve any matters rose in accordance with this Sub- Clause. The Employer’s Representative shall record the business of management meetings and provide copies of this record to those attending the meeting and to the Employer.

The responsibility of the parties for any actions to be taken shall be included in such record and shall, if not agreed in accordance with the Contract, be decided by the Employer’s Representative.

27. CHANGES IN DESIGN AND DRAWINGS

The drawings given with tender documents are indicative. However, during execution of work, any change in design and drawings that may be warranted on account of strata met with or the material that may be available or any other reasons shall not vitiate the contract and no extra payment shall be made to the contractor.

The dimensions given in the design / drawing are minimum requirement. The contractor is necessary to carry out the detail engineering and provide the dimensions as per the requirement for the proper functioning of the project considering minimum requirement. However, all such detail design / deliverables are necessary for its approval from the Engineer-in-charge prior to execution of work. In case, without approval of design/drawing, if contractor proceeded for execution of work, then the contractor is fully responsible for non-compliance and it will be at his cost.

28. LIQUIDATED DAMAGE CRITERIA FOR ELECTRIC CONSUMPTION

The following liquidated damages shall be recovered from the contractor, in addition to the provision for the liquidated damages made under Clause no 49 (section-3 – condition of contract) meant for delayed completion of the works.

A. For Pumping Station

1. Liquidated damages for Excess Power Consumption in Pumping Machinery:

For design discharge and head, at Testing/commissioning stage, the following minimum guaranteed parameters must be achieved for the pumps and motors installed for this work shall be as under:

- a. For each pump, the minimum efficiency shall be 86 % or as guaranteed by bidder whichever is better
- b. For each motor, the minimum efficiency shall be 94 % or as guaranteed by bidder whichever is better
- c. For each set of pump and motor, the minimum combined efficiency shall be 80.84% or as guaranteed by bidder whichever is better

Note: No negative tolerance shall be allowed in above.

During Testing/ Commissioning, each pump and motor set shall be tested and efficiency shall be worked out up to TWO Decimal. At design discharge and head, the combined efficiency of each pump and motor set shall also be worked out. If the guaranteed combined efficiency of each pump & motor set found lesser than the specified above, then the pump and/or motor set shall be liable for rejection. Therefore, the contractor shall rectify/ repair / replace the system/ part and re-testing/

re-commissioning to be carried-out for the pump and/or motor set within ten days. Thereafter, in case, the guaranteed combined efficiency of each pump and motor set not meeting the above guaranteed combined efficiency, then the pump and/ or motor set shall be rejected. No any claims from the Contractor against this shall be entertained.

During O&M Period: Contractor shall maintain the system as per standard operation parameters such that it operates as per design and within the optimum efficiency such that the overall efficiency and specific power consumption of the pumping station during the O&M period of 05 years as below:

Parameter	At Commissioning	Up till the End of Defect Liability Period (3 rd Year)	Up till the End of 5th Year
Specific power consumption (SPC)	Less than or equal to 0.1467	Less than or equal to 0.1467	Less than or equal to 0.1467

Where $SPC = (\text{Total Power consumed at supply energy meter} - \text{power consumed by auxiliary transformer feeder}) / (\text{Total water supplied during the period from pumping station})$

Specific power consumption (SPC) is KWh consumed per unit of water pumped at Pumping station in Cum/hr. The guaranteed SPC will be evaluated at the time of technical approval and same will be measured and calculated at time of performance test during commissioning which shall be less than or equal to above parameters.

The SPC so determine shall be maintained up to 5 years from date of commissioning without any positive variation and further up to 10 years with max 1% positive tolerance. Tolerance shall be rounded up to two decimals in percentage.

The energy audit and efficiency measurement of combined pump and motor set shall be carried out as per the above schedule and minimum guaranteed specific power consumption shall be achieved. It shall be carried out annually and shall satisfy the parameters specified in the above table.

In case, the guaranteed parameters observed lesser than the above specified table, then the contractor is liable for liquidated damages for loss in extra energy consumed from the SPC guaranteed and the same will be recovered from contractor bills/ Security Deposit. i.e., penalty to be charged = (guaranteed SPC – observed SPC) x volume of water pumped during the year since last audit in cubic meters x maximum energy tariff of the same period.

The department is at the liberty to carry out energy audit and efficiency measurement at any intermediate time. If any reduction in the efficiency found compare to the minimum efficiency (for such intermediate period, the specified minimum efficiency shall be worked out on the prorate basis), the contractor shall have to pay liquidated damages as per loss occur to department.

The energy audit shall be carried out as per the above schedule, from the Government approved agency by the department like ERDA or equivalent government approved agency.

In case SPC not satisfying the min guaranteed parameter on completion of O&M or hand over to department whichever is early then penalty will be calculated considering full rated designed discharge of the scheme for 100 days in a year and will be multiplied by balance period in 30 years from date of commissioning. ie (30 years – No of years passed from commissioning)

Each flow meter and energy meter utilized in the above measurements shall be calibrated every year before start of new year during O&M.

Flow meter at pump house and out let shall be kept operational and measured daily for above for measurement of above criteria.

Note: If the SPC is found better than the above guaranteed parameters, no credit or benefit will be given to the contractor.

Example of calculating specific power consumption: KW / m³ of water delivered for Kelamul LI

Q @ Duty point of each pump (m ³ /hr.)	Head (m)	Power input to each motor (KW)	Power input to all Working motors (KW)	Power transformer efficiency @ FL	Power required at Switchyard [D/ E]	Q @ Duty point of no Pumps [3*A]	Specific energy consumption
A	B	C	D	E	F	G	[F/G]
204	33.401	26.5	53	0.99	53.53	408	0.1312

Where SPC = (Total Power consumed at supply energy meter – power consumed by auxiliary transformer feeder) / (Total water supplied during the period from pumping station)

Illustration for computing effect on specific power consumption by reduction in guaranteed parameter in pump house for Kelamul LI

Sr No.	Technical Parameters (A)	Illustrated observe Parameters (B)
1	Total water supplied from pumping station during the period of 24 hours (Cub meter)	269120.77
2	Total Power consumed at supply energy meter during the period of 24 hours (KW)	39600
3	Power consumed by auxiliary transformer feeder during the period of 24 hours (Kw)	100
4	SPC calculated = (B2-B3)/B1	0.1467743
5	Difference in SPC value = (B4) - (Designed SPC)	0.01564
6	Difference in Kw consumed due to SPC difference = (B5 x B1)	4210.8794
7	Additional charges from power utility = (B6 x 8) (considering power unit rate at Rs 8/ Kwh)	33687

LD for Excess power penalty for above illustration is worked out as for 24 hours as Rs 3872/-

1. Liquidated Damages Criteria for Reduction in Flow through pipeline system:

The pipeline system shall be capable to deliver the designed capacity of water demand at the pipe outlet. For the regular supply during the O&M period, the bidder shall get the demand requirement from the employer and run the system accordingly as per varying demand during the O&M period.

Post Commissioning: If the quantity of water received at outlet's during testing & commissioning & during O&M is less by more than 2% (two percentages) of the designed flow & the planned demand as above, the liquidated damages will be deducted for the loss of water measured x {(cost of power x SPC observed for the period or guaranteed SPC whichever is higher) + (cost & tariff of water pumped from the pump house)}.

Each flow meter and energy meter utilized in the above measurements shall be calibrated every year before start of new year during O&M.

Flow meter at pump house and out let shall be kept operational and measured daily for above for measurement of above criteria.

The quantity of water loss above, shall be after allowing/ adjusting accuracy of flow meter reading.

Illustration for LD in case the reduction in flow is above 2%, penalty shall be calculated as below for Kelamul LI -

Sr No.	Technical Parameters (A)	Illustrated observe Parameters (B)
1	Total water supplied from pumping station during the period (Cub meter) 24 hour (Day)	269121
2	Total water quantity measured at all outlet/ sump during the period (Cub meter) 24 hour (Day)	262393
3	Total quantity of water loss from pump house to outlet points in the pipeline system during the period = B1-B2	6728
4	Quantity of water loss permitted @2% = B1* 2%	5382
5	Quantity of water loss above 2% permitted loss = B3-B4	1346
6	Power consumed for the loss of water above 2% = B5 x Calculated SPC	198
7	Cost of Power for loss of water above 2% = B6*8 (where power tariff is Rs 8/kwh) during the above period	1584
8	Cost of water loss above 2% = B5* 1.7 (Where water rate is 1.7 Rs /Cum)	2288
9	Total LD for reduction in flow during the period = B7+ B8	3872

Thus, LD for Excess power penalty for above illustration is worked out as **Rs 3872/- per Day**

2. Power Factor:

If Power factor is lesser than 0.98, the contractor shall modify (or) redesign the capacitor bank as per the requirement to achieve the desire Power Factor. No extra payment will be made for

modification of capacitor bank. During operation period, any penalty imposed by power supply authority due to change in power factor, such penalty will be recovered from the contractor.

General:

a) Use of SCADA will be primary used to generate reports daily and calculation of the Specific Power consumption, Daily water balance, water loss & Power factor.

b) A portable flow meter shall be in use for measurement of flow at the outlet points of pipeline intended to be measured for quantity of water loss.

No credit or benefit will be given to the contractor for better performance parameter achieved during O&M period.

29. RECTIFICATION DURING DEFECT LIABILITY PERIOD

The contractor has to rectify all the defects identified during defect liability period within 15 days. If he fails to do so, the same shall be rectified/replaced by the department at the cost of contractor.

30. TIME AND ADMISSIBLE PAYMENT

The time limit for completion of work is 24 months from date of work order. The contractor has to complete the work including testing, trial run & commissioning within this period. On successful commissioning of the system, contractor has to operate and maintain the system for 05 years. The O & M period of 5 years commences from the date of commissioning of the project, which includes the Defect Liability Period of 3 years. Any repairs, break down occurs during O & M Period is to be rectified by contractor at his own cost. The payment for O&M period will be as per Volume IV-Price Bid, after recovery if any.

31. CONDITION REGARDING VENDOR LIST

The bidder shall quote rates considering approved vendor list mentioned in this Volume. However, during the course of execution of work, the contractor may request use of other brand / product other than mentioned in the approved vendor list giving sufficient reason of non-availability of material from approved vendors. The department may consider the request of contractor at that time and the decision of department shall be final & binding to the contractor at that time. However, the contractor has to submit such a request before at least one month of due course of work. In any case, the extension of time limit shall not be granted for the time lapse in such procedure.

32. THIRD PARTY INSPECTION

The contractor shall note that department may appoint a Third-Party Inspection Agency suitably prior commencement of work. In such case, the contractor has to make office provision with necessary supporting computer equipment with internet facility and arrange for site office for T.P.I. agency.

33. PRECEDENCE OF DOCUMENTS IN CASE OF DISCREPANCY

In the event of any discrepancy, in the several documents forming the contract or in any one document the following order of precedence should apply:

1. Between two or more clauses of this agreement, the provisions of a specific clause relevant to the issue under consideration shall prevail over those other clauses.
2. Between the clauses of this agreement and the schedules, the clauses shall prevail and between schedule ad Annexes, the schedules shall prevail.
3. Between any two schedules, the schedule relevant to the issue shall prevail.
4. Between the written description on the drawings and the specification and standards, the latter shall prevail.
5. Between the dimension scaled from the drawing and its specific written dimension, the latter shall prevail.
6. Between any value written in numerals and that in words, the latter shall prevail.

34. OFFICE AND VEHICLE FOR DEPARTMENT

~~1. **SITE OFFICE:** The Contractor has to provide office or portable office (having minimum size 20 ft x 8 ft x 8.6 ft) at each pumping station with required furniture (i.e., computer table and other table with necessary chair), A/C, internet facility and latest computing facilities with printer, scanner etc. to the Department and TPI as approved by the Engineer in Charge from where communication with the Contractor will be easier. This facility to be available till commission of project.~~

~~2. **VEHICLE:** The Contractor has to provide 1 no. of four wheeler vehicle of model manufactured current year or latest model, in working condition to the Department. The vehicle such as 7-seater SUV (can be used at site) to be deployed right from the contract work commencement till completion period including O&M period. The vehicle is to be deployed for 365 days in each year. This vehicle will be at the disposal of Department with the provision of licensed driver and is expected to run up to 5000 km Per month. All travel expenditure should be covered with all regular maintenance. All such expenditure is to be borne by the Contractor. The vehicle should have comprehensive insurance. The vehicle shall have to be replaced by the contractor with the latest model after 5 years of O&M period or earlier by the contractor, if the same found not suitable by the Engineer in-charge.~~

~~Note – If the agency fails to provide a car from Day 1, an amount of ₹50,000 per month or the prevailing market rate whichever is higher shall be deducted or recovered from the bill.~~

~~3. **TOUR VEHICLE:** The Contractor has to arrange for Four wheeler of model manufactured in current year or latest model in working condition as and when required for tour of Senior Department Officers from Gandhinagar to site/factory visit. The vehicle shall be air conditioned and MUV of Mahindra Jeep (TUV) / Toyota Innova / Equivalent (with SRS Passenger Air Bag and Bucket Seat) to be deployed right from the contract work commencement till work completion period. The vehicle is to be deployed as and when communicated for tour period during the entire period of contract. This vehicle will be with the provision of licensed driver and is expected to run up to 2000 kms. Per month. All travel expenditure/toll etc should be covered with all regular maintenance. All such expenditure is to be borne by the Contractor. The vehicle~~

~~should have comprehensive insurance.~~

~~**Note** If the agency fails to provide a car as per requirement of department as/ when/ where, an amount of ₹50,000 per month or the prevailing market rate whichever is higher shall be deducted or recovered from the bill.~~

~~**4. SITE LABORATORY:** The contractor must construct Laboratory as directed by Engineer In-charge with facility of required toilet facility, electrification etc.~~

~~The above facility is to be provided to facilitate inspection of work, quality testing of material.~~

~~This facility is to be installed within 1 month from issue of work order. The above facility is to be maintained till satisfactory completion of work.~~

35. DOCUMENTS TO BE SUBMITTED BY THE CONTRACTOR

Upon Completion of Physical Construction and Hydro-testing (Phase-1), the following minimum mandatory documents shall be submitted by the Contractor (each 5 sets)

1. Final design documents
2. As built drawings of Civil, Mechanical, Electrical and Instrumentation systems
3. Manufacturer's catalogues/ literatures of all items/ products used in this project
4. All approved QAP documents
5. All Test certificates and inspection reports of materials/ equipment
6. All X-ray films (only one set)
7. O&M Manual with operating philosophy and procedure

Any further documents/ drawings pertaining to this contract asked by the Engineer-in-charge such documents also required to be furnished by the Contractor.

36. DISPOSAL OF THE HARD ROCK

The contractor has to collect and arrange for disposal of the hard rock met with in executions of work.

The payment for the same will be recovered from contractor at Rs. 220.05/- m³ (rate of R & B SOR, Mahisagar 2024-25, it- M540). The minerals if met during same shall have to be stacked on site selected by dept. and same must be handed over to department on completion of work.

37. SPECIAL CONDITIONS FOR CONTRACT AGREEMENT

If the interpretation of any clause of the agreement is not in accordance with prevailing rules, regulations & standard practices or if there are any mistakes (typographical, clerical, etc.) in the measuring units, formulas or terms and conditions of the contract, then contractor should bring it to the notice of department for seeking clarification before signing of agreement. If contractor fails to do the same, department reserves the right to make necessary corrections in the agreement as per prevailing rules, regulation, and standard practices at any stage. Contractor shall accept such changes even after signing of a formal contract.

38. ROU/ROW, LAND ACQUISITION AND STATUTORY CLEARANCES

Draft proposals for obtaining “Right of Use (ROU)” for laying of pipeline and other associated activities shall be prepared by the contractor after completing survey of main pipeline alignment as well as survey of feeder pipelines. Such proposals shall be prepared as per the prevailing act and norms/practice of department of ROU. On completion of survey of pipeline alignment by the contractor and after publication of the final notification of ROU by the department, further activities under the scope of work shall only be commenced by the contractor. **For this, kindly refer ‘Gujarat Water and Gas Pipelines (Acquisition of Right of User in Land) Act, 2000-under Section 3 and sub-section 1.’**

On behalf of the department, considering the status of work and anticipated date of commissioning of the pumping station, the contractor shall prepare necessary application for obtaining electric connection for the pumping stations. The departmental official will sign the application form and shall pay all statutory charges and application fees related to electrical connection. The contractor shall co-ordinate/liaison with the electric authority and shall make all necessary follow up efforts to ensure timely availability of power supply for the pumping stations.

In the case of obtaining electric connection prior to the stipulated / anticipated date of commissioning of the pumping stations, all the charges levied by the electricity authority, for that idle period, shall be recovered from the bills of the contractor.

The contractor shall bear all costs and charges for special and / or temporary Rights-Of-Way (ROW), which he may require, including those for access to the site. The contractor shall also obtain, at his cost, any additional facilities outside the site which he may require for the purposes of the works. The contractor shall have to make the payment to land owner by mutual understanding.

Furthermore, for land acquisition the whole process/approval for the work has to be done by the contractor. The payment for the same will be paid by the department to the concerned person/department.

39. PROVISION OF BOCW ACT 1996.

Contractor has to within stipulated days under the BOCW Act, 1996 get registered online on www.ifp.gujarat.gov.in along with documentation, fees etc. As per provision of the ACT contractors liable under the act shall not engage any workers for any construction at site prior to registration with concern department office/website. Necessary condition to the above shall also form part of the LOI/Work order to be issued to successful bidder.

40. FINAL CERTIFICATES

The contractor (s) should note that the following sequence of certification as defined as below prior to issue of Final certificate:

A. COMPLETION CERTIFICATE – TO BE ISSUED AFTER THE COMPLETION & COMMISSIONING OF ALL ITEMS OF CIVIL, MECHANICAL, ELECTRICAL AND INSTRUMENTATION

Upon successful completion of Commissioning of project and meeting all relevant technical parameters defined in this contract, the contractor is required to intimate the department in writing. Based on this, the Executive Engineer will issue the Commissioning Certificate within One (1) month, subject to full filling all contractual requirements. Upon receipt of this certificate (Phase-I) and after commissioning of the said work, the defect liability period and O & M period shall begin immediately.

B. FINAL CERTIFICATE – TO BE ISSUED AFTER THE SUCCESSFUL COMPLETION OF TOTAL O&M PERIOD OF 05 YEARS

From the date of issue of Commissioning Certificate (Phase-I), the O&M period of 05 years will be commenced. Upon successful completion of total O&M Period of 05 years and after handing over the said work to the department, the contractor is required to intimate the department in writing. Based on this, the Executive Engineer will issue the Final Completion Certificate for the project within One month, subject to full filling all contractual requirements.

The certificate shall be issued only after removal from the premises on which the work shall have been executed, all scaffoldings, surplus materials, rubbish and shall have cleaned of dirt from all wood works, doors, windows, wall floors or other parts of any structures in or upon which the work has been executed or of which the contractor may have had possession for the purpose of executing work, this certificate shall be issued after the work have been measured and certified by the Executive Engineer or where the measurements have taken by his authorized subordinate and until they receive the approval of the Executive Engineer. Such measurements being binding and conclusive against the contractor. If the contractor fails to comply with the requirements of this Clause, on or before the date fixed by the Executive Engineer, In case of none removal of above said things, then the Executive Engineer may at the expense of the contractor remove such scaffolding, surplus materials, rubbish and dispose of the same as he thinks it and clean off such dirt as aforesaid, and for this the contractor shall bear all such expenses incurred and these will be deducted from contractor's pending payments, but shall have no claim in respect of any as aforesaid except for any sum actually realized by the sale thereof.

41. INSTRUCTIONS AND CLARIFICATIONS

A. Ambiguity in Drawings, Specifications and other Tender Documents

Any ambiguity seems in tender specifications, conditions etc., contractor shall bring into notice and ask for clarification/s from Engineer in charge. If not, Engineer in Charge's decision will be binding to the contractor for use of any material or use of methodology etc. The contractor will not be paid for any extra/ additional amount for such variation, if any.

B. Contractor to adopt his own findings and data to bid

This EPC (Engineering, Procurement & Commissioning) Contract. Tender Drawings, Details and Specifications are minimum standards required from the department, but in case of adopting higher configuration/ criteria, serving efficiency and functionality of the system as a whole, shall be of prime importance. Contractor needs to do his own survey & Investigations.

C. Contractor to do re-engineering, re-survey & Investigations etc.

Contractor needs to do re-engineering, re-survey & Investigations and same shall be get approved them by concerned competent authority before start of work.

D. All drawings and Details Provided with Tender Are Indicative Only

All drawings are indicative only. Contractor has to modify details, structural & other designs etc. get approved by Engineer in charge/ concerned authority. No extra or additional amount will be paid for any changes required in detailing/ designing/ matching configuration component being used.

E. Minimum Size, Sections to be used

If site condition favours and contractor's design sections of Pipe dia, class of pipe, internal lining and external coatings, sections of PCC/ CC/ RCC, any structural member, reinforcement requirements work out be smaller/ lesser than shown in drawings/ specified in BOQ/ Specifications, contractor required to adopt minimum section/ detail/ dimensions as shown in drawing and/ or specified in specifications.

F. Damage during construction & Its reinstatement is Contractor's Responsibility

Contractor needs to take care that any premises, Property, structures, compound walls, utility services and their main lines for water, sewer, storm, gas, oil, electric and telephone cables, optical fibre cables, any hidden object/ utility etc. Any damage to anything (specified herein or not) will be contractor's responsibility. Any reinstatement for such components or penal actions shall be contractor's responsibility. The Department will not pay any amount for such components.

G. Items used are Comprehensive.

Many of the items are included with support activities/ material/ accessories/ components. Contractor needs to bid keeping this in mind. For example, DI pipeline with internal cement mortar lining, suitable rubber gasket, DI specials will be requiring excavation in all sorts of soil and for all leads and lifts, sand bedding, lowering laying of DI pipe including required specials, refilling-including watering and compaction, hydraulic testing, commissioning, ROU/ROW, road cutting, road reinstatement with all other allied works as per description of item. These are the components which are not going to be paid separately. Contractors need to bid rates of DI pipeline keeping this in mind. Similarly, for sluice valves/ Butterfly valve with chambers rates shall be included for their own material & Installation as well as procurement of material and installation of SS Expansion bellows of same size and Pressure rating. But separate rates for expansion bellow will not be paid but rates of Sluice valve/ Butterfly valve only will be paid. Similarly, contractors need to look in description of the item in BOQ/ Specifications/ drawings etc. for each item in price bid carefully and shall bid accordingly.

In case any doubt about cost the Items inclusive or not, contractor shall specifically ask before closing of bid submission and seek clarifications before tender is submitted. Otherwise, item/s would be deemed to be included in cost for the project and no extra payment shall be made for the particular item. Superintending Engineer's decision will be final and binding to the contractor in case of any dispute regarding cost of the Item specified in BOQ.

H. Conflict in Selection of Material/ System of Installation/ Services

In case of conflict in selection of material/ system of installation/ services etc., Better one shall be used for the early, effective and efficient commissioning as well as operation and maintenance and minimizing recurring costs.

Section - 12 **Enclosures**

Enclosure – 1: Vendor Lists

Enclosure – 2: Specifications

Enclosure – 3: Price Bid Schedules

Enclosure – 4: Drawings

Enclosure I - Vendor List

A.	CIVIL WORKS	
Sr No.	Description	Name of Manufacturer
1	Ordinary Portland Cement	Ambuja Cement
		Birla Cement
		JK Lakshmi
		Sanghi Industries Ltd. (Sanghi) Cement
		Binani Cement
		Jaypee Cement
		Ultratech cement
		Siddhee Cement
		Kamal/KJS Cement]
		Hathi cement
		Hi-bond cement
2	TMT Bars	SAIL
		TATA
		JINDAL
		Welspun Power & Steel Ltd.
		Electrotherm (India) Ltd.
		NILKANTH
		KAMDHENU
		Rashtriya Ispat Nigam Limited
3	M.S. Plate/H. R. Coil	JSW Steel Limited
		SAIL
		Tata (TISCO)
		ESSAR
		Jindal
		Rashtriya Ispat Nigam Limited
4-A	External 3LPE Coating Epoxy Powder (First Layer) Adhesive (Second Layer) PE Compound (Third Layer)	Welspun Corporation Ltd.
		3M
		Valspar
		Jotun
		KCC Corporation
		DuPont
		Borealis / Borough
		Hyundai Corporation
		Lushan
		Korea Petrochemicals India
		KLJ Polymers & Chemicals Ltd.
4-B	Heat Shrink Sleeves (HSS) (For field outer coating)	Seal for Life
		Canusa CPS
		Shri Narayan Impac India LLP (Formerly known as Raychem RPG)
5	Internal Coating Food Grade Epoxy	Shalimar Paints
		Berry Plast
		Raychem RPG
		Deep Industries

		Hempel
		3M
		Sigma Coating
		Grauer & Weil (India) Ltd.
		Berger Paints India Ltd.
		Thakor Reductants Pvt. Ltd. (TRPL)
		Akzonobel + international
6	Welding Electrodes/ Welding coated filler wire flux Coated Filler Wires for SAW Welding Flux Material for SAW Welding	Advani Orlekon
		ESAB
		Modi Electrodes Modinagar
		Precision
		Lincoln Electric
		Pitharc
		A.V. Weldtech
7	D.I. Pipes	Jindal Saw Limited
		Electrotherm (India) Limited
		Shri Kalahasthi Pipe Limited
		Jai Balaji Industries
		Electro steel Castings Limited
8	M.S. Pipes Manufacturing (Spiral/ Helical Seam Submerged Arc Welded- SAW Pipes) (ERW Pipes Fabrication)	Welspun Corporation Ltd
		Ratnamani metals & Tube Ltd. Kutchh
		Jindal Saw Limited
		PSL Limited Anjar
		Man Industries Kutchh
		Deep Industries
		Essar Steel India Ltd. Hazeera
		Surrinder Engineering

B.	MECHANICAL	
Sr No.	Description	Name of Manufacturer
1	Vertical Turbine Pump / Centrifugal Pump	Jyoti Limited
		Kirloskar Brothers Limited (KBL)
		WPIL Limited (WPIL)
		Mather & Platt Pumps (I) Ltd
		Xylem
		Flowmore Limited
2	HSCF Pumps	Jyoti Limited
		Kirloskar Brothers Limited (KBL)
		WPIL Limited
		Mather & Platt Pumps (I) Ltd
		Xylem
		Flowmore Limited
		Crompton Greaves Ltd.
3	Squirrel Cage HT Induction Motor	ABB
		Bharat Heavy Electricals Ltd. (BHEL)
		Siemens India Limited
		NGEF

		Crompton Greaves Ltd
		Kirloskar Electric Company Ltd.
		Jyoti Ltd.
4	LT Motor	Kirloskar Electric Company Ltd.
		Siemens Greves Ltd (Crompton)
		Crompton Greaves Ltd (Crompton)
		Bharat Heavy Electricals Ltd. (BHEL)
		Jyoti Ltd.
		Bharat Bijlee Ltd.
		ABB
		Matathon (Formerly Alstom)
		L & T
		Havells (Lafert)
5	Motorize Valve Actuators	Rotork Controls (India Private Limited)
		AUMA India Private Limited
		Hawa Engineering
		Limitorque India Ltd
6	Butterfly valves	Indian Valve Pvt. Ltd (IVS)
		Kirloskar Brothers Limited (KBL)
		R & D Multiples
		L& T Valves
		DURGA Engineering Company
		G.M. Dalui & Sons Pvt. Ltd. Kolkatta
		Hawa Engineering
		G.M. Engineering
7	Check Valve (Dual Plate Check Valve	Indian Valve Pvt. Ltd (IVS)
		Kirloskar Brothers Limited (KBL)
		R & D Multiples (R & D)
		DURGA Valves Pvt. Ltd
		G.M. Dalui & Sons Pvt. Ltd. Kolkatta
		Hawa Engineering
		G.M. Engineering
		Flownix Valves
8	Kinetic Air Valve	Kirloskar Brothers Limited (KBL)
		Indian Valve Pvt. Ltd (IVS)
		R & D Multiples (R & D)
		G.M. Dalui & Sons Pvt. Ltd. Kolkatta
		DURGA Engineering Company
		Hawa Engineering
		G.M. Engineering
		Flownix Valves
9	E.O.T/Semi gantry Cranes	Brady & Morris Engg. Co. Ltd.
		Japs Project
		Max Industries
		Meeka Machinery Pvt Ltd
		Safex Equipmnt Pvt. Ltd.
		Techno Industries
10	Metallic Expansion Bellow	Beloflex (B.D Engineers)
		Sur Industries

		Precise Engineers
11	Dewatering (Drain) pump	Kirloskar Brothers Limited (KBL)
		Crompton Greaves Ltd
		ksb pump
		WPIL Limited
		Wilo (Mather & Platt) Pumps Ltd.
		Xylem Pumps
12	Water Hammer control Devices	Jash Engineering
		Megha Engineering
		Flonix Valves Pvt. Ltd.
		Dorro it
		Jupiter Engineering
13	Sluice valves (Scour valve/feeder valve)	Indian Valve Pvt. Ltd (IVS)
		Kirloskar Brothers Limited (KBL)
		R & D Multiples
		L & T Valves
		Bopp & Ruther VAG (Mather & Platt)
		G.M. Dalui & Sons Pvt. Ltd. Kolkatta
		DURGA Valves Pvt. Ltd.
		Hawa Engineering
		G.M. Engineering

C.	ELECTRICAL	
Sr No.	Description	Name of Manufacturer
1	Outdoor Lightning Arrestor	Elpro
		Birla NGK Insulators
		Oblum
		GEC
		WS insulators
		Lamco
2	Outdoor EHV Current & voltage transformers	Crompton Greaves ltd
		Siemens
		ABB
		Jyoti Ltd
		Areva
		Gilbert
		Easun Rayrolle
		MEHRU
3	Outdoor EHV SF6 Circuit breaker	ABB
		Areva T & D
		Alstom
		Crompton Greaves
		Larsen and Toubro
		Schneider Electric
		Siemens
4	Isolators	S & S Switchgear Ltd.
		SMC

		ELPRO
		ABB
		Siemens
		L & T
		Elcon
		Schneider
		Areva
		ABB
5	Power Transformers	Bharat Bijlee
		Crompton Greaves
		EMCO
		IMP Power Ltd.
		Kirloskar Electric Company Ltd.
		Transformers & Rectifiers (India) Pvt.Ltd.
		Volt amp
		Siemens
		Schneider
		Areva T & D
		GEC-Alstom
		ABB
6	Auxiliary/Distribution/ Station Transformers	Bharat Bijlee
		Crompton Greaves
		EMCO
		IMP Power Ltd.
		Transformers & Rectifiers (India)
		Volt amp
		Siemens
		Areva T & D
		GEC-Alstom
		Electrotherm
		Schneider
		Jayshree Insulators
7	Disc insulators/Bus Post insulators/Bushing	Prime Insulators
		Vishal Malleable
		W.S. Insulators
		BHEL
		BHEL
8	HV Switchgear	BIECO LAWRIE
		GEC-Alstom
		Siemens
		S & S
		Jyoti
		NGEF
		ABB
		H.T Switchgears Pune
		Schneider
		L & T
9	Low Voltage Switchgear and control-gear	Control & Switchgear

		Siemens
		Jyoti
		Positronics
		Industrial Controls
		Horizon Microtech
		Sun Automation
		Peaton
		Swati Switch Gear
		Schneider
		H.T. Switchgear
10	Neutral Grounding Resistance	Narkhede Electrical Pvt. Ltd.
		Resirech Electricals Pvt. Ltd.
		AMP Control Equipment Pvt. Ltd.
11	HSFR / FCMA Soft Starter	Jayashree Electron
		Innovative Technomatics
		Lecon Energetcs
12	LT Soft starter	Lecon Energetcs
		ABB
		Schneider
		Jayshree Electron
		Siemens
13	ACB MCCB SDF	L & T
		Siemens
		Schneider
		ABB
		Control & Switchgear
14	Annunciation	Minilec
		Protons
		CA
		Peacon
15	Battery and Battery Charger	Standard
		Exide
		Amara Raja
		AMCO
		Servlink
		Sabnife system
		Chhabi Electricals
		Mass Tech controls
16	Contactors & overload relays	ABB
		Larsen and Toubro
		Schneider Electric
		Siemens
		Control & Switchgear
17	Control & relay panels	Siemens
		L & T
		ABB
		Schneider
		Easun Rayrolle
		Areva & Panetronics

		ABB-H.T. Switch Gear
18	Protective relays	L & T
		Areva T & D
		CSPC
		ABB
		Easun Rayrolle
19	Control Selector switch	EE
		Kaycee
		Siemens
		Jyoti
		Sulzar
20	HV & LV Cables	Recom
		Asian Cables
		Cable corporation of india
		Fort Gloster
		Finolex
		Havells
		Polycab
		RPG Cables
		Universal Cables
		Primecab
21	Cable tray	Torrent Cables
		Profab
		Delta Systems
		Vinfab (VK group)
		West Coast Engineering
22	HT & LT Cable Termination kit	Indiana
		RAY CHEM
		MAHINDRA
		CCI
23	Conduit	M Seal
		AKG Industries
		BEC conduit
		Precision
24	LV-DOL/Star Delta starters	Circle arc
		ABB
		Danfoss
		Larsen and Toubro
		Rockwell Automation
		Schneider Electric
		Siemens
		Toshiba
25	Digital energy meter	VACON
		Larsen and Toubro
		Conzerve
		Secure meters
		Selec
		Automatic electric
		MECO

		ABB
		Enacron
26	Fuse	Larsen and Toubro
		Siemens
		GE
		Indo Asian
		Standard
27	Push Buttons/Indicating lamps	Siemens
		Rishabh (L & T)
		Teknik
		Schneider
		Rass
28	Indicating meters	Automatic electric
		IMP
		MECO
		Rishabh
29	Junction box	BCH Electric
		Prompt Engineering Works
		Pratik Electricals
		Sudhir Switchgear
		Trinity
30	Lighting fixtures	Bajaj
		Crompton Greaves
		Havells
		Philips
31	Power capacitor	ABB
		Asian Capacitors
		Crompton Greaves
		Madhav Capacitors
		Shreem Capacitors
		Schneider Electric
		Universal
		BHEL
32	Terminal blocks	Connect well
		ELMEX
		WAGO
		Phoenix
33	Timer	Siemens
		L & T
		ABB
		Minilec
		Jyoti
		Elico
		C & S
		Indo Asian
34	Modular Switches & Accessories	Clipsal
		MK
		Toyama
		Anchor

		Roma
		Crab Tree
35	Water coolers	Blue star
		Panasonic
		Voltas
		Carrier
		Mitsubishi
36	Split AC	LG
		ONIDA
		SAMSUNG
		BLUE STAR
		Panasonic
		Hitachi
37	LED Lights	Daikin
		Syska
		Oreva
		Surya
		Philips
		Bajaj
38	LV Motors	Hevells
		ABB
		Kirloskar
		NGEF
		Siemens
		Crompton
39	SOLAR LED Light	ALSTOM
		AREVA
40	DG Set-Engine	MERATHON
		Tata BP solar
41	DG Set-Alternator	Oreva
		Cummins
		Caterpillar
		MTU
		Mitsubishi
		Perkins
		KBL
		Stamford
		Cummins

D.	TEST EQUIPMENT	
Sr No.	Description	Name of Manufacturer
1	Insulation Tester	Automatic electric
		ASHIDA
		Fluke
		Megger
2	Primary current injection test set	Automatic electric
		ASHIDA

		Fluke
		Megger
3	Digital earth tester	Automatic electric
		ASHIDA
		Fluke
		Megger
4	Relay testing equipment	Automatic electric
		ASHIDA
		Fluke
		Megger
5	Cable fault locator	Automatic electric
		ASHIDA
		Fluke
		Megger
6	Circuit breaker analyser	Automatic electric
		ASHIDA
		Fluke
		Megger
7	Digital Multi-meter	Automatic electric
		ASHIDA
		Fluke
		Megger
		MOTWANE
		MECO
8	Battery tester	Automatic electric
		ASHIDA
		Fluke
		Megger
		MOTWANE
		MECO
9	RPM Meter	Automatic electric
		ASHIDA
		Fluke
		Megger
		MOTWANE
		MECO

E.	INSTRUMENTATION & AUTOMATION	
Sr No.	Description	Name of Manufacturer
1	Float & board type level Indicator	SBEM
		Pune Techtrol
2	Ultrasonic/Electromagnetic flow meter	General Electric
		Siemens
		Forbes Marshall
		E & H
		Rosemount
		ABB

3	Pressure Gauge	H Guru
		Bell Controls
		Waaree
		Forbes Marshall
		Manometers India
		General Instruments
		Airmaster
4	Pressure Transmitter	Siemens
		Forbes Marshall
		Endress + Houser
		Precision Instrument Co.
5	PLC	GE Fanuc
		Siemens
		Allen Bradley
		FUGI
		HIMA
		MITSUBISHI
		ABB
		Schneider
6	Temperature Scanner	Radix
		Masibus
7	Temperature sensor	Radix
		Masibus
8	Conductivity level Transmitter	SBEM
		Pune Techtrol
9	Temperature transmitter	Siemens
		Emerson
		Endress + Houser
10	Server/PC	IBM
		Wipro
		Dell
11	Printer	HP
		HCL
		HP
		Samsung
		Wipro
		Epson
12	Operating System Software	Microsoft
13	Ethernet Switch Rack/Modem	Cisco
		HP
		Juniper
		Nortel
14	SMPS	Phoenix
		P & F
15	UPS	APC
		Aplab
		Emersion
		Microtech
		Numeric

16	Surge Protector	Phoenix
		Citel
		Raychem
		DHEN
17	Instrument cables	KEI Industries
		RPG Cables Ltd
		Polycab Wires
		Gloster
		Havells
		Finolex
18	Fibre Optic Cable	CISCO
		Finolex
		DAX
		Avaya
19	Telephone cables	Finolex
		Polycab
		Vision International
20	Co-axial cable RG-11	Finolex
		Polycab
		Vision International
21	Speaker cable	Finolex
		Polycab
		Caliplast
		RR cable
22	Telephone socket	Leagrad
		Anchor
		Gelco Electronics
23	LED monitor	LG
		Panasonic
		sony
		Sumsung
		Dell
24	Cat-6 patch cord patch panel Network accessories	CISCO
		Nortel
		DAX
		Avaya
		D-link
25	CCTV	Bosch
		Pelco
		Honeywell
		Sony
		Dvtel
26	Public Address system	Bosch
		Aties
		Philips
		Harman
		Ahuja
27	Smoke Detection and Alarm system	Bosch
		Honeywell

		Tyco
		GE
28	EPABX	Siemens
		Panasonic
		Tata Telecom
29	UPS	APC
		Aplab
		Numeric
		Emerson
		Micro-tech

Note: Over and above the vendor list furnished in this tender document, prevailing vendor list of Gujarat Water Supply & Sewerage Board (GWSSB) / GWIL shall also be applicable. Further vendor who satisfies specifications and other tender provisions, Engineer in Charge is authorized to approve such vendors subject to fulfilment of requirements for this work only. Vendor shall have to submit require authenticate documents satisfying tender provisions. From the vendor list or approved vendor, in case any vendor is removed from the vendor list by GWSSB, GWIL or any other organization of Government of Gujarat at any stage of execution of work, such vendor shall be disqualified for further supply.

Enclosure II

Specifications

Attached Separately as following,

VOLUME – II (A) - TECHNICAL SPECIFICATIONS FOR CIVIL WORKS

VOLUME – II (B) - TECHNICAL SPECIFICATIONS FOR MECHANICAL WORKS

VOLUME – II (C) - TECHNICAL SPECIFICATIONS FOR ELECTRICAL WORKS

VOLUME – II (D) - TECHNICAL SPECIFICATIONS FOR INSTRUMENTATION WORKS

VOLUME – II (E) - OPERATION AND MAINTENANCE - SCOPE & SPECIFICATIONS

Enclosure III

Price Bid Schedules

Attached Separate Volume

Enclosure IV

Drawings

Attached Separate Volume