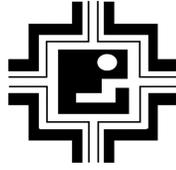


JAIPUR DEVELOPMENT AUTHORITY



Bid Document

(POST QUALIFICATION METHOD)

For

Name of work:- Operation and Maintenance of existing 30 MLD STP (Based on Conventional Activated Sludge Process) at Ralawata for 5 years under EE PHE-I JDA, Jaipur.

Cost: - Rs. 613.92 Lacs

NIT No. 06/2023-24

Due On: 07.08.2023

Volume-I

Envelope 'A' (Technical Bid)

Executive Engineer (PHE-I)
JDA, Jaipur

जयपुर विकास प्राधिकरण, जयपुर

राम किशोर व्यास भवन, कमरा नं. 135, प्रथम-तल, मुख्य भवन,

इन्दिरा सर्किल जवाहर लाल नेहरू मार्ग, जयपुर-302004

क्रमांक जविप्रा/अधि.अभि. (पीएचई- I)/2023-24/D-373

दिनांक : 13.07.23

निविदा सूचना

निविदा सूचना सं० अधि. अभि. (पीएचई- I)/06/2023-24

जयपुर विकास प्राधिकरण द्वारा "Operation and Maintenance of existing 30 MLD STP (Based on Conventional Activated Sludge Process) at Ralawata for 5 years under EE PHE-I JDA, Jaipur." जिसकी अनुमानित लागत रु 613.92 लाख के लिए ऑनलाईन बिड्स दिनांक 07.08.2023 को सायं 6:00 बजे तक आमन्त्रित की जाती है। निविदा बोली का ऑनलाईन आवेदन व भुगतान जविप्रा पोर्टल पर करने की अन्तिम तिथि 07.08.2023 को सायं 6:00 बजे तक है। निविदा बोली के दस्तावेजों का विस्तृत विवरण www.sppp.rajasthan.gov.in, www.eproc.rajasthan.gov.in and www.jda.urban.rajasthan.gov.in पर देखा जा सकता है।

निविदा में भाग लेने वालों को निम्न शर्तों की पूर्ति करनी होगी।

1. निविदा दाता जयपुर विकास प्राधिकरण की वेबसाइट www.jda.urban.rajasthan.gov.in पर पंजीकृत हो एवं निविदा में भाग लेने के लिए बोलीदाता को आवेदन करने के लिए दस्तावेज शुल्क, अमानत राशि, आर.आई.एस.एल. प्रोसेसिंग शुल्क ऑनलाईन जमा करनी होगी।
2. ऑनलाईन निविदा प्रस्तुत करने के लिए निविदा दाताओं का राजस्थान सरकार के ई-प्राक्यूमेंट पोर्टल www.eproc.rajasthan.gov.in पर पंजीकृत हो।

(मुकेश कुमार मीणा)
अधिशायी अभियंता (पीएचई- I)
जविप्रा, जयपुर।

JAIPUR DEVELOPMENT AUTHORITY

Room No. 135, Main Building, First Floor, Ram Kishore Vyas Bhavan, Indira Circle, JawaharLal Nehru Marg, Jaipur – 302 004

Telephone: +91-141-2569696 E.mail: zepheljda@yahoo.in

No: - JDA/EE/PHE-I/2023-24/D-373

Dated: 13.07.2023

NOTICE INVITING BID

NIB No. : JDA/EE (PHE-I)/06/2023-24

Online Bids are invited up-to 6.00 PM of 07.08.2023 for “Operation and Maintenance of existing 30 MLD STP (Based on Conventional Activated Sludge Process) at Ralawata for 5 years under EE PHE-I JDA, Jaipur.” Estimated cost of 613.92 Lacs. The last date for Applying Bid and making online payment on JDA portal is up-to 6.00 PM of 07.08.2023. Details may be seen in the Bidding Document at our office or the State Public Procurement Portal website www.sppp.rajasthan.gov.in, www.eproc.rajasthan.gov.in and www.jda.urban.rajasthan.gov.in.

To participate in the bid, bidder has to be:

1. Registered on JDA website www.jda.urban.rajasthan.gov.in, For participating in the Bid, the Bidder has to apply for the Bid and pay the Bidding Document Fee, RISL Processing Fee and Bid Security Deposit, online only.
2. Registered on e-Procurement Portal of Government of Rajasthan www.eproc.rajasthan.gov.in for online e-Bid submission.

(Mukesh Kumar Meena)
Executive Engineer (PHE-I)
JDA, Jaipur

JAIPUR DEVELOPMENT AUTHORITY

Room No. 302, CCC Building, Third Floor, Ram Kishore Vyas Bhavan, Indira Circle, JawaharLal Nehru Marg, Jaipur – 302 004

Telephone: +91-141-2569696 E.mail: zepheljda@yahoo.in

Bid No: - JDA/EE/PHE-I/2023-24/D-373

Dated: 13.07.2023

NOTICE INVITING BID

NIB No. : JDA/EE(PHE-I)/06/2023-24

Name & Address of the Procuring Entity	<ul style="list-style-type: none"> ➤ Name: Executive Engineer (PHE-I), Jaipur Development Authority Address: Room No. 135, Main Building, First Floor, Ram Kishore Vyas Bhavan, Indira Circle, JawaharLal Nehru Marg, Jaipur – 302 004 Telephone: +91-141-2569696 E.mail: zepheljda@yahoo.in
Subject Matter of Procurement	<ul style="list-style-type: none"> ➤ Operation and Maintenance of existing 30 MLD STP (Based on Conventional Activated Sludge Process) at Ralawata for 5 years under EE PHE-I JDA, Jaipur. ➤ Job No. : 152/2023-24
Bid Procedure	<ul style="list-style-type: none"> ➤ Post Qualification Assessment Method Tender (eg. Two-bid Two part (envelope) open competitive) eBid procedure at http://eproc.rajasthan.gov.in
Bid Evaluation Criteria (Selection Method)	<ul style="list-style-type: none"> ➤ Post Qualification Assessment Method L1 (eg. Least Cost Based Selection (LCBS)-L1)
Websites for downloading Bidding Document, Corrigendum's, Addendums, etc.	<ul style="list-style-type: none"> ➤ Websites: www.sppp.rajasthan.gov.in, www.eproc.rajasthan.gov.in, www.jda.urban.rajasthan.gov.in
Website for online Bid application participation and payment *	<ul style="list-style-type: none"> ➤ Website: www.jda.urban.rajasthan.gov.in ➤ For participating in the Bid, the Bidder has to apply for this Bid and pay the Bidding Document Fee, RISL Processing Fee and Bid Security Deposit, online only. <ul style="list-style-type: none"> ○ Bidding document fee: Rs. 1000/- (Rupees One Thousand only) ○ RISL Processing Fee: Rs. 2500/- (Rupees Two Thousand Five Hundred Only) ➤ Requisite Bid Security Deposit
Estimated Procurement Cost	<ul style="list-style-type: none"> ➤ INR 6,13,91,784.00/- (Rupees Six Crore Thirteen Lacs Ninety One Thousand Seven Hundred Eighty Four Only)
Bid Security Deposit	<ul style="list-style-type: none"> ➤ Amount (INR) : 2% (Rs. 12,27,836.00/-) for A & Above contractor registered in other department and 0.5% (3,06,959.00/-) for AA, A, B, C & D Class contractor enlisted in JDA. ➤ Eligibility: Bidder who is A and AA class contractor registered in other Government Department and Bidder registered as contractor AA, A, B & C in JDA.
Date/Time/Place of Pre-Bid	<ul style="list-style-type: none"> ➤ NA
Applying Bid and making Online Payment on JDA portal (www.jda.urban.rajasthan.gov.in)	<ul style="list-style-type: none"> ➤ Start Date: 17.07.2023 at 9 :30 AM ➤ End Date: 07.08.2023 at 06.00 PM ➤ In case EMD in from BG Original Bank Guarantee is to be submitted in Room No MB-SF-225A (Room No. of DD (E&B) of Main Building, Jaipur Development Authority by 08.08.2023 10.00AM to 11.08.2023 upto 5.00 PM
Bid Submission on e-Procurement Portal of GOR	<ul style="list-style-type: none"> ➤ Start Date: 17.07.2023 at 9.30 AM ➤ End Date: 07.08.2023 at 06.00 PM
Date/Time/Place of Technical Bid Opening	<ul style="list-style-type: none"> ➤ NA
Date/ Time/ Place of Financial Bid Opening	<ul style="list-style-type: none"> ➤ 14.08.2023 at 03.00 PM

Bid Validity	➤120 days from the bid submission deadline
Completion period of work	➤60 Months
* Jaipur Development Authority has decided to receive Earnest Money Deposit (EMD) (Bid Security), Tender Fee and RISL processing fee online through JDA Portal. The bid security options available in tender for participants are as mentioned below:	
<p>A. Payment Options:</p> <p>Option-1: Bank Guarantee (BG) against EMD/ Bid Security Bidder may opt Bank Guarantee (BG) against EMD (Bid Security), for which bidder requires to prepare BG before applying in the tender. The details of BG requires to be fed on JDA portal before paying balance amount (Tender Fee + RISL Processing Fee). This amount will be paid through Payment Gateway only, option to make balance payment through EFT (RTGS/NEFT) will not be available. If bidder does not opt for BG against EMD, options of making complete payment through Payment Gateway or through EFT (NEFT / RTGS) will be available.</p> <p>Option-2: Electronic Fund Transfer (EFT: NEFT/RTGS) If the bidder selects payment mode as EFT (NEFT/RTGS), "Paying Slip for EFT (NEFT/RTGS)" will be generated by the system for the complete amount. The payment can be made from any Bank any Branch using this Paying Slip through NEFT/RTGS (Claim against payment made through EFT in any other JDA bank account will not be acceptable and bidder stands disqualified from participation in the bid applied for). After successful transaction through NEFT/RTGS, as per the standard procedures it may take 4 to 24 hours in process of confirmation of EFT through Auto-Process depending on the time of EFT done. Therefore, option to make payment through EFT (NEFT/RTGS) will be available till 48 hours prior to closing date of bid participation.</p> <p>Option-3: Payment Gateway (Aggregator) The facility to make payment through Debit Card, Credit Card, Net banking etc., will be available. User can use this facility from anywhere any time till the closing date & time of bid participation.</p> <p>B. Bid Participation Receipt After confirming payment, the bidder will get Bid Participation Receipt on the basis of which user will get the payment details along with other details for bidding on e-Procurement portal of GOR.</p> <ul style="list-style-type: none"> • In case of BG as the remaining payment will be done through Payment Gateway, on successful transaction the "Bid Participation Receipt" will be generated on real time basis. • In case complete payment is done through Payment Gateway, on successful transaction the "Bid Participation Receipt" will be generated on real time basis. • In case complete payment is done through EFT (NEFT/RTGS), on confirmation of payment from ICICI Bank (Auto Process) "Bid Participation Receipt" will be available on Login of Bidder on JDA portal. 	
<p>Note:</p> <ol style="list-style-type: none"> 1. Bidder (authorised signatory) shall submit their offer on-line in Electronic formats both for technical and financial proposal. 2. In case, any of the bidders fails to pay the Tender Fee, BSD, and RISL Processing Fee, online (subject to confirmation), its Bid shall not be accepted. 3. To participate in online bidding process, Bidders must procure a Digital Signature Certificate (Type III) as per Information Technology Act-2000 using which they can digitally sign their electronic bids. Bidders can procure the same from any CCA approved certifying agency, i.e. TCS, Safecrypt, Ncode etc. Bidders who already have a valid Digital Signature Certificate (DSC) need not procure a new DSC. Also, bidders must register on http://eproc.rajasthan.gov.in (bidders already registered on http://eproc.rajasthan.gov.in before 30-09-2011 must register again). 4. JDA will not be responsible for delay in online submission due to any reason. For this, bidders are requested to upload the complete bid well advance in time so as to avoid 11th hour issues like slow speed; choking of web site due to heavy load or any other unforeseen problems. 5. Bidders are also advised to refer "Bidders Manual Kit" available at eProc website for further details about the e-Tendering process. 6. Training for the bidders on the usage of e-Tendering System (eProcurement) is also being arranged by DoIT&C, GoR on a regular basis. Bidders interested for training may contact e-Procurement Cell, DoIT&C for booking the training slot. Contact No: 0141-4022688 (Help desk 10 am to 6 pm on all working days) e-mail: eproc@rajasthan.gov.in Address : e-Procurement Cell, JDA, Yojana Bhawan, Tilak Marg, C-Scheme, Jaipur 7. The procuring entity reserves the complete right to cancel the bid process and reject any or all of the Bids. 8. No contractual obligation whatsoever shall arise from the bidding document/ bidding process unless and until a formal contract is signed and executed between the procuring entity and the successful bidder. 9. Procurement entity disclaims any factual/ or other errors in the bidding document (the onus is purely on the individual bidders to verify such information) and the information provided therein are intended only to help the bidders to prepare a logical bid-proposal. 10. The provisions of RTPPA Act 2012 and Rules 2013 thereto shall be applicable for this procurement. Furthermore, in case of any inconsistency in any of the provisions of this bidding document with the RTPPA Act 2012 and Rules thereto, the later shall prevail. 	

(Mukesh Kumar Meena)
Executive Engineer (PHE-I)
JDA, Jaipur

Process for Participation & Depositing Payment Online

JAIPUR DEVELOPMENT AUTHORITY, has decided to receive Bidding document fee, RISL Processing Fee and Bid Security Deposit (BSD) through online mode only for which the bidder has to get registered himself on JDA portal www.jaipurjda.org.

To participate in the bid, bidder has to be:

1. Registered on JDA website www.jaipurjda.org (by depositing Rs. 500.00 online, the validity of which remains 3 (three) years).
For participating in the Bid, the Bidder has to apply for this Bid and pay the Bid Document Fee, RISL Processing Fee and Bid Security Deposit, online only.
2. Registered on e-Procurement Portal of Government of Rajasthan www.eproc.rajasthan.gov.in for online e-Bid submission.

Methods for depositing on line amount

- Online through Internet Banking, Debit Card or Credit Card.
- In case the amount exceeds the online payment limit, the payment may be made through RTGS / NEFT / Transfer in Bank Account Number **675401700586** IFSC Code **ICIC0006754** of ICICI BANK Limited, JDA Campus
Jaipur.

In case of RTGS / NEFT / Transfer the bidder is required to deposit the requisite amount in the dedicated bank account number as mentioned above and has to get the UTR / Reference number from the bank. This number requires to be updated whiling applying the bid on JDA portal.

While participation in the bid, a receipt will be generated through the system showing the submission details as per **Annexure-4**. The bidder is required to fill the instrument numbers for various heads on e-Procurement portal www.eproc.rajasthan.gov.in as mentioned in the receipt.

More details about Registration Process, Terms and Conditions and FAQ along with contact detail is available on JDA website www.jaipurjda.org under [eServices](#)>>JDA Tender

SCHEDULE AND SPECIFICATIONS

SCHEDULE – A: INFORMATION USEFUL FOR THE CONTRACTORS:

The bidder should see the site and fully understand the conditions of the site before bidding and include all leads, lift etc for the material in his item rate/percentage to be quoted on the rates given in Schedule 'G'. The work shall be carried out in accordance with the Rajasthan PWD detailed specification and to the entire satisfaction of the Engineer – In – Charge of the work.

SCHEDULE – B: LIST OF THE DRAWING TO BE SUPPLIED BY THE DEPARTMENT

The drawing may be seen in the office of the undersigned.

SCHEDULE – C: LIST OF THE DRAWING TO BE SUPPLIED BY THE CONTRACTOR: List of the drawing to be supplied by the contractor NIL. But the contractor shall have to arrange at his own cost drawings required for the work after deposition necessary cost with JDA.

SCHEDULE - D: TEST OF THE MATERIALS:

The test of the materials and workmanship shall be conducted by the JDA staff as necessary. The result of such tests should confirm to the standards laid down in the Indian standard & or the standards laid down in the detailed specifications of the work by the contractor. Qualified personnel required as per the contractor enlistment rules shall have to be engaged at site by the Contractor. The authority reserves the right to engage such staff and recover the expenses from the contractor on such account in case of his failure to do so.

SCHEDULE – E: SAMPLES OF THE MATERIALS:

The sample of the materials to be used by the contractor shall be deposited 15 days in advance with the Engineer In charge and be got approved by him before use.

SCHEDULE - F: TIME OF COMPLETION:

The work should start within 10 days of the issue of the work order and complete within time limits.

SCHEDULE – G: ATTACHED SEPARATELY BASED ON APPLICABLE BSRs IN JDA.

SCHEDULE – H: SPECIAL CONDITION: Attached Separately.

SCHEDULE – I: COST OF TENDER DOCUMENTS, PROCESSING FEES & BID SECURITY.

The Bid Processing fee is payable in favor of M.D. RISL & Cost of bid document & Bid Security is payable in Favour of the Secretary, JDA, Jaipur. Bidders have to pay bid processing fees, cost of bidding documents, and Bid Security through Online. **If a bidder opts to deposit the bid security through bank guarantee, the bank guarantee**

should be valid for the next seven months after the bid opening date. A copy of the such bank guarantee will be required to be attached with the bid submission documents uploaded on the E-procurement portal of GOR. The bank guarantee will be physically handed over upto prescribed time to Nodal officer of the on-line tendering system of JDA i.e. D.D(E&B) in room No. 215N Extension building, JDA, JLN marg, Jaipur, as per specified in bidding documents.

Annexure-1. Special Conditions of Contract regarding defect liability period.

Annexure-2A. Bank guarantee will be in specified Performa enclosed with this bidding document for Bid Security.

Annexure-2B. Bank guarantee will be in specified Performa enclosed with this bidding document for Performance Security.

Annexure-A. Compliance with the code of integrity and no conflict of interest (RTPP Act/Rules).

Annexure-B. Declaration by the bidder regarding qualifications (RTPP Act/Rules).

Annexure-C. Grievance Redressal during the procurement process (RTPP Act/Rules).

Annexure-D. Additional Conditions of Contract (RTPP Act/Rules).

Annexure-E. Process for Tender Participation & Depositing Payment on 'Online Tender Participation' Portal of JDA & Bid Submission on 'e-Procurement Portal' of Government of Rajasthan.

Annexure F : DLP period for various type of works. Office order D-29 dated 11.03.2016

Annexure G : Payment mechanism for participating in tender: Office order D-399 dated 04.10.2016.

Annexure H : GST Circular for participating in tender: Office order D-172 dated 12.07.2017.

Annexure I : Finance (G&T) department, notification dated 22.10.2021

Annexure J : JDA Order D-75 dated 26.08.2021

Annexure K : Finance (G&T) department, notification dated 12.01.2022

Annexure L : JDA Office Order No. JDA/EE & (TA to Dir. Engg.-I)/2022/D-194 dated 06.09.2022

**EXECUTIVE ENGINEER (PHE-I)
JDA, Jaipur**

SPECIAL CONDITIONS

SCHEDULE 'H'

01. If there is any typographical error or otherwise in the 'G' Schedule, the rates given in the relevant BSR on which Schedule 'G' has been prepared, shall prevail.
02. The bidder shall follow the provisions of the builder labour regulation and abolition Act, 1970 & Rule, 1971.
03. The JDA shall have the right to cause an audit for technical examination of the work and the final bills of the bidder including all supporting vouchers, abstracts etc. to be made within two years after payment of the final bills and if as a result of such audit, any amount is found to have been overpaid / excess in respect of any work done by the bidder under the contract or any work claimed by him to have been done under this contract and found not to have been executed, the bidder shall be liable to refund such amount and it shall be lawful for the JDA to recover the such sum from him in the manner prescribed in special condition no. 8 or any other manner legally permissible and if it is found that the bidder was paid less than that was due to him under the contract in respect of work executed by him under it, the amount of such underpayment shall be paid by the JDA to the bidder.
4. Wherever any claim against the bidder for the payment of a sum of money arises out of under the contracts, the JDA shall be entitled to recover the sum by appropriating in part or whole of the performance security of the bidder, In the event of the security being insufficient or if no security has been taken from the bidder then the balance of the total sum recoverable as the case may be deducted from any sum then due or which at any time their contract with the JDA should this sum be sufficient to recover the full amount recoverable. The bidder shall pay to JDA on demand the balance remaining due. The JDA shall further have the right to affect such recoveries under P.D.R. Act.
5. The rate quoted by the bidder shall remain valid for a period of 120 days from the date of opening of the bids.
6. By submission of the Bid the bidder agrees to abide by all printed conditions provided in the PWD manual from 64 (Chapter 3-para 36) and subsequent modification.
7. No conditions are to be added by the bidder and the conditional Bid is liable to be rejected.
8. If any bidder withdraws his Bid prior to the expiry of said validity period given at S. No. 5 or mutually extended prior or makes modifications in the rate, terms and conditions of the Bid within the said period which are not acceptable to the authority or fails to commence the work in the specified period, fails to execute the agreement the authority shall without prejudice to any, other right or remedy, be at liberty to forfeit the amount of bid security given in any form absolutely. If any bidder, who has submitted a Bid does not execute the agreement or start the work or does not complete the work and the work has to be put to rebidding he will stand debarred for six months from participating of Bidding in JDA in addition to forfeiture of bid security/ Performance Security and other action under agreement
9. Any material not conforming to the specifications collected at the site have to be removed by the bidder within a period of 3 days of the instruction, issued by the Engineer -In charge in writing failing which, such material shall be removed by the Engineer-In charge at risk and cost of the bidder after the expiry of 3 days period.
10. The material collected at the site and paid provisionally shall remain under the watch and ward of the bidder till it is consumed fully on the work.
11. The rates provided in the Bidding documents are inclusive of all Taxes and royalties otherwise specified.
12. No extra lead of earth/material shall be paid over and above as specified in 'G' Schedule, Source/ borrow pit area for the earth shall have to be arranged by the Bidder at his own cost.
13. Undersigned has full right to reject any or all Bids without giving any reasons.
14. As per the Supreme Court decision "All contracts with Governments shall require registration of workers under the building and other construction workers (Regulation of Employment and Conditions of Service) Act, 1996 and extension of benefits to such workers under the etc."

15. Special Conditions of the Contract regarding the Defect Liability Period (DLP) for works costing Rs. 25.00 lacs and more shall be applicable (Annexure-I).
16. The Bidder is required to submit a copy of their enlistment as a contractor.
17. Conditions of RPWA-100 will be mandatory & acceptable to the bidder.
18. The bidder will have to install display boards at the site of work as directed by Engineer in charge.
19. All the provisions of THE RAJASTHAN TRANSPARENCY IN PUBLIC PROCUREMENT ACT, 2012 and Rules, 2013 and amendments issued from time to time by the Finance Department, GOR shall be applicable. If there are any contradictions in existing special conditions and provisions of THE RAJASTHAN TRANSPARENCY IN PUBLIC PROCUREMENT ACT, 2012 and Rules 2013 provisions of THE RAJASTHAN TRANSPARENCY IN PUBLIC PROCUREMENT ACT, 2012 and Rules 2013 shall prevail.
20. In case the rate received in the bid is below than BSR rate, additional Performance security shall be deposited by the bidder as per Rule 75 (A) of RTPP Rules.
21. The Annexure "B" (RTPP Act/Rules) is mandatory to be fulfilled & signed with seal by the bidder failing which the bid shall summarily be rejected without asking for any clarification.
22. Contractors enlisted in JDA, should be get reviewed periodically. The registered bidder who has not been reviewed within a period of 5 years 3 months, shall not be allowed for participate in the bid. Contractors enlisted in other departments shall be as per provision of PWF&AR.
23. **In case of single bid system Annexure "B" enclosed by the bidder regarding qualification of RTPP Act 2012 & Rule 2013 along with bid document, should be signed by the participating bidder before uploading the tender document otherwise the bid of the bidder will be rejected.**
24. **After dated 31.12.2022 contractor cannot participate in bid without Review Registration.**

**Executive Engineer (PHE-I)
JDA, Jaipur**

SPECIAL CONDITIONS OF CONTRACT REGARDING DEFECT LIABILITY PERIOD (DLP) FOR WORKS COSTING RS. 25.00 LACS AND**MORE****Table-1**

S.No.	Type of work	DLP Period
1.	Bridge Work	5 Years
2.	CD Work	5 Years
3.	CC Road. PQC Work	5 Years
4.	CC tiles/Krebs/medians	5 Years
5.	Drains	3 Years
6.	Roads	
	(i) Two-layer WBM/GSB	6 months or one full rainy season whichever is later
	(ii) For Renewal/Strengthening	
	(a) BT up to 30 mm thickness	1 Years
	(b) BT above 30 mm to up to 40 mm	2 Years
	(c) BT above 40 mm to up to 90 mm	3 Years
	(d) BT above 90 mm thickness	5 Years
	(iii) New Roads	
	(a) BT up to 90 mm	3 Years
	(b) BT more than 90 mm	5 Years
7.	Compound wall	3 Years
8.	Building Work	
	(i) Work pertaining to Sanitary work electrical works, Joinery works and painting work.	2 Years
	(ii) Work pertaining to the Building structure and other civil works	5 Years
9.	Electric work except for maintenance	3 years
10.	Sewer/Water supply including STP and water supply-related work except for maintenance works.	3 Years

1. ROAD-WORKS

- 1.1 The Defect Liability Period (DLP) for all Road works excluding patch repair work shall be as per the above table. Road works executed by the Contracting agency shall be maintained by them at their own cost for completion (DLP) from the actual date of completion of work as per the clause in the Contract Agreement and Special Condition of the Contract.
- 1.2 No extra payment shall be made to the contracting agency on account of maintenance of Road works and removal of defect during the Defect Liability Period.
- 1.3 The word "Road Works" means all new Road Works construction, widening, strengthening, up-gradation and renewal works
- 1.4 The word "Maintenance of Road Works during Defect Liability Period" means
 - (i) Routine maintenance of Road Works,
 - (ii) To remove the defect as & when appear in part and the entire structure of Road Works, in the specified time and keeping the Road Surface with good riding quality and
 - (iii) Damages due to improper drainage/drains, local flooding, depressions on roads etc.
- 1.5 The contracting agency shall do the routine maintenance of Road works, including pavement, road side and cross drains including surface drains to the required standards and keep the entire road surface and structure in Defect free conditions during the entire period of routine maintenance, which begins at the completion of the construction work and ends after complete (DLP).
- 1.6 The routine maintenance shall consist of the routine maintenance operation defined in the manual for the maintenance of roads of MoRTH and shall be carried out accordingly.
- 1.7 The routine maintenance activities and their periodicity.

S.No.	Name of Item/Activity	Frequency of operations in one year
1	Restoration of rain cuts and dressing of berms.	Once in a year, generally after rains.
2	Making up of shoulders.	As and when required.
3	Maintenance of Bituminous surface road and/or gravel road/WBM road including filling pot holes and patch repairs etc.	As and when required.
4	Insurance of proper functioning of drains including civil maintenance and desalting of drains. (If constructed by the same Road agency or not)	As and when required.
5	Maintenance of road signs. (If installed by the same Road agency)	Maintenance as and when required. Repainting once in every one and a half years.
6	Road Marking, Kerb Stone / Dand. (If done by the same Road agency)	Thermoplastic Paint Maintenance as and when required. Repainting once in everyone & a half year. Ordinary Paint Maintenance as and when required. Repainting thrice in every year.
7	Damages beyond the control of the agency.	Road cuts made by various agencies for utility, duly permitted by JDA / JNN will have to be repaired by the agency on the same rates of the contract agreement till DLP.

2. General

2.1 Inspection of works during the Defect Liability Period

2.1.1 The contracting agency shall undertake a joint detailed inspection along with Engineer-in-charge/A.En., at least once in three months in case of all Road works. The Engineer-in-charge can reduce this frequency in case of an emergency. The Contracting agency shall forward to the engineer in-charge the record of inspection and rectification immediately after the joint inspection. The Contracting agency shall pay particular attention to those road sections, which are likely to be damaged during rainy season.

2.1.2 One register has to be maintained by every AEN for recording the inspection details of works in his jurisdiction under defect liability period.

2.2 Conditions regarding Performance Security

2.2.1 Security for DLP-

The contracting agency shall have to furnish Performance Security in the form of Bank Guarantee valid from the actual date of completion, which shall be assigned by the Engineer-in-charge.

2.2.2 The release of PS amount shall be as per following table 2 :-

S.No.	Released PS \ DLP Period	1 Year	2 Years	3 Years	5 Years
1.	After 1 year	100%	40%	20%	10%
2.	After 2 year		60%	20%	10%
3.	After 3 year			60%	10%
4.	After 4 year				20%
5.	After 5 year				50%

The Performance Security will be released as per the above table after a satisfactory performance certificate issued by Engineer-In-Charge:-

2.2.3 Forfeiture of Performance Security

In case the contracting agency fails to rectify the defects within the stipulated period notified to him by the Engineer-in-charge concerned under the contract agreement, the Engineer-in-charge shall serve a final notice for 5 days time reckoned from the date of issue of notice to rectify the defects. In case the contracting agency not responding to the notice and fails in the rectification of defects the Engineer-in-charge will get the defect removed at the risk and cost of the contracting agency. Action such as encashment of Bank Guarantee and action under enlistment rules etc. shall also be taken against the contracting agency by the competent authority.

1.2.4 Force Majeure

The defect that arises due to earthquakes, cyclones, and natural calamities shall not be the responsibility of contracting agency.

2.2.5 Various conditions for managing DLP are as under :-

- (i) At the time of completion of work, final component shall be worked out for each individual item like BT/CC/tiles/ drains etc. (as per different categories in Table-I), DLP shall be operative based upon type of individual item ex:- CC-5 years, BT-1/2/3/5 years, Drain-3 years etc.
- (ii) If any work, amount is less than Rs. 25 lacs but later on due to extra/excess work, if amount of final work crosses more than Rs. 25 lacs, DLP shall be operative as per rule for each individual item.
- (iii) Similarly, if any work is more than Rs. 25 lacs but after finalization amount of work is less than Rs. 25 lacs, DLP should be operative for six months or rainy season whichever is later.
- (iv) During DLP period if contractor fails to repair any work even after the issue of 7 days written notice, the same work shall be got executed by the respective Executive Engineer at the contractor's risk and cost. This process shall be applicable throughout the DLP period. After completion of DLP period in such works contractor should be debarred and blacklisted, from JDA for three years as per RTPP rule 2012 and 2013 where his defaults twice in a single agreement or in two different works.
- (v) Quarterly Inspection as per rules shall be carried out and DLP registers shall be maintained by respective Executive Engineers to monitor the DLP repairs.
- (vi) Special and regular inspection shall also be carried out as per order no. JDA/XEN & TA to DE-I/2014-15/D-223 dated 12.03.2015 and order no. SE (PMGSY) CIRCULAR 2006/D-115 dated 04.05.2006 Point no. 3.
- (vii) In case JDA feels to take up work on any existing DLP road due to any reason, the following procedure should be adopted:
 - (a) At the time of withdrawal total liability of repairs as per DLP conditions to be carried out and the contractor shall be asked to complete the same. After completion of assessed repairs, DLP period shall be released after deduction amt. as per following table-III.

Table-3

% Recovery on withdrawal of DLP of work order	1 Year	2 Year	3 Year	4 Year	5 Year
DLP period					
1 Year	1.12	-	-	-	-
2 Year	2.55	1.43	-	-	-
3 Year	4.38	3.26	1.83	-	-
5 Year	9	7.88	6.45	4.62	2.47

Note:- Calculation is to be done on a quarterly basis.

- (b) In case the Contractor fails to carry out these repairs, same shall be carried out at his risk and cost. If the total amt. of such repairs works out to be more than the total retained amount of PS same shall be recovered from other works and as per PDR rules. The amount as per Table 3 is also to be deducted in addition to this amount.
- (viii) Based upon the type of work, DLP conditions for works to be carried out during the DLP period with their frequency of the respective type of work shall be prepared by respective SE's after approval of these periods.

3. In case patch repairs/civil maintenance works costing more than Rs. 25.00Lakhs, defect liability period will as per clause 37(C) of Contract Agreement.

Executive Engineer (PHE-I)
JDA, Jaipur

Specified Bank Guarantee Performa for Bid Security

Section - 6

Form of (Bank Guarantee) -En cashable at the branch of the bank in Jaipur City.

To
Secretary,
Jaipur Development Authority,
Jaipur

Sub:

Bank Guarantee No. _____ dated _____ for [amount of Security in figures] [in words] on behalf of _____ [Name of the Bidder] against Bid Security for the.....**JDA Jaipur**

WHEREAS, _____ [name of Bidder with address] (**hereinafter called "the Bidder"**) has submitted his Bid dated for the work of Operation and Maintenance of existing 30 MLD STP (Based on Conventional Activated Sludge Process) at Ralawata for 5 years under EE PHE-I JDA, Jaipur. (here in after called " the Bid ").

KNOW ALL PEOPLE by these presents that we _____ (Name of Bank) of having our registered office at _____ [name of country] having our registered office at _____ (hereinafter called "the Bank") are bound unto Secretary, Jaipur Development Authority. (Hereinafter called "the Employer") in the sum of Rupees _____ [**Amount of Security in figures**] _____ (in words) only for which payment will and truly to be made to the said Employer, the Bank binds itself, its successors, and assigns by these presents.

That on demand of JDA , this Bank Guarantee is cashable at the following branch in Jaipur City.

1. Name of Bank:
2. Name of the branch with branch code:
3. Address:
4. E-Mail Id:
5. Telephone No.
6. Fax No.:

SEALED with the Common Seal of the said Bank this _____ day of _____ of 20 _____.

THE CONDITIONS of this obligation are:

- (1) if the Bidder withdraws his Bid during the period of Bid validity specified in the Form of Bid;
- (2) if the Bidder refuses to accept the correction of errors in his bid;
- (3) If the Bidder, having 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, or
- (b) fails or refuses to furnish the Performance Security, in accordance with the Instructions to Bidders;

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 more of the above conditions, specifying the occurred condition or conditions.

This Guarantee will remain in force up to and including the date 30 days after the date of expiration of the Bid Validity, as stated in the Instructions to Bidders, or any such extension thereto as may be agreed by the Bidder, a notice of which extension(s) to the Bank is hereby waived. Any demand in respect of this Guarantee should reach the Bank no later than the above date.

The amount covered under the above Bank Guarantee shall be automatically credited in the accounts of JDA in ICICI Bank, JDA Campus, Jaipur through **ISFC code No ICICI 006754. Bank Account No. 675401700518** on the date of expiry or its validity, unless the agencies get it re-validated well before its expiry date or produce NOC from JDA in writing for its release.

Date _____ Signature of the Bank _____

Witness _____ Seal _____

[Signature, Name, and Address]

[Note: To be furnished on appropriate non-judicial stamps & should be valid for the next 7 months from the bid opening date]

Specified Bank Guarantee Performa for Performance Security

Section - 6

Form of (Bank Guarantee) -En cashable at the branch of the bank in Jaipur City.

To

Secretary, Jaipur Development Authority, Jaipur

Sub:.....

Bank Guarantee No. _____ dated _____ for [amount of Security in figures] [in words] on behalf of _____ [Name of the Bidder] against Performance Security for the.....**JDA Jaipur** WHEREAS, _____ [name of Bidder with address] (**hereinafter called "the Bidder"**) has submitted his Bid dated for the work of Operation and Maintenance of existing 30 MLD STP (Based on Conventional Activated Sludge Process) at Ralawata for 5 years under EE PHE-I JDA, Jaipur (herein after called " the Bid ").

KNOW ALL PEOPLE by these presents that we _____

_____ (Name of Bank) of having our registered office at _____ [name of country] having our registered office at _____ (hereinafter called "the Bank") are bound unto Secretary, Jaipur Development Authority. (Hereinafter called "the Employer") in the sum of Rupees _____ [**Amount of Security in figures**] _____ (in words) only for which payment will and truly to be made to the said Employer, the Bank binds itself, its successors, and assigns by these presents.

That on demand of JDA, this Bank Guarantee is cashable at the following branch in Jaipur City.

1. Name of Bank:
2. Name of the branch with branch code:
3. Address:
4. E-Mail Id:
5. Telephone No.
6. Fax No.:

SEALED with the Common Seal of the said Bank this _____ day of _____ of 20____.

We undertake to pay to the Employer up to the above amount upon receipt of his first written demand within valid period of this guarantee.

This Guarantee will remain in force up to and including the date 30 days after the date of expiration of the Bid Validity, as stated in the Instructions to Bidders, or any such extension thereto as may be agreed by the Bidder, a notice of which extension(s) to the Bank is hereby waived. Any demand in respect of this Guarantee should reach the Bank no later than the above date.

The amount covered under the above Bank Guarantee shall be automatically credited to the accounts of JDA in ICICI Bank, JDA Campus, Jaipur through **ISFC code No ICICI 006754. Bank Account No. 675401700518** on the date of expiry or its validity, unless the agencies get it re-validated well before its expiry date or produce NOC from JDA in writing for its release.

Date _____ Signature of the Bank _____

Witness _____ Seal _____

[Signature, Name and Address]

[Note: To be furnished on appropriate non-judicial stamps.]

Compliance with the Code of Integrity and No Conflict of Interest

Any person participating in a procurement process shall-

- (a) Not offer any bribe, reward or gift or any material benefit either directly or indirectly in exchange for an unfair advantage in the procurement process or to otherwise influence the procurement process;
- (b) Not misrepresent or omit that misleads or attempts to mislead so as to obtain a financial or other benefit or avoid an obligation;
- (c) Not indulge in any collusion, Bid-rigging or anti-competitive behavior to impair the transparency, fairness and progress of the procurement process;
- (d) Not misuse any information shared between the procuring entity and the bidders with an intent to gain an unfair advantage in the procurement process;
- (e) Not indulge in any coercion including impairing or harming or threatening to do the same, directly or indirectly, to any party or to its property to influence the procurement process;
- (f) Not obstruct any investigation or audit of a procurement process;
- (g) Disclose conflict of interest, if any; and
- (h) Disclose any previous transgressions with any entity in India or any other country during the last three years or any debarment by any other procuring entity.

Conflict of interest:

The Bidder participating in a bidding process must not have a Conflict of Interest.

A Conflict of interest is considered to be a situation in which a party has interests that could improperly influence that party's performance of official duties or responsibilities, contractual obligations, or compliance with applicable laws and regulations.

A bidder may be considered to be in conflict of interest with one or more parties in the bidding process if, including but not limited to:

- (a) Have controlling partners/shareholders in common; or
- (b) Receive or have received any direct or indirect subsidy from any of them; or
- (c) Have the same legal representative for purposes of the bid; or
- (d) have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another bidder, or influence the decisions of the procuring Entity regarding the bidding process; or
- (e) The bidder participates in more than one bid in a bidding process. Participation by a bidder in more than one bid will result in the disqualification of all bids in which the bidder is involved. However, this does not limit the inclusion of the same subcontractor, not otherwise participating as a bidder, in more than one bid; or
- (f) the bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the goods, works or services that are the subject of the Bid; or
- (g) Bidder or any of its affiliates has been hired (or proposed to be hired) by the procuring entity as engineer-in-charge/consultant for the contract.

Declaration by the Bidder regarding Qualifications

Declaration by the Bidder

In relation to my/our Bid submitted tofor procurement ofin response to their Notice inviting Bids No.....Dated.....I/wehereby declare under Section 7 of Rajasthan Transparency in Public Procurement Act, 2012 that:

1. I/we possess the necessary professional, technical, financial and managerial resources and competence required by the Bidding Document issued by the Procuring Entry;
2. I/we have fulfilled my/our obligation to pay such of the taxes payable to the union and the state government or any local authority as specified in the Bidding Document.
3. I/we are not insolvent, in receivership, bankrupt or being wound up, not have my/our affairs administered by a court or a judicial officer, not have my/our business activities suspended and not the subject of legal proceedings for any of the foregoing reasons;
4. I/we do not have, and our directors and officers not have, been convicted of any criminal offense related to my/our professional conduct or the making of false statements or misrepresentations as to my/our qualifications to enter into a procurement contract within a period of three years preceding the commencement of this procurement process, or not have been otherwise disqualified pursuant to debarment proceedings;
5. I/we do not have a conflict of interest as specified in the Act, Rules and the Bidding Document, which materially affects fair competition;

Date:

Signature of the bidder

Place:

Name:

Designation:

Address:

Note:- Annexure “B” is mandatory to be fulfilled & signed with seal by the bidder failing which the bid shall summarily be rejected without asking any clarification.

Grievance Redressal during Procurement Process

The designation and address of the First Appellate Authority :

For works costing up to Rs. 300.00Lakhs - Jaipur Development Commissioner, JDA, Jaipur.

For works costing above Rs. 300.00Lakhs - Executive Committee, JDA, Jaipur.

The designation and address of the Second Appellate Authority:

For works costing up to Rs. 300.00Lakhs - Executive Committee, JDA, Jaipur.

For works costing above Rs. 300.00Lakhs - Principle Secretary/ACS, Urban Development
& Housing Department, GOR, Jaipur.

(1) Filing an appeal: -

if any bidder or prospective bidder is aggrieved that any decision, action or omission of the procuring entity is in contravention to the provisions of the Act or the rules or the guidelines issued there under, he may file an appeal to First Appellate authority, as specified in the Bidding document within a period of ten days from the date of such decision or action, omission, as the case may be, clearly giving the specific ground or grounds on which, he feels aggrieved:

Provided that after the declaration of a bidder as successful the appeal may be filed only by a bidder who has participated in procurement proceedings:

Provided further that in case a procuring entity evaluates the technical bids before the opening of the financial bids, an appeal related to the matter of financial bids may be filed only by a bidder whose technical bid is found to be acceptable.

(2) The officer to whom an appeal is filed under Para (1) shall deal with the appeal as expeditiously as possible and shall Endeavour to dispose it of within thirty days from the date of the appeal.

(3) If the officer designated under Para (1) fails to dispose of the appeal filed within the period specified in Para (2), or if the bidder or prospective bidder or the procuring entity is aggrieved by the order passed by the first appellate authority, the bidder or prospective bidder or the procuring entity, as the case may be, may file a second appeal to the second appellate authority specified in the bidding document in this behalf within fifteen days from the expiry of the period specified in Para (2) or of the date of receipt of the order passed by the first appellate authority, as the case may be.

(4) Appeals not to lie in certain cases: -

No appeal shall lie against any decision of the procuring entity relating to the following matters, namely: -

- (a) Determination of the need of procurement
- (b) Provisions limiting the participation of bidders in the bid process
- (c) The decision of whether or not to enter into negotiations
- (d) Cancellation of a procurement process
- (e) Applicability of the provisions of confidentiality

(5) Form of Appeals: -

- (a) An appeal under Para (1) or (3) above shall be in the annexed form along with as many copies as there are respondents in the appeal.
- (b) Every appeal shall be accompanied by an order appealed against, if any, Affidavit verifying the facts stated in the appeal and proof of payment of fee,

- (c) Every appeal may be presented to the first appellate authority or second appellate authority, as the case may be, in person or through registered post or authorized representative.

(6) Fee for filing Appeal: -

- (a) Fee for the first appeal shall be rupees two thousand five hundred and for the second appeal shall be rupees ten thousand, which shall be non-refundable.
- (b) The fee shall be paid in the form of a bank demand draft or banker's cheque of a scheduled bank in India payable in the name of the appellate authority concerned.

(7) Procedure for disposal of Appeal: -

- (a) The first appellate authority or second appellate authority as the case may be, upon the filing of the appeal, shall issue notice accompanied by a copy of the appeal, affidavit and documents, if any, to the respondents and fix a date of hearing
- (b) On the date fixed for hearing, the first appellate authority or the second appellate authority, as the case may be shall-
- (i) Hear all the parties appeal presenting before him; and
- (ii) Peruse or inspect documents, relevant records or copies thereof relating to the matter.
- (c) After hearing the parties, perusal or inspection of documents and relevant records or copies thereof relating to the matter, the appellate authority concerned shall pass an order in writing and provide a copy of the order to the parties to appeal free of cost.
- (d) The order passed under sub-clause (c) above shall also be placed on the state public procurement portal.

Additional Conditions of Contract

1. Correction of arithmetical errors

Provided that a financial bid is substantially responsive, the procuring entity will correct arithmetical errors during the evaluation of financial Bids on the following basis:

- (i) if there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected unless in the opinion of the procuring entity, there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price shall be corrected;
- (ii) if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
- (iii) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (i) and (ii) above.

If the Bidder that submitted the lowest evaluated bid does not accept the correction of errors, its bid shall be disqualified and its bid security shall be forfeited or its bid securing declaration shall be executed.

2. Procuring Entity's Right to Vary quantities.

- (i) At the time of award of the contract, the quantity of goods, works or services originally specified in the bidding documents may be increased or decreased, by a specified percentage, but such increase or decrease shall not exceed fifty percent, of the quantity specified in the bidding documents. It shall be without any change in the unit prices or other terms and conditions of the bid and the conditions of the contract.
- (ii) If the Procuring entity does not procure any subject matter of procurement or procures less than the quantity specified in the bidding document due to change circumstances, the bidder shall not be entitled to any claim or compensation except otherwise provided in the conditions of the contract.
- (iii) In case of procurement of goods or services, additional quantity may be procured by placing a repeat order on the rates and conditions of the original order. However, the additional quantity shall not be more than 25% of the value of goods of the original contract and shall be within one month from the date of expiry of the last supply. If the supplier fails to do so, the procuring entity shall be free to arrange for the balance supply by limited bidding or otherwise and the extra cost incurred shall be recovered from the supplier.

3. Dividing quantities among more than one bidder at the time of award (In case of procurement of Goods):-

As a general rule, all the quantities of the subject matter of procurement shall be procured from the Bidder, whose Bid is accepted. However, when it is considered that the quantity of the subject matter of procurement to be procured is very large and it may not be in the capacity of the Bidder, whose Bid is accepted, to deliver the entire quantity or when it is considered that the subject matter of procurement to be procured is of critical and vital nature, then in such cases, the quantity may be divided between the Bidder, whose Bid is accepted and the second lowest Bidder or even more Bidder in that order, in a fair, transparent and equitable manner at the rates of the Bidder, whose Bid is accepted.

Process for Tender Participation & Depositing Payment on ‘Online Tender Participation’ Portal of JDA & Bid Submission on ‘e-Procurement Portal’ of Government of Rajasthan: -

A*Process for Tender Participation & Depositing Payment on ‘Online Tender Participation’ Portal of JDA

1-Participate in tender

- a) Bidder can access ‘Online Tender Participation’ Portal of JDA at <https://jda.urban.rajasthan.gov.in/jda> or by Single-Sign-On at <http://service.jaipurjda.org>.
- b) Create user Login with a valid mobile number to register yourself for various Online Services of JDA.
- c) Select ‘Proceed as Citizen’ and then ‘Proceed for Subscription’ for ‘Tender Online Payment’. The prevailing plan for getting registered for tendering process of JDA is Rs. 500.00 with a validity period of 3 Years (renewable).
- d) After successful payment, re-login and upload required documents for KYC (Know Your Client) compliance as per the type of entity viz. Individuals/ Company/ Partnership Firms/ Trusts & foundations. Besides, Bank Passbook / Cancelled Cheque consisting of Bank Account, IFSC Code is mandatory to be uploaded, to refund the bid security of unsuccessful bidder.
- e) After receiving the payment successfully and approving KYC documents the bidder will be authenticated by JDA for taking part in Tender.

2-Deposit Tender Fee, RISL processing fee and Bid Security (EMD)

- **Option-1:** Payment Gateway (Aggregator)
The facility to make payment through Debit Card, Credit Card, Net banking etc., will be available. User can use this facility from anywhere any time till the closing date & time of bid participation.
- **Option-2:** Electronic Fund Transfer (EFT: NEFT/RTGS)
If the bidder selects payment mode as EFT (NEFT/RTGS), “Paying Slip for EFT (NEFT/RTGS)” will be generated by the system for the complete amount. The payment can be made from any Bank any Branch using this Paying Slip through NEFT/RTGS (Claim against payment made through EFT in any other JDA bank account will not be acceptable and bidder stands disqualified from participation in the bid applied for). After successful transaction through NEFT/RTGS, as per the standard procedures it may take 4 to 24 hours in process of confirmation of EFT through Auto-Process depending on the time of EFT done. Therefore, option to make payment through EFT (NEFT/RTGS) will be available till 48 hours prior to closing date of bid participation.

3-Deposit Bid Security (EMD)

The Bid Security (EMD) can be submitted through Bank Guarantee (BG). Bidder may opt Bank Guarantee (BG) against Bid Security (EMD), for which bidder requires to prepare BG before applying in the tender. The detail of BG requires to be fed on ‘Online Tender Participation’ Portal of JDA before paying balance amount (Tender Fee + RISL Processing Fee). This balance amount will be paid through Payment Gateway only, option to make balance payment through EFT (RTGS/NEFT) will not be available.

4-Obtain Bid Participation Receipt

After confirming payment, the bidder will get Bid Participation Receipt based on which user will get the payment details along with other details for bidding on e-Procurement portal of GOR.

- In case of BG as the remaining payment will be done through Payment Gateway, on successful transaction the ‘Bid Participation Receipt’ will be generated on real time basis.
- In case complete payment is done through Payment Gateway, on successful transaction the ‘Bid Participation Receipt’ will be generated on real time basis.
- In case complete payment is done through EFT (NEFT/RTGS), on confirmation of payment from ICICI Bank (Auto Process) ‘Bid Participation Receipt’ will be available on Login of Bidder on JDA portal.

B-*Bid Submission on 'e-Procurement Portal' of Government of Rajasthan**

- 1- Online e-Bid can be submitted after registration at e-Procurement Portal of Government of Rajasthan www.eproc.rajasthan.gov.in
- 2- It is mandatory to upload Bid Participation Receipt with the bid submission.
- 3- Details of online payment available on Tender Participation Portal of JDA have to be filled in 'offline payment' section of e-Procurement portal.

Note

- 1- Bidder (authorized signatory) shall submit their offer on-line in electronic formats both for technical and financial proposal.
- 2- In case, any of the bidders fails to pay the Tender Fee, BSD, and RISL Processing Fee, online (subject to confirmation), its Bid shall not be accepted.
- 3- To participate in online bidding process, Bidders must procure a Digital Signature Certificate (Type III) as per Information Technology Act-2000 using which they can digitally sign their electronic bids. Bidders can procure the same from any CCA approved certifying agency, i.e., TCS, Safecrypt, nCode etc. Bidders who already have a valid Digital Signature Certificate (DSC) need not procure a new DSC. Also, bidders must register on <http://eproc.rajasthan.gov.in> (bidders already registered on <http://eproc.rajasthan.gov.in> before 30-09-2011 must register again).
- 4- JDA will not be responsible for delay in online submission due to any reason. For this, bidders are requested to upload the complete bid well advance in time so as to avoid 11th hour issues like slow speed; choking of web site due to heavy load or any other unforeseen problems.
- 5- Bidders are also advised to refer "Bidders Manual Kit" available at eProc website for further details about the e-Tendering process.
- 6- Training for the bidders on the usage of e-Tendering System (eProcurement) is also being arranged by DoIT&C, GoR on a regular basis. Bidders interested in training may contact e-Procurement Cell, DoIT&C for booking the training slot.

Contact No: 0141-4022688 (Help desk 10 am to 6 pm on all working days) e-mail: eproc@rajasthan.gov.in

Address: e-Procurement Cell, JDA, Yojana Bhawan, Tilak Marg, C-Scheme, Jaipur

- 7- The procuring entity reserves the complete right to cancel the bid process and reject any or all of the Bids.
- 8- No contractual obligation whatsoever shall arise from the bidding document/ bidding process unless and until a formal contract is signed and executed between the procuring entity and the successful bidder.
- 9- Procurement entity disclaims any factual/ or other errors in the bidding document (the onus is purely on the individual bidders to verify such information) and the information provided therein are intended only to help the bidders to prepare a logical bid-proposal.
- 10- The provisions of RTPPA Act 2012 and Rules thereto shall be applicable for this procurement. Furthermore, in case of any inconsistency in any of the provisions of this bidding document with the RTPPA Act 2012 and Rules thereto, the later shall prevail.

Jaipur Development Authority, Jaipur.	
Bid Participation Receipt	
	Date & Time:-
Bid Detail	
Bid ID:	Procurement Entity:-
Bid Title:	
Bid Value:	Bid Opening Place:
Bidder Detail	
Name of Entity:	Mobile No.:
Registration Type:	Instrument Amount:
Payment Mode:	Payment Channel:
Instrument No.:	Instrument Date:

Dates Detail		
Sr. No.	Event Name	Event Date
1	Publishing Date	
2	Bid Opening Date	

Specific Instrument for eProc Rajasthan			
Instrument Type			
Instrument Number	Head Name	Amount	Date
	Tender Fee		
	RISL Processing Fee		
	Bid Security Deposit		
Issuer Detail: Jaipur Development Authority		Challan Number:	

More details about Registration Process, Terms and Conditions and FAQ along with contact detail is available on JDA website www.jda.urban.rajasthan.gov.in.

JAIPUR DEVELOPMENT AUTHORITY, JAIPUR

SPECIAL CONDITION OF THE CONTRACT FOR POST QUALIFICATION OF CONTRACTORS

Name of work :- Operation and Maintenance of existing 30 MLD STP (Based on Conventional Activated Sludge Process) at Ralawata for 5 years under EE PHE-I JDA, Jaipur.

Special conditions of contract of POST QUALIFICATION as detailed here under, shall be applicable in addition to all other terms and condition already prescribed under standard agreement forms/rules and regulations to contract:

1. Procedure:

Procedure for POST QUALIFICATION would be as follow:

- (a) Two-envelope (docket) system would be adopted, for POST QUALIFICATION, Docket-1 being for Technical Bid and Docket-2 being for Financial Bid.

Docket-1:- There will be three separate folders- **Folder-1** is for proof of deposition of Bid Security, cost of bidding document and bid processing fee along with copy of GST registration, Annexure "B" (RTPP Act/Rules) is mandatory to be fulfilled & signed with seal and copy of enlistment as contractor/ bidder in required category. **Folder-II** is for bid document and **folder-III** is for technical bid.

Docket-2:- There will two separate **folders-1** is for financial bid and **folders-2** is for bill of quantities.

- (b) The technical bid will be opened only of whose bidders those proper Bid Security, copy of GST registration, proof for deposition of bidding document fee, RISL processing fee, copy of enlistment of contractor in required category and signed Annexure "B" (RTPP Act/Rules) is mandatory to be fulfilled & signed with seal are found to be in order. The bid Security will be accepted only in form of online deposition or in form of Bank Guarantee.

- (c) The Technical Bid envelope would be opened on the date 14.08.2023 at 3:00 pm.

- (d) The Financial Bid envelope would be opened only of those bidders who fulfill all the POST QUALIFICATION CRITERIA.

2. Criteria:

Criteria for POST QUALIFICATION would be as follows:-

- (a) The bidder should have executed following quantities of work in last seven financial years. However the bidder may opt current year in the said financial assessment period.

S.No.	Items	Quantities
a	O &M for STP/CETP/ETP of minimum 15 MLD capacity or more including PLC/SCADA system	For 30 months or more

Note:-

- (i) **Certificate issued by the Government of India, State Governments, Union Territory, Government, Undertaking, Autonomous Bodies shall only be considered.**
- 2(b) The bidder should have completed at least one similar nature work in last seven Financial Year (including current year, if opted by the bidder) of value not less than 50% of the Estimated Cost of The work (Rs. 306.96 Lacs) updated to present price level.

Note:-

- (i) The starting & completion date of the work is to be in between above said financial year. If no then maximum work (70%) of work mentioned in certificate submitted is to be completed in above said financial years. The bidders should have to enclose the proper bifurcated certificate accordingly otherwise the certificate will not be considered.
 - (ii) In case; if single work selected by the bidder, is of mix in nature having different components; then a proper bifurcated completion certificate showing the required similar nature component, should be enclosed.
 - (iii) Experience certificate included for similar nature of work shall have minimum component of O&M included in it, irrespective of the quantity and cost of the O &M and other component of work.
 - (iv) Experience certificate of work where construction of STP has been completed and O &M work is under progress shall also be considered for criteria 2 (a) and 2 (b) for evaluation of bid.
 - (v) If bidder enclosed experience certificate having O & M component only and 50 % amount of bid cost has been completed and O & M is further in progress than certificate shall be similar shall be consider for evaluation of criteria 2(a) & 2(b).
- 2(C) The bidder should have achieved an annual financial turnover of at least 60% of the estimated cost of work (Rs. 368.36 Lacs) in any one of the seven five financial years (including current year, if opted by the bidder)

Note:-

- (i) The bidder should enclose certificate of Turn Over from Chartered Accountant for last seven financial year & audited balance sheet of the year which is considered by the bidder in criteria 2(c).
 - (ii) If current year or last year has been opted by bidder whose balance sheet is not submitted till the submission of bid then certificate from Chartered Accountant should be enclosed.
- 2(d) The bidder should give self-declaration to deploy the machinery and equipment as specified in Schedule-III for the execution of this work.
- 2(e) Bid Capacity: Bidders who meet the minimum qualification criteria will be qualified only if available bid capacity is equal to or more than the total Bid Value.

The available bid capacity will be calculated as under:

bid capacity= (AxNx3-B)

- Where A= Maximum value of civil engineering work executed in any one year during the last 7 financial years(updated to preset Price level) taking in to account the completed as well as works in progress. However, the bidder may opt current year in the five year assessment period (Annexure-IV).
- N= Number of year prescribed for completion of the work of which bids are invited. In present case value of N shall be.....
- B= Value, at present price level of existing commitments and ongoing works to be executed during “N” period (period prescribed for completion of the works for which the bids are invited)

Note:-

- (i) **Certificate from Chartered Accountant should be enclosed by bidder clearly indicated maximum value of Civil Engineering Work in one Financial Year.**
- 2(f) Litigation History:- Bidder should provide an accurate information on any litigation or arbitration resulting from contracts completed or under execution by him over the last seven years. The maximum value (updated at the present

price level) of disputed amount claimed in the litigation/arbitration resulting from contracts executed in last seven years shall be deducted from the calculated Bid Capacity of the bidder. The details shall be furnished in Schedule VI.

Note:-

- (I) The present price level for turnover, cost of completed work & disputed amount of similar nature, the previous years value shall be given weight age of 10% per years as follows:-

Financial Year	Factors
(a) For current year	1.00
(b) For First last financial year	1.00
(c) For second last financial year	1.10
(d) For third last financial year	1.21
(e) For fourth last financial year	1.33
(f) For Fifth last financial year	1.46
(g) For sixth last financial year	1.60
(h) For seventh last financial year	1.76

3. The bidder should furnish the following documents along with the technical bid;
- (a) Information regarding financial resources and capability in Schedule-I.
 - (b) Information regarding works executed in the last Seven years in Schedules-II.
 - (c) Certificates from the concerned Engineer-In-Charge in support and verification of the information furnished in Schedule-II.
 - (d) Self declaration regarding machinery and equipment required for deployment, as detailed in Schedule-III.
 - (e) Information regarding details of maximum value of civil engineering works executed in any one year during the last seven years taking into account the completed as well as works in progress in schedule-IV.
 - (f) Information regarding existing commitments and ongoing works to be completed in schedule-V.
 - (g) Information regarding details of litigation or arbitration contracts to be furnished in schedule-VI.
 - (h) Calculation of Bid capacity in schedule-VII.
 - (i) Self declaration as per Annexure I.
 - (j) Details regarding evaluation criteria in schedule-VIII.

Note:- These schedules are mandatory to fill by the bidder, failing which the information be treated as NIL.

4. Important:

- (a) The bidder must ensure that all the information required in the Document is furnished by him completed in all respects. He would not be allowed to withdraw any document, or to rectify any information furnished therein, after submitting the bid.
- (b) The bidder should give self declaration that the information furnished in schedule I to VII is correct. If any information is found incorrect, the offer of the bidder shall be rejected and action be taken as per rules.
- (c) Bidders must do paging of all enclosure of bid documents.

5. Rejection of bids:

The department reserves the rights to reject any bid or to disqualify any or all the bidders, without assigning any reasons at any stage.

- (I) If bid is not accompanied with the requisite documents mentioned in clauses 3(a) to 3(i) or is not in accordance with procedure specified in para 1, or is not accompanied with bid security, copy of GST registration, proof for deposition of bidding document fee, RISL processing fee, Annexure "B" (RTPP Act/Rules) is mandatory to be fulfilled & signed with seal by the bidder and registration of contractor in required category it would be liable for rejection.
- (II) Furnish of incorrect or concealment of any information required in the bid documents would render the bid liable for rejection.
- (III) he bidder shall prepare bid in the digital/ electronic mode for uploading on e-procurement portal in the format/type of file specified in evaluation qualification criteria" all the documents uploaded should be digitally signed with DSC of authorized signatory, deemed as all the pages of the uploaded documents are signed."
- (IV) The self-declaration and annexure "B" enclosed by the bidder regarding qualifications of RTPP Act, 2012 and Rules, 2013 along with bid documents, should be signed by the participating bidders before uploading bid documents otherwise the bid will be rejected as per officer order No. 194 dated 06.09.2022.

EXECUTIVE ENGINEER (PHE-I)
JAIPUR DEVELOPMENT AUTHORITY
JAIPUR

TENDER FOR WORKS

I/We hereby tender for the execution for the Jaipur Development Authority, Jaipur of the work specified in the underwritten memorandum within the time specified in such memorandum at the rates, (in figure) (as well as in words) in all respects in accordance with the specifications, designs, drawings and instructions in writing referred to in Rule I in all respects in accordance conditions with such conditions so far as applicable. I/We have visited the site of work and am/are fully aware of all the difficulties and conditions likely to affect carrying out the work, I/We have fully acquainted myself/ourselves about the conditions in regard to accessibility of site and quarries/kilns nature and the extent of ground, working conditions including stacking, of materials, installation of tools & plant, conditions effecting accommodation and movement of labour etc. required for the satisfactory execution of contract.

Memorandum

(a) **General description of work:- Operation and Maintenance of existing 30 MLD STP (Based on Conventional Activated Sludge Process) at Ralawata for 5 years under EE PHE-I JDA, Jaipur.**

(b) **Estimated cost : Rs. 613.92 Lacs**

(c) **Earnest money : Rs. 12,27,836/- @ 2.0 %.** For contractor not enlisted in JDA (Any Central Govt. Dept./State Govt. Dept./Local Body/Railway or a Private/Public Limited Company & un-registered or registered in company Act),
: Rs. 3,06,959/- @ 0.5 % for contractor enlisted in JDA.

(d) **Security Deposit:**

(i) "The security deposit @ 10% of the gross amount of the running bill shall be deducted from each running bill and shall be refunded as per rules on completion of the contract as per terms and conditions. However, the amount of security deposit deducted from running bills shall not be converted into any mode of securities like bank guarantee. FDR etc. The earned money deposited shall however be adjusted while deducting security deposit from first running bill of the contractor. There will be no maximum limit of security deposit.

However, a contractor may elect to deposit of full amount of 10% security deposit in the shape of bank guarantee or any acceptable form of security before or at the time of executing agreement. In that case earnest money may be refunded only after deposition of full 10% as above. However, in case during execution cost of works exceeds as shown at the time of depositing 10% as above, balance security deposit shall be deducted from the Running Account Bills."

(ii) Bank Guarantee shall in all cases be payable at the headquarter of the Division or the nearest District Headquarters.

(e) Time allowed for the completion of work (to be reckoned from the 10th day after the date of written order to commence the work) in **05 Years**. Should this tender be accepted in whole or in Part, I/We hereby agree to abide by and fulfil all the terms and provisions of the conditions of contract annexed here to and of the Notice Inviting Tender, or in default thereof, to forfeit and pay to the Governor of Rajasthan or his successors in office, the sum of money mentioned in the said conditions.

(f). Rate Quoted by bidder shall be fixed and firm, no price adjustment (clause) is applicable

Validity of rates 120 days.

A sum of Rs. is forwarded herewith in the form of Cash, Bank Draft, Bankers Cheque as Earnest Money. This amount of earnest money shall absolutely be forfeited to the Governor of Rajasthan or his successor in office without prejudice to any other right or remedies of Governor of Rajasthan or his successor in his office, should I/We fail to commence the work specified in the above memorandum.

Signature of Witness
Witness's address & Occupation

Signature of Contractor
Address of Contractor

Date:

The above tender is hereby accepted by me on behalf of the Governor of Rajasthan

Date:

Executive Engineer (PHE-I)
JDA, Jaipur

JAIPUR DEVELOPMENT AUTHORITY, JAIPUR

No. JDA/Ex.En. (TA to Dir. Engg.-I)/2016/D-29

Dated: 11/3/2016

Office Order

Subject: - DLP period for various type of works.

As per the decision taken in the 201st meeting of Executive Committee held on 23.02.2016 w.r.t. agenda no. 201:22, DLP period of various natures of works amounting more than Rs. 25 lakhs has been revised as per following time periods based on nature of works.

This order will supersede the earlier orders issued in this regard i.e. order No. JDA/TA to D(E)/2010-11/D-317 dated 28.04.2011 including Special Condition No. 2.2.2 & 2.2.3 of Annexure-I related to SD refund & forfeiture (other Special Condition of annexure-I of this order will remain valid) and order No. JDA/Ex.En.(Pr.-5 & TA)/2013/D-43 dated 27.02.2013 and also all pertaining orders, in contract agreements or in PWF&AR having DLP period different than what is being enforced through this present order for concerned type of work.

Table-I

S.No.	Type of Work	Existing DLP Period	As per approved in E.C. held on 23.02.2016
1.	Bridge Work	3 years	5 Years
2.	CD Work	3 years	5 Years
3.	CC Road, PQC Work	3 years	5 Years
4.	CC tiles/Kerbs/medians	3 years	5 years
5.	Drains	6 months	3 years
6.	Roads		
	(i) Two layer: WBM/CSB	3 years	6 Months or one full rainy season which ever is later
	(ii) For Renewal/ Strengthening		
	(a) BT upto 30 mm thickness	3 years	1 year
	(b) BT above 30 mm to upto 40 mm	3 years	2 years
	(c) BT above 40 mm to upto 90 mm	3 years	3 years
	(d) ET Above 90 mm	3 years	5 years
	(iii) New Roads		
	(a) BT upto 90 mm	3 years	3 years
	(b) BT more than 90 mm	3 years	5 years
7.	Compound wall	6 months	3 years
8.	Buildings work		
	(i) Work pertaining to Sanitary works electrical works, Joinery works and painting works.	6 months	2 years
	(ii) Work pertaining to Building structure and other civil works.	6 months	5 years
9.	Electric work except maintenance	6 months	3 years
10.	Sewer/Water supply all including STP and water supply related work except maintenance works.	6 months	3 years 4.7

The release of SD amount shall be as per following table:-

Table-II

S. No.	Rele. sed SD	1 st year	2 nd year	3 rd year	5 th year
	DLP period				
1.	Upto 1 year	100%	40%	20% ✓	10%
2.	Upto 2 year		60%	20% ✓	10%
3.	Upto 3 year			60% ✓	10%
4.	Upto 4 year				20%
5.	Upto 5 year				50%

Various conditions for managing DLP are as under:-

- (i) At the time of completion of work, final component shall be worked out for each individual item like BT/CC/tiles/drains etc (as per different categories in Table I), DLP shall be operative based upon type of individual item ex- CC-5 years, BT- 1/2/3/5 years, Drain- 3 years etc.
- (ii) Similarly for all new works, these components should be calculated at the time of TS itself, which should be made part of BID document.
- (iii) If any work, amount is less than Rs. 25 lakhs but later on due to extra/excess work, if amount of final work crosses more than Rs. 25 lakhs, DLP shall be operative as per rule for each individual item.
- (iv) Similarly if any work is more than Rs. 25 lakhs but after finalization amount of work is less than Rs. 25 lakhs, DLP should be operative for six months or rainy season whichever is late.
- (v) During DLP period if contractor fails to repair any work even after issue of 7 days written notice, same work shall be got executed by respective Executive Engineer at the contractor's risk and cost. This process shall be applicable throughout the DLP period. After completion of DLP period in such works contractor should be debarred and blacklisted from JDA for three years as per RTPP Rule 2012 and 2013 where he defaults twice in a single agreement or in two different works.
- (vi) Quarterly Inspection as per rules shall be carried out and DLP registers shall be maintained by respective Executive Engineers to monitor the DLP repairs.
- (vii) Special and regular inspection shall also be carried out as per order no. JDA/Ex.En & TA to DE-I/2014-15/D-223 dated 12.03.2015 and order no. SE (PMGSY) CIRCULAR 2006/D-115 dated 04.05.2006 Point no. 3.
- (viii) In case JDA feels to take up work on any existing DLP road due to any reason, following procedure should be adopted:
 - (a) At the time of withdrawal total liability of repairs as per DLP conditions to be carried out and contractor shall be asked to complete the same. After completion of assessed repairs DLP period shall be released after deduction amt. as per table III.

Table-III

% Recovery on Withdrawal of DLP, of work order DLP period	1 year	2 year	3 year	4 year	5 year
1 year	1.12	-	-	-	-
2 year	2.55	1.43	-	-	-
3 year	4.38	3.26	1.83	-	-
5 year	9	7.88	6.45	4.62	2.47

Note:- Calculation is to be done on quarterly basis.

(b) In case Contractor fails to carry out these repairs, same shall be carried out at his risk and cost. If the total amt. of such repairs works out to be more than total retained amt. of SD, same shall be recovered from other works and as per PDR rules. The amount as per Table III is also to be deducted in addition to this amount.

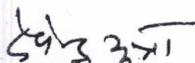
(ix) Based upon type of work, DLP conditions for works to be carried out during DLP period with their frequency of respective type of work shall be prepared by respective SE's after approval of these periods.

This order shall come in force with immediate effect and will be applicable on all new works whose NIB is to be called.


 Director (Engineering-I)
 JDA, Jaipur

Copy to following for information and necessary action:-

1. PS to IDC, JDA, Jaipur.
2. PS to Secretary, JDA, Jaipur.
3. Director Engineer I/II, JDA, Jaipur.
4. Director (Fin.), JDA, Jaipur.
5. C.F, JDA, Jaipur.
6. All Add. Chief Engineers, JDA, Jaipur.
7. All Superintendent Engineers, JDA, Jaipur.
8. OSD (RM), JDA, Jaipur.
9. Additional Director (REV.&DP.)
10. CAO (P&A) JDA, Jaipur.
11. Sr. Horticulturist, JDA, Jaipur
12. All Executive Engineer, JDA, Jaipur.
13. DD (E&B) JDA, Jaipur.
14. All AOs, JDA, Jaipur.
15. All AAOs, JDA, Jaipur.
16. System Analyst
17. All Contractors' Association, JDA, Jaipur.
18. Guard file


 S.E. & TA to Dir. (Engg-I)
 JDA, Jaipur

Jaipur Development Authority, Jaipur

Office Order

No. : JDA/IT(1074501)/E-Services/2015-16/D-399

Dated: 4-10-2016

Subject: Payment mechanism for participating in tender.

Jaipur Development Authority has decided to receive Earnest Money Deposit (EMD) (Bid Security), Tender Fee and RISL processing fee online through JDA Portal. The bid security options available in tender for participants are as mentioned below:

A. Payment Options:

Option-1: Bank Guarantee (BG) against EMD / Bid Security

Bidder may opt Bank Guarantee (BG) against EMD (Bid Security), for which bidder requires to prepare BG before applying in the tender. The details of BG requires to be fed on JDA portal before paying balance amount (Tender Fee + RISL Processing Fee). This amount will be paid through **Payment Gateway only**, option to make balance payment through EFT (RTGS/NEFT) will not be available.

If bidder does not opt for BG against EMD, options of making complete payment through Payment Gateway or through EFT (NEFT / RTGS) will be available.

Option-2: Electronic Fund Transfer (EFT: NEFT/RTGS)

If the bidder selects payment mode as EFT (NEFT/RTGS), "**Paying Slip for EFT (NEFT/RTGS)**" will be generated by the system for the complete amount. The payment can be made from **any Bank any Branch** using this Paying Slip through NEFT/RTGS (Claim against payment made through EFT in any other JDA bank account will not be acceptable and bidder stands disqualified from participation in the bid applied for). After successful transaction through NEFT/RTGS, as per the standard procedures it may take 4 to 24 hours in process of confirmation of EFT through Auto-Process depending on the time of EFT done. Therefore, option to make payment through EFT (NEFT/RTGS) will be available till 2 days prior to closing date of bid participation.

Option-3: Payment Gateway (Aggregator)

The facility to make payment through Debit Card, Credit Card, Net banking etc., will be available. User can use this facility from **anywhere any time** till the closing date & time of bid participation.

B. Bid Participation Receipt

After confirming payment, the bidder will get Bid Participation Receipt on the basis of which user will get the payment details along with other details for bidding on e-Procurement portal of GOR.

- In case of BG as the remaining payment will be done through Payment Gateway, on successful transaction the "**Bid Participation Receipt**" will be generated on real time basis.

- In case complete payment is done through Payment Gateway, on successful transaction the “**Bid Participation Receipt**” will be generated on real time basis.
- In case complete payment is done through EFT (NEFT/RTGS), on confirmation of payment from ICICI Bank (Auto Process) “**Bid Participation Receipt**” will be available on Login of Bidder on JDA portal.

This payment mechanism will come into force w.e.f 15/10/2016. Thereafter, old payment mechanism related to NEFT/ RTGS in which the bidder makes direct payment without “**Paying Slip for EFT (NEFT/RTGS)**” in JDA’s bank account will be discontinued.

All procuring entities are hereby directed to clearly mention this procedure in NIB document.


(Pawan Arora)
 Secretary

Copy for information and further necessary action to:

1. P.S. to JDC, JDA, Jaipur.
2. P.S. to Secretary, Secretary, JDA, Jaipur.
3. Director (Law / Finance / Town Planning / Engineering-I / Engineering-II), JDA, Jaipur.
4. All Additional Chief Engineer _____, JDA, Jaipur
5. DC (Administration)/DC(Store)/DC (Vehicle), JDA, Jaipur
6. System Analyst, JDA, Jaipur
7. Analyst-cum-Programmer, JDA to ensure integration of software w.e.f 01/10/2016.
8. All Xen _____, JDA, Jaipur.
9. Officer-in-charge, SPPP Portal, Jaipur.
10. OSD (Public Relation) / PRO, JDA, Jaipur.


(Brijesh Kishore Sharma)
 OSD (RM)

जयपुर विकास प्राधिकरण, जयपुर

क्रमांक :- F-()JDA/Sr.Ao.works-II/2017/D- 172

दिनांक :- 12.7.17

आदेश

1 जुलाई 2017 से भारत सरकार के नोटिफिकेशन द्वारा GST लागू होने के कारण व्यक्तियों/फर्मो/कम्पनी/संस्था/टेकेदार के निर्माण/सिविल आपूर्ति/सेवाओं इत्यादि के कार्यों के प्राधिकरण द्वारा बिल भुगतान किये जाने के लिये प्राधिकरण कर सलाहकार चार्टर्ड एकाउन्टेन्ट से प्राप्त हुई राय के क्रम में निम्नांकित प्रमाण पत्र/शपथ पत्र/Invoice बिलों के साथ प्रस्तुत किया जाना सुनिश्चित करावे :-

1. व्यक्ति/फर्म/कम्पनी/संस्था/टेकेदार का GST के अन्तर्गत रजिस्ट्रेशन प्रमाण पत्र की स्व:प्रमाणित फोटो प्रति।
2. व्यक्ति/फर्म/कम्पनी/संस्था/टेकेदार का GST के रजिस्ट्रेशन नहीं होने के स्थिति में स्व:प्रमाणित शपथ पत्र।
3. अपंजीकृत व्यक्ति/फर्म/कम्पनी/संस्था/टेकेदार के बिलों के भुगतान की स्थिति में मासिक टैक्स Invoice भुगतान-अधिकारी द्वारा मासिक आधार पर उसी माह के अंत में तैयार करवाया जाना सुनिश्चित किया जावेगा।
4. आपूर्ति एवं सेवा के विरुद्ध भुगतान बिलों में Vat/Service Tax चार्ज होने (Vat/Service Tax होने) पर (दिनांक 30.06.17 तक आपूर्ति एवं Invoice जारी करने पर) Taxable Invoice नहीं बनाया जावेगा एवं इनका भुगतान पूर्वानुसार (01.07.2017 से पूर्व निहित प्रक्रिया अनुसार) किया जाना सुनिश्चित करावे।

स्पष्टीकरण :- दिनांक 30.06.17 तक सामान की आपूर्ति के बिलों में Vat Invoice होने पर या अन्यथा होने पर इनका भुगतान पूर्वानुसार 01.07.2017 से पूर्व निहित प्रक्रिया अनुसार किया जावेगा।

संलग्न :- GST रेट तथा HSN/SAC CODE की फोटो प्रति

(बृजेश किशोर शर्मा)
निदेशक(वित्त)

प्रतिलिपि निम्न को सूचनार्थ एवं आवश्यक कार्यवाही हेतु :-

1. वॉरंट निर्जी सचिव, आयुक्त, जविप्रा, जयपुर।
2. वॉरंट निर्जी सचिव, सचिव, जविप्रा, जयपुर।
3. निदेशक (वित्त/विधि/अभियांत्रिकी-प्रथम व द्वितीय/आयोजना/परियोजना, जविप्रा, जयपुर।
4. अतिरिक्त आयुक्त(प्रशासन/पूर्व/पश्चिम/एल.पी.सी./भूमि), जविप्रा, जयपुर।
5. संयुक्त आयुक्त(सिस्टम मैनेजमेन्ट/संसाधन एवं समन्वय), जविप्रा, जयपुर।
6. विशेषाधिकारी(संसाधन विकास), जविप्रा, जयपुर।
7. अतिरिक्त निदेशक(राजस्व एवं सम्पत्ति निस्तारण), जविप्रा, जयपुर।
8. समस्त जून उपायुक्तगण , जविप्रा, जयपुर।
9. मुख्य लेखाधिकारी(पी. एण्ड ए.), जविप्रा, जयपुर।
10. उपनिदेशक(व्यय एवं बजट), जविप्रा, जयपुर।
11. वरिष्ठ लेखाधिकारी(निर्माण-प्रथम/द्वितीय/आर.सी.आर./पेंशन/नीलामी), जविप्रा, जयपुर।
12. सिस्टम एनालिस्ट, जविप्रा, जयपुर को प्रेषित कर लेख है कि सिस्टम में GST नम्बर सम्मिलित करने एवं Tax Invoice बनाने की प्रक्रिया तैयार करावे।
13. उप रजिस्ट्रार(सहकारिता), जविप्रा, जयपुर।
14. अधिशाषी अभियन्ता जून , जविप्रा, जयपुर।
15. वरिष्ठ उद्यानविज्ञ, जविप्रा, जयपुर।
16. लेखाधिकारी (भुगतान/योजना/निर्माण)/सहायक लेखाधिकारी, जविप्रा, जयपुर।
17. प्रभारी अधिकारी, नागरिक सेवाकेन्द्र, जविप्रा, जयपुर।
18. सलाहकार(जनसम्पर्क), जविप्रा, जयपुर।
19. रोकडियों(निर्माण/सिविल/भूमि आवृत्ति), जविप्रा, जयपुर।
20. रक्षित पत्रावली

अति.निदेशक(रा.एवं स.नि.)



 सत्यमेव जयते	राजस्थान राजपत्र विशेषांक	RAJASTHAN GAZETTE Extraordinary
	साधिकार प्रकाशित	Published by Authority
	आश्विन 30, शुक्रवार, शाके 1943-अक्टूबर 22, 2021 <i>Asvina 30, Friday, Saka 1943- October 22, 2021</i>	

भाग 4 (ग)

उप-खण्ड (I)

राज्य सरकार तथा अन्य राज्य-प्राधिकारियों द्वारा जारी किये गये (सामान्य आदेशों, उप-विधियों आदि को सम्मिलित करते हुए) सामान्य कानूनी नियम।

FINANCE (G&T) DEPARTMENT

NOTIFICATION

Jaipur, October 22, 2021

G.S.R.364 .-In exercise of the powers conferred by section 55 of the Rajasthan Transparency in Public Procurement Act, 2012 (Act No. 21 of 2012), the State Government hereby makes the following rules further to amend the Rajasthan Transparency in Public Procurement Rules, 2013, namely:-

1. Short title and commencement.- (1) These rules may be called the Rajasthan Transparency in Public Procurement (Fourth Amendment) Rules, 2021.

(2) They shall come into force from the date of their publication in the Official Gazette.

2. Insertion of new rule 75A.- After the existing rule 75 and before the existing rule 76 of the Rajasthan Transparency in Public Procurement Rules, 2013, the following new rule 75A shall be inserted, namely:-

"75A. Additional Performance Security.- (1) In addition to Performance Security as specified in rule 75, an Additional Performance Security shall also be taken from the successful bidder in case of unbalanced bid. The Additional Performance Security shall be equal to fifty percent of Unbalanced Bid Amount. The Additional Performance Security shall be deposited in lump sum by the successful bidder before execution of Agreement. The Additional Performance Security shall be deposited through e-Grass, Demand Draft, Banker's Cheque, Government Securities or Bank Guarantee.

Explanation : For the purpose of this rule,-

- (i) Unbalanced Bid means any bid below more than fifteen percent of Estimated Bid Value.
- (ii) Estimated Bid Value means value of subject matter of procurement mention in bidding documents by the Procuring Entity.
- (iii) Unbalanced Bid Amount means positive difference of eighty five percent of Estimated Bid Value minus Bid Amount Quoted by the bidder.



(2) The Additional Performance Security shall be refunded to the contractor after satisfactory completion of the entire work. The Additional Performance Security shall be forfeited by the Procuring Entity when work is not completed within stipulated period by the contractor. Provision for 'Unbalanced Bid' and 'Additional Performance Security' shall be mentioned in the Bidding Documents by the Procuring Entity."

[No. F.2(1)FD/G&T(SPFC)/2017]

By Order of the Governor,

Vimal Kumar Gupta,
Joint Secretary to the Government.

राज्य केन्द्रीय मुद्रणालय, जयपुर।



जयपुर विकास प्राधिकरण, जयपुर

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क्रमांक जविप्रा/अधि. अभि./त.स.नि.अ.-1/2021/डी-75

दिनांक :- 26/01/2021

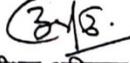
To

Contractor's Association
Jaipur Development Authority
Jaipur.

जयपुर विकास प्राधिकरण में विभिन्न कार्यों हेतु कार्यों की प्रकृति के अनुसार निविदाएं, कार्यालय आदेश क्रमांक JDA/Ex.En. (TA to Dir.Engg.-1)/2014-15/D-202 Dated:16.02.2015 द्वारा एकल बिड व Two bid में invite की जाती है। निविदाएं प्राधिकरण की EC द्वारा अनुमोदित निविदा दस्तावेज के अनुसार की जाती है। निविदाओं के evaluation के दौरान प्रायः यह देखा जाता है कि निविदाकर्ता द्वारा निविदा प्रपत्र में अंकित दिशानिर्देशों के अनुसार प्रस्तुत किए गये आवश्यक दस्तावेज या तो अधूरे होते हैं या चाहे गये प्रफोर्मा प्रपत्र के अनुसार नहीं आवेदित किए जाते हैं। इस कारण से कई बार निविदाएं छोटी-छोटी गलतियों की वजह से निरस्त हो जाती हैं या Particular bidder disqualify हो जाते हैं। कुछ सामान्य गलतियां निम्नानुसार हैं:-

1. Schedule 1 to 4 को नहीं भरना।
2. RTPP प्रपत्र A,B,C,D को नहीं भरना व हस्ताक्षर नहीं करना।
3. निविदा दस्तावेज विभिन्न दस्तावेजों पर स्वयं के या नोटेरी के हस्ताक्षर नहीं होना।
4. रजिस्ट्रेशन की प्रति नहीं लगाना।
5. EMD Receipt नहीं लगाना।
6. Work performance certificate नहीं लगाना।
7. Non Judicial Stamp पर दी जाने वाली सूचनाएं सामान्य प्रष्ठ पर देना।
8. Two bid निविदाओं में वर्ष वार कार्य की मात्राएं एवं राशि नहीं देना।
9. अनावश्यक दस्तावेज उपलब्ध कराना।
10. Online bidding के लिए आवश्यक विभिन्न शुल्क जमा नहीं कराना।
11. GST Clearance Certificate नहीं लगा होना।
12. Certificate having quantities financial year wise should not be missing.
13. Certificate of maximum value of similar nature work executed in any one last financial year out of last five financial year.
14. Annual turn our certificate by CA नहीं लगाना।
15. मशीनरी की details संलग्न नहीं करना।
16. Bid Fee, Bid Processing Fee, Tax Clearance Certificate should not be missing.
17. Completion certificate of required similar nature component is to be enclosed.
18. Litigation History Should be enclosed.
19. Information regarding existing commitments and ongoing works should be enclosed.

इस सम्वन्ध में सभी निविदाताओं को सूचित किया जाता है कि निविदाएं जमा करने से पहले निविदा प्रपत्र में अंकित व चाहि गयी सूचनाएं उचित तरीके से भर कर ही निविदा प्रस्तुत करे जिससे अनावश्यक रूप से निविदा निरस्तीकरण से बचा जा सके। त्रुटीपूर्ण निविदा की स्थिति में निविदाता स्वयं ही जिम्मेदार होंगे।


अधीक्षण अभियन्ता एवं
तक.सहा. निदे. (अभि.-प्रथम)
जविप्रा, जयपुर

रामकिशोरव्यासभवन, इन्दिरासर्किल, जवाहरलालनेहरूमार्ग, जयपुर-302004

दूरभाष- : ईपीबीएक्स - +91-141-2569696 एक्सटेंशन: (7209); फैक्स- +91-141-2574555

e-Mail : (sudhirsharma.jda@rajasthan.gov.in)

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जयपुर विकास प्राधिकरण, जयपुर

www.jda.urban.rajasthan.gov.in

क्रमांक जविप्रा/अधि. अभि./त.स.नि.अ.-1/2021/डी-75

दिनांक :- 26/8/2021

प्रतिलिपि निम्न को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित है:-

1. निजी सचिव, आयुक्त, जविप्रा, जयपुर।
2. निजी सचिव, सचिव, जविप्रा, जयपुर।
3. निदेशक (अभियांत्रिकी-प्रथम/द्वितीय/वित्त), जविप्रा, जयपुर।
4. समस्त अतिरिक्त मुख्य अभियन्ता, जविप्रा, जयपुर।
5. समस्त अधीक्षण अभियन्ता, जविप्रा, जयपुर।
6. समस्त अधिशाषी अभियन्ता, जविप्रा, जयपुर।
7. रक्षित पत्रावली।


अधिशाषी अभियन्ता एवं
तक.सहा. निदे. (अभि.-प्रथम)
जविप्रा, जयपुर

रामकिशोरव्यासभवन, इन्दिरासर्किल, जवाहरलालनेहरुमार्ग, जयपुर-302004

दूरभाष- : ईपीबीएक्स - +91-141-2569696 एक्सटेंशन: {7209}; फ़ैक्स- +91-141-2574555

e-Mail : {sudhirsharma.jda@rajasthan.gov.in}

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	राजस्थान राजपत्र	RAJASTHAN GAZETTE
	विशेषांक	Extraordinary
	साधिकार प्रकाशित	Published by Authority
पौष 22, बुधवार, शाके 1943-जनवरी 12, 2022 <i>Pausa 22, Wednesday, Saka 1943- January 12, 2022</i>		

भाग 4 (ग)

उप-खण्ड (1)

राज्य सरकार तथा अन्य राज्य-प्राधिकारियों द्वारा जारी किये गये (सामान्य आदेशों, उप-विधियों आदि को सम्मिलित करते हुए) सामान्य कानूनी नियम।

FINANCE (G&T) DEPARTMENT

NOTIFICATION

Jaipur, January 12, 2022

G.S.R.398 .-In exercise of the powers conferred by section 55 of the Rajasthan Transparency in Public Procurement Act, 2012 (Act No. 21 of 2012), the State Government hereby makes the following rules further to amend the Rajasthan Transparency in Public Procurement Rules, 2013, namely:-

1. Short title and commencement.- (1) These rules may be called the Rajasthan Transparency in Public Procurement (Amendment) Rules, 2022.
(2) They shall come into force from the date of their publication in the Official Gazette.

2. Amendment of rule 75.- In rule 75 of the said rules,-

- in proviso to sub-rule (2), for the existing expression "31.12.2021", the expression "31.03.2023" shall be substituted; and
- in proviso to clause (f) of sub-rule (3), for the existing expression "31.12.2021", the expression "31.03.2023" shall be substituted.

[No. F.2(1)FD/G&T(SPFC)/2017]

By Order of the Governor,

Vimal Kumar Gupta,
Joint Secretary to the Government.

1936

Government Central Press, Jaipur.



JAIPUR DEVELOPMENT AUTHORITY, JAIPUR

www.jda.urban.rajasthan.gov.in

No. JDA/ E.E. & (TA to Dir. Engg.-I)/2022/D-194

Dated: - 6/9/2022

Office Order

In the standard bid document (Two bid system) of JDA, Clause 5: Rejection of Bids, subclause (iii) shall be replaced and read as under with immediate effect:-

S.N.	Provision as per standard Bid document	As per GoR orders F.8(15)Fin/SPFC/2020 dated 17.05.2022
1.	"If all the copies enclosed in support and affidavit is not duly attested by notary public/gazetted officer/Self (as per order No F 14(22)JDA/Estt./2014 Dated 01.01.2015) then bid of the bidder is to be rejected."	The Bidder shall prepare bid in the digital/electronic mode for uploading on e-Procurement portal in the format/type of file specified in evaluation and Qualification criteria 'All the documents uploaded, should be digitally signed with the DSC of authorized signatory, deemed as all the pages of the uploaded documents are signed'.

The following additional condition should be added in the standard Bid document (Two Bid system)

1. The Affidavits and Annexure 'B': be enclosed by the bidder regarding Qualification of RTPP Act-2012 & Rule-2013 along with Bid document, should be signed by the participating bidders before uploading the tender document otherwise the Bid of the bidder will be rejected.
2. In case of single Bid system Annexure 'B': be enclosed by the bidder regarding Qualification of RTPP Act-2012 & Rule-2013 along with Bid document, should be signed by the participating bidders before uploading the tender document otherwise the Bid of the bidder will be rejected.

This will be enforced with immediate effect.


Director Engineering-I
JDA, Jaipur

Copy to:-

1. Director (Engineering-I/II/III/IV), JDA, Jaipur.
2. Director (Finance), JDA, Jaipur.
3. C.F. JDA, Jaipur.
4. All Additional Chief Engineers, JDA, Jaipur.
5. All Superintending Engineers, JDA, Jaipur.
6. All Executive Engineers, JDA, Jaipur for include this in every bid instead of previous condition.
7. O.S.D. (RM)/A.D.R. , JDA, Jaipur.
8. Sr. Horticulture, JDA, Jaipur.
9. Sr. A.O., JDA, Jaipur.


Director Engineering-I
JDA, Jaipur

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Ram Kishor Vyas Bhawan, Indira Circle, Jawahar Lal Nehru Marg, Jaipur-302004
Direct Line- {+91-141-2563234} : EPABX - +91-141-2569696 Extn : {7203} : Fax - +91-141-2574555

Section A-02

General Conditions of Contract

(Appendix XI of PWF & AR. Govt. of Rajasthan effective up to date shall be applicable)

Section A-03
Scope of Contract

1. SCOPE OF CONTRACT

JDA has put up 30 MLD capacity Sewage Treatment Plant at Ralawata, Jaipur for use of treated sewage to discharge in to nearby low-lying area meeting the norms of Rajasthan Pollution Control Board. The raw sewage is being collected in to the sump of located at the STP site and 30 MLD sewage is pumped by the existing pumping machineries installed in the pumping station. The process on which the STP is based is “Activated Sludge Process (ASP)” with PLC /SCADA system.

The work includes Five-year O & M of existing 30 MLD STP (The O & M period of Existing 30 MLD STP is 60 months from the date of the award of the contract.

2. LOCATION OF PLANT

The existing sewage treatment plant is at Ralawata, Goner, Jaipur. The layout of plant is shown in drawing attached with tender document.

The bidder is advised to depute a suitable representative to visit and examine the site of STP and its surroundings for fully understanding of the job and as certain the difficulties that may be countered during the execution and operation and maintenance of the STP and for obtaining for himself, on his own responsibility, all information that may be necessary for O & M work. The cost of visiting the site shall be entirely at bidder’s own expense.

The bidder and any of its personnel will be granted permission by the Employer to enter upon its premises and lands for the purpose of such inspection.

To assess the O & M work bidder has to collect the required data like the details of the Operation and Maintenance status/condition of existing STP, status/condition of electromechanical works, instrumentation, inlet and outlet piping details, topography, NGL, HFL and Discharge level of the final treated water etc. At his own expenses if required.

3. SCOPE OF WORK

The Contractor shall ensure the technical feasibility of his Offer submitted after visiting the Site. It must be clearly understood that the Contractor shall execute every such Item(s) of Work(s) which are considered required or necessary for the satisfactory Operation & Maintenance of the plant even if such Item(s) of Work(s) are not specified in the Bid documents, but are essential for O&M of Plant.

The scope of the work shall include but not be limited to the following:

- 01 Taking over of the STP Plant for further O & M from Contractor presently maintaining the plant, after ensuring and ascertaining the proper functioning of all the units of the 30 MLD STP such as Civil, Electrical, Mechanical, Instrumentation, pipeline, etc. units of plant up to required satisfaction as per Operation & Maintenance Manual and as per requirement of process design of the STP to meet continuously and consistently desired treated sewage characteristics in conformity with specifications of RAJASTHAN

POLLUTION CONTROL BOARD guidelines. The report on functioning of the plant to be submitted in form of report with complete details within 30 days of date of commencement of this work.

- 02 Operation & Maintenance (O&M) of Existing STP for 60 months as per Tender specifications including required manpower for this job, spares, tools & tackles, consumable including chemicals, chlorine tonners, grease, lubricating oil, cleaning agents, laboratory reagents etc. and as per specifications laid down in this tender.
- 03 Repairing & reconditioning of all the Equipment's in the concluding year of the Operation & Maintenance Period to such a condition that they are in running condition with regular preventive and recommended maintenance.
- 04 The contractor has to operate and maintain MCC panel, PLC and SCADA system
- 05 The Contractor may use dewatered Sludge and treated waste water at his own disposal, any revenue earned by selling such sludge and treated waste water may be accounted for during quoting financial bid. If transportation required for such sludge and treated waste water, then it should be done as per RSPCB norms
- 06 Supply of all Spares, Tools & Tackles requires to Run O & M work of STP, till the O & M Period.
- 07 All liaison work shall be carried out by contractor to get permission to establish/operate the sewerage treatment plant from Rajasthan Pollution Control Board shall be the responsibility of the contractor. Necessary fees to be deposited in RSPCB shall be paid by the contractor and shall then be reimbursed by JDA.
- 08 The regular/prescribed visit to the plant by Rajasthan Pollution Control Board officials shall be arranged by the contractor
- 10 The time period for O&M of Existing 30 MLD STP shall be completed for 60 months from the date of the award of the contract. Shall be 60 months, which can be increased up to time period till award of new work order is given to contractor for further O & M on mutual agreement.
- 11 In case any fine/ penalty imposed by any pollution control board due to mishandling /poor functioning of treatment plant same shall be recovered contractor.

Note:-The bidder shall take over the STP for O&M from existing contractor for further O& M immediately as soon as work order is given. The bidder observes any defect in Any Civil, electrical, mechanical, instrumentation, piping work etc. at existing 30 MLD STP while taking over the plant from existing bidder, the same defects shall be informed in writing to existing bidder under intimation to department. The existing bidder shall immediately attend such defects, in case existing bidder fails to attend such defects which has been communicated to

him in writing within 10 day period then new bidder shall attended these defects without waiting for defects removal cost from employer. However the cost of such defects shall be paid to contractor after recovery from existing contractor. In this regard decision of EIC shall be final and firm binding to all concern. IN all conditions the plant shall be operative

4. Details of design for Existing STP

Design Basis:

Sr. No.	Design Parameters	Capacity
1	Average Flow	30 MLD
2	Peak Factor	2.50
3	Peak Flow	75 MLD

5. Raw Sewage Quality

Sewerage Treatment Plant was constructed for a design flow of 30 MLD capacity with peak flow considered at 75.00 MLD having peak factor of 2.50 in 2009-10. The average Raw Sewage characteristics considered for design purpose were as under.

Sr.No.	Parameters	Values	UO M
1	Biochemical Oxygen Demand (BOD ₅)	300	mg/l
2	Chemical Oxygen Demand (COD)	700	mg/l
3	Total Suspended Solids (TSS)	600	mg/l
4	Total Kjeldahl Nitrogen (TKN)	45	mg/l
5	Total Phosphorous (TP)	5	mg/l
6	Fecal Coli form	1x 10 ⁶	No./100ml
7	pH	6.5 to 8.5	----

6. Treated Sewage Quality

The Contractor shall do the O & M in such a way that the treated effluent quality attains the following limits or even better or as per norms of Rajasthan Pollution Control Board (copy enclosed):

Sr.No.	Parameters	Values
1	Biochemical Oxygen Demand (BOD ₅)	20 or less mg/l
2	Chemical Oxygen Demand (COD)	250 or less mg/l
3	Total Suspended Solids (TSS)	100 or less mg/l
4	Fecal Coli form	1000 or less MPN/100ml
5	pH	6.5 to 8.0

Treated Sewage water shall be discharged in to nearby low lying area and one MLD will be reused for gardening, industrial use.

7. Existing Treatment scheme

The treatment scheme includes physical, primary and secondary treatment processes, along with sludge treatment.

The raw sewage from receiving chamber will flow to screen channels. Each screen is comprised of mechanical fine bar screen suitable to handle the design peak flow. Rotary drum type fine bar screen is provided for removal of floating materials etc. In each screen channel. The sewage free of floating particles passes through the grit chambers. There are two numbers of grit chambers are provided, out of which one is working and the other is stand by.

In the grit chamber, all the grit particles are settled down. The settled grit particles are cleared by grit removal mechanism provided in the tank. The grit washing and classify mechanism are provided to collect the grit and transfer the same to the disposal point. The sewage free of grit particles then passes through Parshall flume. In the Parshall flume, flow-measuring device is installed and the flow passing through the flume is recorded.

The sewage from Parshall flume is collected and taken to the primary clarifier. There are two numbers of primary clarifier provided.

In the primary clarifier the suspended solids are settled down. The supernatant is collected for further biological treatment whereas the sludge settled at the bottom of the clarifier is removed by telescopic out let to the collection sump from where it is pumped to the sludge thickener. The overflow of primary clarifier is collected and taken to the activated sludge treatment process. The primary treated sewage is taken to the aeration tank.

There are two numbers of aeration tanks provided. In aeration tanks, the microorganisms present in the aeration tank convert the organic matter present in the partially treated sewage to safe end products viz. Carbon dioxide and water in the presence of oxygen. The oxygen is supplied through the fine bar flexible membrane diffused aeration with air blowers. The aeration supplies oxygen to microorganism and at the same time keeps the tank content [sewage] in suspension.

From the aeration tank the sewage is overflowed to the secondary clarifiers. There are two numbers of secondary clarifiers provided. In secondary clarifiers, the biomass is settled down. The biomass settled at the bottom of the clarifier is collected in to the recycle sump from where it is pumped to the aeration tank to maintain the design and desired biomass level. The excess biomass is drained to the sludge sump. The overflow of the secondary clarifier is collected to the distribution chamber from where desired quantity of treated sewage is taken to the dilution water sump for mixing the dilution water for sludge thickener and be it wash water. The other sewage, which is the major sewage quantity, is taken to the chlorine contact tank where chlorine is added through the chlorinator. The sewage after the chlorination is taken to the final discharge point from where it flows through the gravity to low lying area. The primary sludge, the excess biological sludge and the dilution water is mixed in a tank from where it is taken to the sludge thickener. The supernatant of sludge thickener is taken to the raw sewage collection sump whereas the thickened sludge is taken to the thickened sludge sump and it is pumped to an aerobic digester.

There are two numbers of anaerobic digester provided. Each digester is equipped with sludge recycling system to keep the incoming sludge and the digester mass homogeneous. The sludge is digested in the anaerobic digester. The sludge digestion is done with the help of the anaerobic microorganism, which reduce the sludge quantity and convert the volatile part of the sludge to carbon dioxide, methane and other end products. The digested sludge is withdrawn and taken to the digested sludge sump whereas the biogas [methane] produced is collected from the gas dome and pumped to the gas holder through air blowers. The supernatant of anaerobic digester is taken to the raw sewage collection pump.

The digested sludge is pumped to the belt press filter system where belt wash water is added. The wet cake is collected and sent for disposal whereas the filtrate is taken to the raw sewage collection sump. The gas generated from the anaerobic digester and collected in the gas holder can be reuse in the kitchen. When it is not in used, the flare trap assembly is provided to flare the gas through ignite on chamber.

8. Details of the Existing Treatment Units

The details of the existing sewage treatment units covering the design aspects are asunder:

- Raw Sewage Sump & Pump House

No. of units	One
Design flow	30 MLD
No. of pumps	6 nos. (4W+2S)
HRT	10 min at present +future flow
Dia. Of sump	15 m
SWD	2.5m
Type of pump	Submersible
Capacity of pump	850m ³ /hr
Head of pump	8.50m
Screen type	Coarse screen
Screening arrangement	One mechanical +One manual
Belt Conveyor	Inter locked with screen

- Inlet Chamber

Design flow	30 MLD + other flows
Peak factor	2.50
Peak sewage flow	75 MLD + other flow
No. of unit	01
Detention period	60 second at peak flow
Size	6.4m x 3.5m x 2.5m

- Coarse Bar Screens 2 nos (1 Mechanical + 1 Manual)

- Screen channels-Fine Bar Screen with belt conveyor system

No. of units	Two (1W+1S) + other flow
Capacity of each screen	75 MLD + Other flow
Size	8.0m long x 1.3m wide
SWD	1.0m

Type of screen	Rotary Drum type
Belt Conveyor	Inter locked with screen
Angle of inclination	40° to horizontal
Head loss through screen	225mm

- Grit chambers

No. of units	2 Nos. (1W+1S)
Capacity of each	75 MLD peak flow through each grit mechanism + other flow
Size	7.9m x 7.9m
SWD	1.0m
Detention period	60 sec
Assumed size of grit particles	0.15mm and above
Specific gravity of particle	2.65
Freeboard	5mm

- Parshall Flume

No. of units	1 no.
Design flow	30 MLD + other flow
Peak sewage flow	75 MLD + other flows
Size	2 m wide x 15m long
Freeboard	0.50m

- Primary Clarifier, Primary sludge sump and pump house

No. of clarifier	Two
Design flow (avg.)	30 MLD + Other flow
Dia.	29.2 m
SWD	3.2m
Detention time	2.5HRS.
Surface loading rate at average flow	30 m ³ /d/m ²
Weir load in grate	125m ³ /d/m ²
BOD ₅ days, 20°C removal	30%
No. of pumps	2 nos. (1W+1S)
Type of pump	Screw type
Capacity of pump	25 m ³ /hr
Head of pump	12 m

- Aeration tanks with diffused aeration system with air blowers

No. of units	Two
Design flow (avg.)	30 MLD+ other flow
Inlet BOD(5days at 20°C)	210
MLSS	3000 mg/l
MLVSS	80% of MLSS
Free board	0.60

Size	38.0m x 20.0m
SWD	5 m
Detention time	5 hours (min.)
Return sludge	Upto50%
Min. oxygen required	1.0 kg(min.)
Type of diffusers	Silicon based fine bubble diffusers with retrievable arrangement
No. of Blowers	3 (2W+1S)
Type of blower	Twin lobe
Capacity of blower	3300m ³ /hr

- Secondary clarifier with Return sludge pumps and Excess sludge pumps

No. of clarifier	Two
Design flow (avg.)	30 MLD+ Other flow
Detention time	2.5 hours
Dia.	30.5m
SWD	3.5m
Solid loading rate at avg. flow	70 to 140kg/d/m ²
Specific gravity of secondary sludge	1.01
Freeboard	500mm
Return sludge pumps	
No. of pumps	2 nos. (1W+1S)
Type of pump	Horizontal Centrifugal non-clog
Capacity of pump	729m ³ /hr
Head	27 m
Excess sludge pumps	
No. of pumps	2 nos. (1W+1S)
Type of pump	Horizontal Centrifugal non-clog
Capacity of pump	20 m ³ /hr
Head	12m

- Chlorine Contact Tank

No. of unit	One no. with two compartments
Design flow (avg.)	30 MLD+ Other flows
Retention time	30 min
Size	12.5m x 10m
SWD	2.5m
No. of chlorinator	3 nos. (1W+2S)

Type of chlorinator	Vacuum type
Dose of chlorine	5 PPM (min) or suitable for 0.5
PPM FRC	
No. of chlorinators	3 nos.

Types of chlorinators	Vacuum type
Chlorine Booster pumps	
No. of unit	3 nos. (1W+2S)

- Gravity Sludge Thickener, Thickened sludge sump and pump house

No. of units	One
Solid loading rate	40 kg/d/m ²
Hydraulic loading rate	12 m ³ /m ² /day(min)
Dia.	22.5m
SWD	3.5
Solid concentration in thickened sludge	5 % (max)
No. of pumps	2 nos. (1W+1S)
Type of pump	Screw type
Capacity of pump	20m ³ /hr
Head of pump	13 m
Size of Sump	5.0mx 2.0m x2.0m (LD)

- Anaerobic Sludge Digester and Digester sludge mixing pump house

No. of units	2 nos.
No. of pumps	3 nos. (2W+1S)
Temp. of digestion	30°C
Digestion period of stated temp.	20 days (min.)
Solid loading	1.6 kg of VSS/day/m ³ (max)
Dia.	20 m
SWD	10 m
Type of pump	Horizontal Centrifugal non-clog
Capacity of pump	800m ³ /hr
Head of pump	10 m

- Sludge Dewatering System

Belt filter press	
No. of units	2 nos. (1W+1S)
Capacity	20 m ³ /hr
Bldg size	20m x 10.0m
Belt wash pumps	
No. of units	2 nos. (1W+1S)
Type of pump	Horizontal Centrifugal
Capacity of pump	20 m ³ /hr
Head of pump	15 m

- Polyelectrolyte Dosing Tank, Mixer & Pumps

No. of dosing tanks	2 nos.
Capacity	12 hrs. dosing requirement
Solution strength	0.1% (max.)
No. of agitator	1 no./tank
Type of agitator	Turbine type
No. of dosing Pump	2 nos. (1W+1S)
Type of pump	Diaphragm
Pressure	2 kg/cm ²
Agitator speed	60 – 100 RPM

- Dilution water sump & pump house

No. of units	1 no.
No. of pumps	2 nos. (1W+1S)
Type of pump	Submersible
Capacity of pump	180m ³ /hr
Head of pump	20 m
Size of sump	6.0mx 4.0m x2.0m (LD)

- Bio-Gas Blowers (VFD operated)

No. of blowers	2 nos. (1W+1S)
Type of blower	Twin lobe, air cooled
Capacity	300nm ³ /hr
Head of pump	20 m
Size of sump	6.0mx 4.0m x2.0m (LD)

9. Electrical Details

Details of electrical equipment installed at the treatment units are listed in following

Sr. No.	Description	Working	Stand by	Total	Motor rating(KW)
1	Raw sewage transfer pump	2	4	6	75
2	Mechanical fine bar screen	1	1	2	3.7
3	Belt conveyer	1	0	1	1.1
4	Grit mech. -scraper	1	1	2	1.1
5	Grit mech. -classifier	1	1	2	3.7
6	Grit mech.-organic return	1	1	2	0.37
7	Primary clarifier	2	0	2	0.75
8	Air blower-Diff. aeration	2	1	3	90
9	Secondary clarifier	2	0	2	0.75
10	Chlorine booster pump	2	1	3	5.5

11	Primary sludge pump	1	1	2	5.5
12	Return sludge pump	1	1	2	75
13	Excess sludge pump	1	1	2	3.7
14	Sludge thickener	1	1	2	1.5
15	Dilution water pump	1	1	2	15
16	Thickened sludge pump	1	1	2	3.7
17	Digester mixing pump	2	1	3	37
18	Bio-gas blower	1	1	2	3.7
19	BFP feed pump	1	1	2	5.5
20	Polyelectrolyte agitator	1	1	2	1.5
21	Poly. Dosing pump	1	1	2	1.5
22	BFP drive - I	1	1	2	2.2
23	BFP drive - II	1	1	2	3.7
24	BFP agitator	0	0	0	0.75
25	Belt wash pump	1	1	2	15
26	Borewell	1	0	2	2.2
27	Agitator for digested sludge	1	0	1	3.7
28	Eot for blowers	1	1	1	2.95
29	Eot for chlorine tonners	1	1	1	2.95
30	Dewatering pumps	1	0	3	1.5
31	Lighting load	1	0	1	2.00
32	Misc. / other load	0	0	0	10.00

10. Instrumentation Details

Details of instrumental items located at treatment units and the present status is as under.

Instrumentals Items Details

Sr.No	Name of Instrument	L
1	pH Analyzer	At Inlet Chamber
2	DO Analyzer	At AerationTank-1
3	DO Analyzer	At AerationTank-2
4	MLSS Analyzer	At AerationTank-1
5	MLSS Analyzer	At AerationTank-2
6	Diff. Level transmitter- Ultrasonic type	At across coarse mechanical bar screen
7	Diff. Level transmitter- Ultrasonic type	At fine screen bar
8	Diff. Level transmitter- Ultrasonic type	At fine screen bar
9	Level transmitter- Ultrasonic type	Raw sewage transfer sump

10	Level transmitter- Ultrasonic type	On primary sludge sump
11	Level transmitter-Ultrasonic type	Sludge recirculation excess sludge sump
12	Level transmitter- Ultrasonic type	Dilution water sump
13	Level transmitter- Ultrasonic type	On thickened sludge sump
14	Level transmitter- Ultrasonic type	On digested sludge sump
15	Flow meter-Ultrasonic open Ch. Type	At Raw sewage flow at inlet Parshall flume
16	Flow meter-Ultrasonic open Ch. Type	At in sewage flow at CCT out let Parshall flume
17	Flow meter- Electromagnetic type	Primary sludge pump header to thickener
18	Flow meter- Electromagnetic type	Excess pump header to thickener
19	Flow meter- Electromagnetic type	Dilution water pump header to thickener
20	Flow meter- Electromagnetic type	Recirculation pump line to Aeration tank-1
21	Flow meter- Electromagnetic type	Recirculation pump line to Aeration tank-2
22	Flow meter- Electromagnetic type	Thickened sludge pump to sludge line Digester-1
23	Flow meter- Electromagnetic type	Thickened sludge pump to sludge line Digester-2
24	Pressure gauge	Discharge ofAerationblower-1
25	Pressure gauge	Discharge ofAerationblower-2
26	Pressure gauge	Discharge ofAerationblower-3
27	Pressure gauge	Discharge of boosterpump-1
28	Pressure gauge	Discharge of boosterpump-2
29	Pressure gauge	Discharge of boosterpump-3
30	Pressure gauge	Biogas blower-1discharge
31	Pressure gauge	Biogas blower-2discharge
32	Pressure gauge	Rawsewagepump-6 discharge
33	Pressure gauge	Beltfilterwashpump-1 discharge
34	Pressure gauge	Beltfilterwashpump-2 discharge
35	Pressure gauge	Primary sludge pump-1 discharge
36	Pressure gauge	Primary sludge pump-2 discharge
37	Pressure gauge	Excess pump-1discharge
38	Pressure gauge	Excess pump-2discharge
39	Pressure gauge	Recirculation sludge pump-1 discharge
40	Pressure gauge	Recirculation sludge pump-2 discharge
41	Pressure gauge	Thickened sludgepump-1 discharge
42	Pressure gauge	Thickened sludgepump-2 discharge
43	Pressure gauge	Digester sludge mixing pump-1 discharge
44	Pressure gauge	Digester sludge mixing pump-2 discharge
45	Pressure gauge	Digester sludge mixing pump-3 discharge

46	Pressure gauge	PE dosingpump-1 discharge
47	Pressure gauge	PE dosingpump-2 discharge
48	Pressure gauge	Digestedsludgepump-1 discharge
49	Pressure gauge	Digestedsludgepump-2 discharge
50	Pressure gauge	Dilutionpump-1 discharge
51	Pressure gauge	Dilutionpump-2 discharge
52	Pressure gauge	Gas holding tank
53	PH Analyzer	Digester A mixing
54	PH Analyzer	Digester B mixing
55	Flow meter- Electromagnetic type	Static mixture
56	Level transmitter- Ultrasonic type	Gas holding tank
57	Flow meter- Electromagnetic type	Poly dosing pump-1
58	Flow meter- Electromagnetic type	Poly dosing pump-2

11. Laboratory and building

The Laboratory is fully equipped with all necessary equipment, Instruments, Chemicals, Reagents, Glassware and Furniture along with computers, printers, telecommunication facilities, etc. Provided to carryout the analysis on daily basis. The list of laboratory equipment's and chemical reagents are as follows:

Sr.No.	Item Description	Unit	Qty
A	Laboratory Instruments		
1	Analytical balance	No.	1
2	Aqurium Air pump	No.	2
3	Dissolved oxygen meter	No.	1
4	Distilled water units	No.	1
5	Heating plates	No.	2
6	Hot air Oven	No.	1
7	Jar test Equipment	No.	1
8	Muffle furnace	No.	1
9	Optical microscope	No.	1
10	Ph meter	No.	1
11	Soxhlet heating app. 6tap	No.	1
12	Soxhlet heating app. 6tap	No.	1
13	Vacuum Pump	No.	1
14	Water wath	No.	1

Sr.No.	Item Description	Unit	Qty
B	Laboratory Glassware		
1	Amber colored bottle,1000ml	No.	2
1	Amber colored bottle,1000ml	No.	12
2	Amber colored bottle,500ml	No.	30
3	Amber colored bottle,250ml	No.	12
4	Plastic wash bottle cap.1000ml	No.	6

5	Plain wide mouth bottle,1000ml	No.	1
6	Plainbottle,1000ml	No.	4
7	Plainbottle,500ml	No.	10
8	Plainbottle,250ml	No.	20
9	Plainbottle,125ml	No.	6
10	Beaker,1000ml	No.	2
11	Beaker,500ml	No.	2
12	Beaker,250ml	No.	4
13	Beaker,100ml	No.	4
14	Beaker,50ml	No.	2
15	PlasticBeaker,500ml	No.	3
16	PlasticBeaker,250ml	No.	3
17	MeasuringCylinder,500ml	No.	3
18	MeasuringCylinder,250ml	No.	2
19	MeasuringCylinder,100ml	No.	1
20	Volumetricflask,500ml	No.	10
21	Volumetricflask,250ml	No.	10
22	Volumetricflask,100ml	No.	10
23	GroucherucibleG-4	No.	1
24	GroucherucibleG-3	No.	1
25	Silica dish	No.	1
26	Filter funnel	No.	2
27	Roundbottomflask,500ml	No.	1
28	Roundbottomflask,100ml	No.	2
29	Flatbottomflask,500ml	No.	1
30	Flatbottomflask,250ml	No.	2
31	Separatingfunnel,500ml	No.	2
32	Separatingfunnel,125ml	No.	2
33	Separatingfunnel,1000mlwithTeflon	No.	6
34	Dropper	No.	4
35	Glass rod	No.	2
36	Graduatedpipette,25ml	No.	3
37	Graduatedpipette,2ml	No.	2
38	Conicalflask,500,1000,2000ml	No.	18
39	Conicalflask,250ml	No.	12
40	Burette,50ml	No.	2
41	Boiling Beads	No.	2
42	Watch Glass	No.	2
43	PPMeasuringCylinder,50,100,250,1000ml	No.	10
44	PPConicalflask,250ml	No.	2
45	PPbottle250ml	No.	2
46	Tripod Stand	No.	2
47	Wire gauge	No.	5
48	Watmanfilter paper No. ½	No.	1
49	WatmanfilterpaperNo.40/42	No.	1

50	Test tube stand	No.	1
51	Pipette stand round	No.	1
52	Burette Stand	No.	1
53	Nonabsorbent cotton	No.	2
54	SS Spatula 6"	No.	4
55	SS Tong 18"	No.	2
56	Tissue role	No.	2
57	Gas burner	No.	2
58	BOD bottles	No.	46

C	Laboratory Chemicals		
Sr.No.	Item Description	Unit	Qty
1	Ammonia buffer soln.	ml	500
2	Ammonium chloride	gm	500
3	Ammonium hydroxide	gm	500
4	Buffer tbt 4.0	tbt	10
5	Buffer tbt 7.0	tbt	10
6	Calcium chloride	gm	500
7	ED TA	gm	100
8	Ferrous ammonium sulphate	gm	500
9	Ferric Chloride	gm	250
11	Magnesium Sulphate	gm	250
12	Mangnese Sulphate	gm	250
13	Potassium dichromate	gm	500
14	Potassium hydroxide	gm	500
15	Sodium hydroxide	gm	500
16	Sodium chloride	gm	500
17	Sodium thiosulphate	gm	500
18	Sulphuric acid	Ltr.	20
	Sodium Azide	gm	500
	Sodium Azide	gm	500
19	Filter paper whatman 541	Pkt.	3
20	Filter paper whatman 42	Pkt.	1
21	Ferroun indictor solution	ml	250
22	Chlorotex reagent	ml	100
23	Starch	gm	500
24	Silica gel	ml	100
25	Ammonia solution	ml	500

Note: -The bidder shall check the operation and performance along with calibration check if required of all the lab. Equipment. In case any lab equipment required calibration same has to done by bidder. Lab equipment's without calibration shall not be allowed to use.

12. List of Asset, item and machinery available at site

Sr.		
1	Personal Computer in PLC/SCADA/Control Room	1 No. (Windows 7.0, RAM2.0GB,21"LCD)
2	Printer in PLC/ SCADA /Control Room	2 No. of A4 Printer nos.
3	Air Conditioner (split Type)	06 (1.5 Ton) nos.
3	Ceiling Fan	13nos.
4	Wall mounting Fan	5nos.
5	Tube light	352nos.
6	Mercury light +round light	23+5 nos.
7	Sodium street light (1 x 250)	52 nos.
8	PVC water Tank 500 Litters	04 nos.
7	Office table	07 nos.
8	Chairs with arms rest	10 nos.
9	Revolving chairs	10nos.
10	Conference room Table	1nos.
11	Steel cupboard	3 nos.
12	Steel cupboard with glass door	2 nos.
13	Control room table(console)	1 no.
14	Air coolers	2 nos.
15	Water cooler	1nos.
16	Fire extinguisher	4nos.
17	First aid box	1nos.
18	Welding machine	1nos.
19	Drill machine 500w	1nos.
20	Manual trolley	1nos.
21	Digital clamp meter	1nos.
22	Hammer	2nos.
23	Pipe Wrench 18"	1nos.
24	Slice wrench 12"	1nos.
25	Allen key set	1nos.
26	Bearing Puller	1nos.
27	Measuring taps 3mtr.	2nos.
28	Grander machine 4"	1nos.
29	Double ended spanner set	1nos.
30	Screw driver set	2nos.

13. Disposal of Plant Residuals Treated Effluent

Plant residuals (Screenings, Grit and dewatered Sludge) and treated effluent shall be safely disposed by contractor. The Contractor shall be responsible for disposal of Plant residuals within 60 Km from Site as per RSPCB norms. Contractor shall be responsible for any penalty / fine imposed by any department /authority due to unsafe disposal of plant residuals.

Section A-04
GENERAL CONDITION FOR
O&M OF SEWAGE
TREATMENT PLANT

GENERAL CONDITION FOR O&M OF SEWAGE TREATMENT PLANT

- 1.0 The contract includes operation and maintenance of entire Sewage Treatment Plant on round the clock basis for a period of 60 Calendar Months (Five Years). Guidelines stipulated in Manual on Sewerage and Sewage Treatment, Second Edition, published by Central Public Health and Environmental Engineering Organization(CPHEEO), Ministry of Urban Development, New Delhi, December 1993 shall be followed.
- 2.0 The Sewage Treatment Plant shall be operated and maintained by the contractor including all works. Contractor has to incur and bear all the cost for taxes, GST, duties, transportation, labour, machining, welding, repairing, replacing and making good any and all parts / plant equipment, consumables, motors, pumps, blowers, gear unit, capacitor, ht/lt switchgear, plc panel, lighting system, cables, battery charger, battery, instruments, meters, chemicals for laboratory etc. All the cost in lump sum offer, department shall not provide any consumable or shall not be responsible for any item required for the work of O & M.
- 2.1 Average power factor for incoming power bill (Rajasthan State Electricity Board) must be greater than 0.90 and if any penalty/charge levied due to low power factor, then it will be recovered from the contractor without any reasons. The entire capacitor panel must be kept in working condition to maintain power factor of 0.90 or better by the contractor. Any spares required to keep capacitor panel in working condition is in the scope of the contractor. The spares required for LT capacitor panel must be procured and replaced immediately, if required. No spares for capacitor panel & LT capacitor panel in any circumstances will be provided by JDA. Penalty on account of poor power factor (i.e. less than 0.90) as explained elsewhere will be recovered from the contractor from his monthly O&M bill.
- 3.0 The Contractor will be held responsible for O & M and satisfactory performance of the STP. Major components and works shall include the following but not limited to:
 - a) Operate the plant efficiently for Five years (24 hours/day & 365 days/year) including all consumables, parts or components, labour transportation and other charges, except for cost of power and supply of raw sewage. Power cost would be borne by Employer. Raw sewage shall be supplied by employer.
 - b) Operate and maintain all units and equipment's of the Sewage Treatment Plant as per the requirement of the process to meet continuously and consistently desired treated sewage characteristics in conformity with specifications and RAJASTHAN POLLUTION CONTROL BOARD guidelines, maintain all equipment in good working condition as per the prevailing O & M manual at STP.
 - c) Attend breakdown of civil, mechanical, electrical, piping and instrumentation works and maintain the plant and equipment throughout the Contract Period.
 - d) The operation and maintenance service provided by the Contractor for the period specified in the Contract shall ensure the continuous operation of the Plant and that the breakdown or deterioration in performance, under normal operating conditions, of any items of Plant and equipment and component parts thereof is kept to a minimum.

The contractor shall determine operating parameters, select settings (chemical dosages etc.) and generally optimize the process, and working of the treatment plant. Excessive chemical dosing i.e. doze more than / less than normal and excessive power consumption should be avoided; otherwise penalty shall be levied and recovered from the contractor.
 - e) The contractor shall adhere to the manufacturers' recommendations with respect to equipment maintenance, consumables, the types and grades of lubricants to be used, frequency of lubrication, adjustments to be made regularly and recommended spares to be held in store.

The spares, tools and tackles supplied by contractor as specified herein as a part of this tender obligation are property of employer (JDA) and employer has no obligation to supply the same to contractor for carrying out any rectification work. Contractor for the purpose of O&M shall have required spares in stock at site and maintain a record of the same. In case if employer hands over any spare for carrying out rectification in emergency situation, the same shall be handed over back by contractor to JDA within reasonable period of time and not exceeding a maximum of 4 weeks duration in any case. Failing to do so, JDA reserves the right to deduct the price of same from O&M bill/Security Deposit of contractor. Arranging necessary tools and tackles for effective and efficient O&M of the plant is responsibility of contractor.

The contractor shall provide timely planning and regular procurement of all required spares and consumable including chemicals, chlorine tonners, grease, lubricating oil, cleaning agents, laboratory reagents etc. Contractor shall arrange for the requirement well in advance.

- f) Maintaining Logbooks / Records of the work carried out to keep them in good working condition. He shall obtain approval of the format of logbooks and records from Employer.
- g) The Contractor shall prepare and implement an effective plant maintenance program in consultation with the Employer. It is absolutely the Contractor's responsibilities to look after all sorts of maintenance whether routine, preventive or break down or any other type of maintenance. The Contractor will be responsible to carry out day to day as well as periodic maintenance necessary to ensure smooth and efficient performance/running of all equipment.
- h) Submission of daily and monthly O & M report as per direction of EIC.
- i) Carry out regular and frequent sampling, analysis and result recording of raw and treated sewage as per the procedures laid out by the Owner and in conformity with standard methods; and complying with the RAJASTHAN POLLUTION CONTROL BOARD norms and attend RAJASTHAN POLLUTION CONTROL BOARD during the monitoring/ sampling and obtaining approval.
- j) Employ appropriate and skilled manpower; provide all tools, tackles, equipment, laboratory instruments, glassware and chemicals, reagents etc. required for effective implementation of the Services detailed above.
- k) Area lighting – The premises of various works are provided with metal halide / sodium vapor lamps, fluorescent tubes and also ceiling fans/exhaust fans inside the various structures. Daily on/off operation and routine cleaning of all type of electric fixtures. Replacement of lamps / Tubes / Fans in case of failure at contractor's cost.
- l) Maintenance of garden – Normally watering the trees once a day or more if required. Grass cutting, removal of shrubs, weeds, around tree to be done as directed. Remarking the ponds around the tree after loosening with soil with supply of additional earth, if required. Cutting of branches, if required for straight growth of tree/plant and development of garden.
- m) All buildings, bathroom, toilet to be kept swept, cleaned and washed daily. Consumable requirement for cleaning such as acid, harpic, phenyl, air freshner, washing powder, brooms, wire brushes, duster, bamboos, toilet shop, lotion waste, kharata (broom) shall be provided and used as required. All ventilators, windows/doors to be cleaned and to keep in good aesthetic condition.
- n) To keep watch on overflowing of sump. If such overflow takes place the agency shall have to bear the damages caused to surrounding properties.
- o) Maintaining laboratory and it's all equipment's. All materials, equipment and labour shall have to be employed by the agency to maintain the same.

- p) Contractor shall ensure that the sewage entering the plant is not bypassed for more than half an hour, which is again subject to obtaining prior permission / approval of the employer. In adverse circumstances of heavy rainfall, contractor may use the plant bypass for the purpose of attending disturbance for a period of maximum one hour. Generally major repair encountered in Aeration Tank/ RSPH etc. shall be attended as quicker as possible. Contractor shall ensure that the raw sewage undergoes the primary treatment (i.e. after PST to remove BOD of at least 30% and SS of at least 60%) during maintenance of units downstream to aeration tank. In case it is not possible, the reason for the same to be informed to the Employer within 2 hours.
- r) The contractor shall monitor the performance of the Sewage Treatment Plant, conduct the analysis of the influent as well as effluent quality after treatment as per table given below. Contractor shall initiate and take adequate actions to ensure smooth and satisfactory performance/ running of the plants on a 24 hours/ round the clock basis. The Contractor will also provide a Tests Certificate of effluent quality from the RPCB/Third party as direction of EIC at the end of each quarter period

Sr.no	Sampling Point	Type of Sampling	Freq. of Sampling	Parameters to be tested at JDALab in STP
1.0	Raw Sewage			
a	Inlet chamber	Composite	Once a Day	pH, SS/VSS, BOD, COD, O&G, Alkalinity
b	Inlet chamber	Grab	Once a Day	pH, SS, COD
c	Inlet chamber	Grab	Once a month	VSS, Alkalinity, Chloride, Sulphate, Phosphate, Ammo. Nitrogen,TKN
2.0	Treated Sewage			
a		Composite	Once a Day	pH, SS, BOD, COD, O&G,
b		Grab	Once a Day	pH, SS, BOD, COD, O&G,
3.0	Aeration tank	Grab	Once a Day	DO, MLSS/MLVSS, SVI

- s) For the smooth running of the plant all the required equipment, machineries, accessories, major and minor spares, consumables including chemicals, greases, lubricants, all cleaning agents, packing, rubber sheet, laboratory reagents, all hardware, required quantity of white wash, oil paint colour, all types of epoxy paint, material required for house- keeping and cleaning etc. are to be brought by the contractor. The quality of all consumable and spare etc. i.e. technical requirements as per manufacture recommendation shall remain unchanged.

- t) To remove/suitably collect dewatered sludge from mechanized dewatering system (belt filter press), screenings and grit from grit detritus etc. and loading the same into vehicle and conveying and unloading the same at Low lying area as per RSPCB norms

If the contractor fails to remove silt / sludge in the treatment plant for any reason and beyond the notice period issued by the employer, the same shall be removed by employer by engaging other agencies and the cost shall be recovered from the contractor.

- u) The contractor shall carry out cement paint/ enamel paint/ white wash for exterior finish of civil units once before the end of third year of O & M of the plant and before the end of fifth year of O&M and similarly shall also carry out painting on mechanical equipment's/ above ground pipe lines/ hand railing before the end of second year and fourth year of O & M of the plant.

- v) The contractor shall hand over the plant back to JDA on expiry of his contract in fully working condition satisfying the requirement of treated sewage. All the electrical, mechanical and instrumentation including standby shall be in perfect working condition.

- 4.0 The Contractor shall procure, keep at site and use necessary tools, tackles and safety equipment's for day to day routine maintenance, preventive maintenance and break down maintenance. Also minor and major repairs to the equipment involved in the plant have to be carried out by the contractor during the O&M period. Contractor shall submit report, discuss and finalize with the Employer on the major repairs required to be carried out and how these repairs will be undertaken, to the satisfaction of the Employer and obtain written approval from the Employer before carrying out any major repairs.

- 4.1 The scope also includes cleaning of units, sludge drying beds, clarifier, removing of foreign materials like debris, sand, fish, frogs or any other dead or live animals and also cleaning of strainers of each pump quarterly so that required quantity of sewage is treated properly.

- 4.2 The disposal of the foreign particles like sand, dead or alive animals etc. from all the units of the plant to suitable place is in the scope of contractor.

The scope of works also includes the calibration of all meters e.g. pressure gauge, Ammeter, voltmeter, relay, trajectory meter, Energy meters, temp scanners, flow meters etc. for measurement of accurate readings.

- 4.3 In case of power failed, contractor shall be responsible for proper lasing with JVVNL for restoring 11 KV in coming power feeder for STP.

- 4.4 The scope of work of contractor includes operation & maintenance of 11 KV incoming power line, Lighting Arrestors, D.O. fuse, earthing works, or any other maintenance required on two/four pole D P structure.

- 5.0 Contractor to ensure that the sewage entering the plant is not retained for more than half an hour. In case it is not possible, the reason for the same to be informed to the Employer within 2 hours.

- 5.1 Scope of JDA will be only to the extent of supplying raw sewage (at Plant Inlet Chamber) and bear the energy charges to be paid to JVVNL.

- 5.2 Besides above mention condition, any other condition required for o & M of STP shall be applicable

- 5.3 In case of unsatisfactory performance by contractor, JDA will be free to award work on same rates and same term and conditions to any agency for continuing public service

- 5.4 Jaipur city will be jurisdiction in case of for any dispute

Signature of Contractors

Executive Engineer (PHE-I)
JDA, Jaipur

Mob. No.

Section A-05
SPECIAL CONDITION FOR O & M
OF SEWAGE TREATMENT PLANT

01 CHAPTER
SPECIAL CONDITION OF CONTRACT FOR OPERATION & MAINTENANCE

1.0 SUFFICIENCY OF TENDER

- 1.1 The prices entered in the Price Schedule shall, except in so far as it is otherwise provided, be deemed to cover all the Contractor's obligations under the Contract and all matters and things necessary for the operation and maintenance of the Plant. Particular requirements set forth in the Specification are given without prejudice to the aforementioned general obligations of the Contractor.

2.0 DOCUMENTS / INSTRUCTION FURNISHED BY THE EMPLOYER

- 2.1 The Employer may issue at such times as he may think proper during the contract period instructions as may appear to him to be necessary for the guidance of the Contractor in the operation and maintenance of the Plant. The Contractor shall be bound by the same, obey and execute.
- 2.2 The Contractor shall acknowledge the receipt of such instructions in writing or by fax. The Contractor shall carefully check all such instructions before commencing any Works. The Contractor shall inform the Employer in writing, within 3 (three) days from the receipt of the same, of any errors or omissions discovered, or of the difficulty to execute any Works or part thereof in compliance with the written instructions received from the Employer. Failing to do so contractor shall be liable to execute at their own cost the necessary alterations to any Works resulting from these errors or omissions.
- 2.3 The Contractor will also be furnished with two copies of all instructions as may be issued by the Employer. One copy of all such O & M manuals and instructions issued to the Contractor shall be kept in his office at the site. The O & M manuals or instruction shall be considered valid only if the Employer has signed it.

3.0 CONTRACTOR'S ORGANISATION & ADMINISTRATION OF THE CONTRACT

- 3.1 The Contractor shall provide experienced administrative, managerial, technical, supervisory, non-technical personnel and labour necessary to operate and maintain the plant properly, safely and efficiently on a continuous 24 hours basis for the full term of the O & M Contract Period. During O & M period if any expert / technically knowledgeable / special persons or manpower needed, he shall have to arrange & bear / pay any and all cost, charges, fare, and allowances etc. for the same. The employer will not pay any cost / charges for the same.
- 3.2 The qualifications and capability of the Contractor's personnel shall be appropriate for the task they are assigned to perform. The staff provided shall be fully trained in the operation of the various units of the Treatment Plant before being given responsibility for operating any part of the Plant. If in the opinion of the Employer, any member of the Contractors staff is considered to be insufficiently skilled or otherwise inappropriate or not doing the work properly he is required to perform, he shall be replaced by the Contractor with a person with the appropriate skills and experience for the task, to the satisfaction of the Employer. The Contractor will be required to submit to the Employer the Schedule of 'Manpower' and 'Organization Chart'. The contractor shall keep all the details, bio-data, photograph, references, application, and all such records with him even after he is removed or resigned from work of this site. Guilty person or undisciplined person shall not be employed by the Contractor.
- 3.3 The CV/Resumes of the Contractors personnel shall be submitted to the Employer for acceptance at least 7 days before the anticipated commencement of the O & M period. Any change of personnel shall be promptly informed to the Employer within a day's time. Normal time duty hours for the contractors' operation & maintenance personnel may be modified as necessary and agreed by the Employer. A rotating shift schedule shall be established by the Contractor and agreed by the Employer which will ensure that an adequate number of the Contractor's staff, fluent in Hindi/English is on duty at Plants 24 hours per day, 7 days per Week, including all holidays. The contractor shall have to issue identify cards with photographs to all the state employed for O & M. All the employees of contractor should be in specified

uniform indicating contractor logo.

3.5 All correspondence and communication between the Employer and the Contractor including the Contractor's sub-contractors shall be directed through the ProjectManager.

3.6 The sub-contractors proposed by the Contractor shall be subject to the approval of the Employer.

3.7 Contractor shall provide manpower as per qualification and experience mentioned below:

Sr.	Designation	Qualification Experience	No. of personnel
1	Manager	Project B.E.(Env.) or 3 years experience. 1 year experience M.E. (Env.)in the field of O&M of STP or large ETP having capacity more than 15 mld	01
2	Laboratory	M.Sc. (Micro) 3 years' experience and knowledge in technician identifying micro-organism and testing procedures	01
3	Assistant Lab Technician	B.Sc. (Micro) 1 year experience and knowledge in identifying micro-organism and testing Procedures	01
4.	Mechanical Engineer	D.M.E. (Mech.)3 years experience. 1 year experience in the field of O&M of STP	01
5.	Electrical Engineer	D. E.E. (Elect.) 3 years experience in maint. of LT/HT Panel, motors, Lighting System, DG Set & Other electrical equipment.	01
6.	Plant Operator	ITI fitter 3 years experience of operating cum supervisor pumping machinery	03
9.	Helpers	8th Standard Pass -having knowledge of Hindi/English	18
TOTAL PERSONNEL			26

3.9 Relaxation in qualification and number of staff shall not be allowed. The above staff shall be distributed in three shifts. General shift shall be considered as 09:00 Hrs to 18:00 Hrs. various personnel shall attend the plant during general shift as tabulated

3.10 4.0 above. Preferable timing of shift shall be 06:00 Hrs to 14:30 Hrs, 14:00 Hrs to 22:30 Hrs and 22:00 Hrs to 06:30 Hrs (with half an hour of overlap). The arrangement of reliever for weekly off / all holidays etc. shall be made by the Contractor over and above the required persons mentioned in 3.8 above.

As per agreement, the No. of staff in each shift should always remain present; otherwise, penalty towards absence of any staff may levied and recovered from the contractor. The penalty shall be decided by the Director (Engineering) JDA. The arrangement of reliever for weekly off/holiday/leave etc. shall be made by the contractor. Absence on any ground like weekly off or holiday shall not be considered. The presence of staff in each shift should be marked in register to be maintained at office of Engineer of the Client at Sewage Treatment Plant; which shall be considered as final. The contractor's staff must mark their presence in this register. The contractor may maintain a separate register for his own purpose. In this regard decision of EIC shall be final.

3.11 The staff of Contractor will always remain in contact with Employer and follow his instructions. The Contractor shall have to issue identity cards with photograph to all the staff employed for operation and maintenance; otherwise, they will not be allowed to enter the plant premises.

- 3.12 The Contractor shall employ all the required staff (and in no case less than the number specified in the tender which is mandatory) immediately within 14 days of award of the Contract, otherwise full payment will not be made. In such case, the commencement of the Contract Period and payment thereof shall be reckoned only from the date of employment of full numbers of staff. If at any stage it is felt necessary that additional manpower over and above the specified minimum manpower is required for the proper operation of the treatment plant, contractor shall employ necessary additional manpower at no extra cost within 7 days from the date of issue of notice by engineer-in-charge.
- 3.13 The Contractor will comply with all safety rules and regulations and all inter- disciplinary measures as followed by the Employer. The Employer will not be responsible for any accident / injury to the staff or any person of the Contractor or loss or damage to any property. Further, the Employer will not provide any insurance or free medical facility to the staff of Contractor.

Providing necessary security arrangement for safety of the plant and contractor's personnel will be the responsibility of contractor.

- 3.14 All Central / State Government / Semi-Government / Local Body's rules and regulation pertaining to this contract, all legal formalities pertaining to provident fund, factory act, all legal formalities shall be followed and observed by the Contractor without any extra cost to the Employer. Please note that failure in complying so, all liabilities arising as per laws will be to the Contractor's account.
- 3.15 No accommodation / guesthouse / transportation facility will be provided by the Employer/ Employer to the Contractor. No staff or any person shall reside in the plant premises and any such person found shall be driven out immediately.
- 3.16 Due to strike by the Contractor's employees, the operation and maintenance of plant must not be affected and the property of JDA should not be damaged. In such case any dispute / discrepancy occurs, the decision of Engineer-in-charge will be final and will be binding to the contractor. Also if any expense will be made by JDA, it will be deducted from Contractor's bill/ SD.
- 3.17 The duration of contract shall be Five years from the date of commencement/ taking over certificate. However the client reserves the right to terminate the contract at any time by giving 3 months' notice to the contractor or can be extended contract period at the Fifth year rate of O & M as mutually agreed by EIC and contractor.
- 3.18 The contractor shall provide necessary chemicals for polyelectrolyte tank mixture, lubricating oil, grease in their store room. Stacking and day to day preparation of solution shall be arranged by the contractor. Similarly, chlorine tonner / cylinder shall also be provided by the contractor at the door – step of the chlorination plant. Disconnecting and removal of empty tonners and reconnection of filled tonners shall be carried-out by the contractor. The minor spares required for disconnection/reconnection i.e. clamp/'O' rings/washers shall also be arranged by the contractor.
- 3.19 Plant shall be handed over in "Fully operational conditions" according to above para to contractor on the award of contract. Thus, the contractor has to take over the plants for said contract without any insistence for any change in the plants.
- 3.20 The scope of work also includes regular cleaning of complete plant area including floor, railing, door, windows, light fixtures and ceiling etc. similarly, minimum 5 mts. from the construction boundary on the outside of the plant area shall also be cleaned and maintained by the contractor.
- 3.21 This work is inclusive of but not limited to operation, maintenance, housekeeping, cleaning, removing sludge by its own carrier arrangement, painting, white colour washing, preparing data, recording, correspondence work to the client and Government Departments, etc. All this work should be done as per standard practices and by following labour, factory, electrical, RAJASTHAN POLLUTION CONTROL BOARD, and all other old and new law and order, Indian standards etc. as applied of Local, State and Central Govt. of India.
- 3.22 Nothing is to be provided by the client except electricity and sewage flow (Raw Sewage & Electricity shall be provided by JDA). All the formalities to all government authorities for factory, electrical, RAJASTHAN POLLUTION CONTROL BOARD, etc. for having NOC, water consent, Hazard waste concern, approval etc. shall be done by the contractor. However, necessary legal fees to all government

authorities shall be borne by the client.

- 3.23 Monitoring shall be done as per guidelines given by Engineer-in-charge. Contractor has to maintain all the parameters of treated effluent within the stipulated limits or he will be penalized for not maintaining the parameters given by RAJASTHAN POLLUTION CONTROL BOARD and client. All expenditure incurred for the same like, suite, fee, court fee, case fee, or the penalty as decided by City Engineer and penalty charged by RAJASTHAN POLLUTION CONTROL BOARD shall be deducted from his pending bills or Security Deposit.
- 3.24 The Contractor shall have to test the sewage samples of the influent and effluent from each of the treatment units at every day through the laboratory provided at the plant; as per the schedule fixed by the Engineer in charge. The same have to be verified and checked by the Client once a week by taking parallel sample from the same point and at the same time and analyzing the same at the clients laboratory/laboratory approved by client. Proper register/record shall have to be maintained by the contractor and any modification /rectification, on the basis of analytical results of samples if required, in performance of each unit shall be carried out immediately. The daily analysis report along with steps for the rectification / modification taken, if any, shall also be reported to the client with the daily report.
- The weekly report shall also be submitted to the Engineer-in-charge of the Client, with remarks and the steps taken for modification, if any, taken during the period of report frequency of submitting report shall be decided by EIC.
- 3.25 No equipment shall remain idle or unrepaired or damaged or unutilized for the period exceeding 5 days. If any equipment is not repaired, rectified and or replaced within 3 days, the contractor shall be penalized with no limit at the rate of Rs. 1000/- per day of delay per each individual equipment of the plant.
- 3.26 If a man on the duty remains absent and there will not be any replacement in his place, the contractor will be penalized at the rate of Rs. 500/- per man per day up to no limit.
- 3.27 The quoted rate shall remain firm and valid for five years of O&M contract.
- 3.28 The payment of O&M charges will be made as per relevant clause of Special Conditions of Contract for O&M. S.D. shall be deducted as per rule. All security deposits/retention money shall be released after 6 months on successful completion of O&M period of 5 years.
- 3.29 The other terms and conditions described in these tender documents, wherever applicable, shall remain unchanged.
- 3.30 However, during O&M period, the contractor has to supply all the spares, at his cost during major-minor breakdown and also maintenance works.

4.0 MAINTENANCE

- 4.1 The maintenance service provided by the Contractor for the period specified in the Contract shall ensure the continuous operation of the Plant and that the breakdown or deterioration in performance, under normal operating conditions, of any items of Plant and equipment and component parts thereof is kept to a minimum.
- 4.2 The Contractor shall carry out the Maintenance of the plant installations in accordance with the requirements of the O & M Manual and also to the approved Maintenance Plan as mutually agreed.
- 4.3 The Contractor shall adhere to the manufacturers' recommendations with respect to equipment maintenance, the types and grades of lubricants to be used, frequency of lubrication, adjustments to be made regularly and keep in safe custody recommended spares, which may be required for smooth & trouble-free operation of the plant on day to day basis.
- 4.4 The Contractor to operate and maintain all equipment as recommended in the O & M manual and maintain logs and records of the work carried out to keep them in good working condition. The Employer shall approve the format of logs and records.
- 4.5 The Contractor shall prepare and implement an effective plant maintenance program in consultation with

the Employer. It is absolutely the Contractor's responsibilities to look after all sorts of maintenance whether routine, preventive or break down or any other type of maintenance. The Contractor will be responsible to carry out day to day as well as periodic maintenance necessary to ensure smooth and efficient performance / running of all equipment.

4.6 The contractor shall along with the O & M Manual submit a write-up covering vision, mission, plan for smooth & trouble-free operation & maintenance of the Plant. It shall include all activities, their duration and planned deployment of manpower and resources.

4.7 Contractor shall set-up and maintain laboratory at plant site complete with all equipment, testing instruments, glassware, weigh scale, chemicals, reagents, consumables and carry out necessary calibration from time to time to conduct tests as stipulated in 5.3 below and any other test required to check some of the basic parameters, not specifically mentioned.

5.0 DOCUMENTATION / REPORTS

5.1 The Contractor will run the plant in accordance with this prevailing O & M manual of the plants in additions to proposed additional units. The Contractor will be responsible for keeping & updating record of documents including History Card for equipment and maintaining every day logbook. The Contractor shall maintain and update logbook and details of operational parameters like pumping hours, aerator operation hours, Amperes, Flow meter reading, H.T. Voltage, Power Factor, energy meter reading, pressure and other reading required are recorded in every shift at regular interval e.g. hourly or as agreed mutually (by JDA).

5.2 Printing of log sheets, registers and all necessary stationery required for maintaining records of operations and maintenances has to be arranged by the Contractor at his cost, duly approved by Employer. Format of log sheets, registers will be made available to the contractor by the JDA.

5.3. The Contractor shall submit a copy of the weekly/ monthly O & M report or as decided by EIC. This report must include the following:

a) Details of plant visit made by any govt. authority like JDA, RAJASTHAN POLLUTION CONTROL BOARD, etc.

b) Maintenance carried out due to fault / breakdown of equipment.

c) Necessary lab test carried out

d) Power cut duration.

7.0 SAFETY, HEALTH AND ENVIRONMENT

7.1 The Contractor shall be responsible for safety on Site during the O & M of the Works by the Contractor. Health of workers shall be protected against infectious and contagious diseases. Medical check-up at every six months shall be done. Environmental protection shall also be given priority so as to conserve the environment.

7.2 The Contractor's duties with respect to Safety shall include the following:

(a) Utilize safety awareness procedures in every element of operation and maintenance.

(b) Give emphasis to safety including:

i. Safe working and safety procedures as per rules and regulations of Department of Explosives, factory inspector, electrical inspector regarding use of protective clothing, gloves, boots and helmet etc.

ii. Cleanliness of the Plant as a whole

iii. Awareness of hazardous conditions and accident reporting and necessary compliance

iv. Safe practice in Treatment Plant

- 7.3 The Contractor shall be responsible for all safety measures and those procedures adopted shall comply with the Indian regulations pertaining to such work and local safety codes currently in force. Where such codes do not adequately cover the Plant then the Contractor shall ensure that proper safety procedures are followed. Those given below are minimum standards and the works shall not be limited to these, if higher standards prevail. The Contractor will comply with all safety rules and regulations and all interdisciplinary measures as followed by the Employer. The Employer will not be responsible for any accident/ injury to the staff of the Contractor. Further, the Employer will not provide any insurance or free medical facility to the staff of Contractor.
- 7.4 If the work in the vicinity of electrical equipment has to be carried out after connection has been made to the electricity supply the Contractor shall comply with any "Permit to Work" system approved by the Employer.
- 7.5 Suitable scaffolds shall be provided for workmen for all work that cannot safely be done from the ground, or from solid construction except such short period work as can be done safely from ladders. When a ladder is used an extra man shall be engaged for holding the ladder and if the ladder is used for carrying materials as well, suitable footholds and hand holds shall be provided on the ladder.
- 7.6 All necessary safety equipment as considered adequate by the Employer shall be available for use of persons employed on the Site and maintained in a condition suitable for immediate use. The Contractor shall take adequate steps to ensure proper use of the equipment by those concerned, in the following manner:
- (a) Those engaged in handling any material which is injurious to eye shall be provided with protective goggles.
 - (b) Those engaged in welding shall be provided with welder's protective eye-shields.
 - (c) Those involved in works in areas where there is a risk of drowning shall be provided with life jackets.
 - (d) Electrician, wiremen and helper shall be provided with shock-proof shoes.
- 7.7 Adequate provision shall be made for prompt first aid treatment of all injuries likely to be sustained during the course of the work. When work is done near any place where there is risk of drowning, all necessary equipment shall be provided and kept ready for use and all necessary steps taken for the prompt rescue of any person in danger. Only after arranging such equipment, tools/ tackles etc. at site work shall be started.
- 7.8 To ensure effective enforcement of the rules and regulations relating to safety precautions, arrangements made by the Contractor shall be open to inspection by the Employer or his Representative and the inspecting officers.
- 7.9 Notwithstanding the provisions made above the Contractor is not exempted from the operation of any Act or rule in force.
- 8.0 TOOLS AND TEST EQUIPMENT
- 8.1 A complete set of necessary tools and test equipment required for operation & maintenance of the plant shall be available with the Contractor. This shall enable erection, dismantling, repairing, replacing or testing to be carried out on any part of the Plant whether of an electrical, mechanical or other nature, during the contract period. All tools and test equipment shall be procured, kept at site in good condition and used properly by the Contractor at his expense. The contractor shall prepare and implement an effective plant maintenance program in consultation with the Employer. It is absolutely the contractor's responsibilities to look after all sorts of maintenance whether routine, preventive or break down or any other type of maintenance. The Contractor will be responsible to carry out day to day as well as periodic maintenance necessary to ensure smooth and efficient performance/ running of all equipment.

9.0 INSURANCE CERTIFICATES

9.1 Within 14 days of the acceptance of this tender the Contractor shall produce to the Employer a certificate or certificates signed by the Contractor's insurers or their duly authorised agents covering all the persons with accidental policy of sufficient amount as per their grade (30 times monthly salary) with disability benefit provision for them stating that insurance's complying with the requirements of the contract have been effected. No such certificate shall relieve the Contractor of his obligations under the Conditions of Contract to produce to the Employer if required by him the insurance policies and the receipts for payment of premiums.

10.0 ASSISTANCE FOR THE EMPLOYER'S STAFF

10.1 The Contractor shall provide all necessary assistance to the Employer and his staff in carrying out their duties of checking setting out, inspecting and measuring the Works. The Contractor shall provide staff, office attendants, labourers and other help as may be needed from time to time by the Employer.

10.2 The Contractor shall provide for the Employer and his staff such protective clothing, safety helmets and rubber boots of suitable sizes, 440 volts series hand lamps and the like as may reasonably be required by them. These articles shall remain the property of the Contractor.

11.0 FIRST AID BOX

11.1 The Contractor shall at his own cost provide and maintain at the Site of Works standard first aid boxes at minimum six locations as directed and approved by the Employer for the use of his own as well as the Employer's staff on Site as stipulated by local regulations. Contractor shall arrange to train all their staff in first aid treatment within 3 months

12.0 NOTICE BOARDS / DISPLAY BOARDS

12.1 The Contractor shall provide a Notice Boards/Display Boards at appropriate locations detailing precautions to be taken by operation and maintenance personnel in work in conformity with Industries and Labour Regulations and Department of Explosives.

13.0 APPLICATION

13.1 These general conditions of the contract shall apply to the extent that they are not superseded by provision in other parts of the contract.

14.0 GENERAL ROUTINE MAINTENANCE

To operate and maintain the sewage treatment plant and equipment in accordance with the aim and purpose of treatment. The plant and equipment covered under the above contract will be promptly attended by the contractor including any "Trouble shooting" to ensure smooth and trouble free operation. The contractor will be responsible for smooth and satisfactory operation and maintenance of the Sewage Treatment Plant on the round the clock basis for 5 years period from the date of taking over the plant after 3 months trial run period is completed and on acceptance of plant.

A Technical expert of the contractor shall visit the plant on every fortnight and will suggest if required, to improve the efficiency and working of the plant. The visit must be recorded at Employer's document and outcome of the visit/ minutes of meeting should be got signed by Employer's authorized representative without which the visit shall not be considered.

The employer shall check the operation of the plant or designate an organization of his choice to carry out inspections. The employer or the organization appointed by him shall check that the Contractor is performing the tasks for which he is responsible with due diligence.

- 14.1
- (1) Regular cleaning of screens in all shifts as often as required to prevent backing up to sewage. Mechanical screens should be kept properly lubricated as per instruction of the manufactures.
 - (2) Cleaning of screens by high pressure water jet (preferably between 11.00 hrs to 12.00 hrs) on daily basis
 - (3) Cleaning of belt conveyor
 - (4) Checking Alignment, tightening of fasteners, and lubrication of gear and other moving parts of screens, conveyor belt, detritor, classifier units, PST/SST bridge & scrapper, scum removal system, rail alignment etc.
 - (5) Checking and inflating types of all trolleys
 - (7) Checking of all pumps, motors, gears etc. for its proper operation.
 - (8) Checking of gas mixing system, gas holder unit for its proper operation.
 - (9) Observing/monitoring sludge level in digester unit.
 - (10) Setting SV & Telescopic valve on sludge withdrawal line of PST/SST to suit with the sludge consistency by sample analysis.
 - (11) Checking all the pipelines for preventing choking, water tightness etc.
 - (12) Monitoring BOD and DO level in treated effluent.
 - (13) Checking development of foam in Aeration tank and diminish it by waterspraying.
 - (14) Safe disposal of screening, grit and dry sludge cake generated on daily basis at a site indicated by employer within 60 km radius of the treatment plant (STP).
 - (15) Avoid strictly the accumulated sludge decomposing in the settling tanks and buoyed to the surface. Septic condition should not arise in the tanks.
 - (16) The return sludge pumps unit should be operated according to the increase or decrease in return sludge rate of flow required to maintain the necessary MLSS in aeration tank unit, based on the sludge volume index. The sludge volume index should be determined daily to know the condition of the sludge.
 - (17) Removal of excess sludge from the secondary tanks to ensure that the sludge is fully aerobic this should be measured daily and recorded. The excess sludge is taken to digester directly or through primary setting tank
 - (18) Watering of plants and trees
 - (19) Sewage treatment plants presents many hazards that must be guarded against. The staff should be trained and compelled to use helmets gumboots, hand gloves etc.
 - (20) Smoking or carrying open flames in and around digesters should be prohibited.
 - (21) All worker should be compelled to observe personal, hygiene such as washing with soap after work as well as washing before taking food.
- 14.2 General routine maintenance schedule for plant units shall be adopted from O&M Manual. However, the general routine maintenance to be carried out by the Contractor's personnel will include but not limited to the following: -
- (a) If it is observed that power consumption per MLD of sewage treated is increased, the contractor has to trace out the fault and rectify the same to bring to the standard Value.
 - (b) De-weeding and cleaning of the Transformer yard and other places.
 - (c) Checking and refilling of silica-gel in the breather of the transformer and checking temperature gauge, vent pipe, voltage tap changing switch
 - (d) Regular watering in the earth-pits.
 - (e) Check for any oil leak in the transformer and intimating and repairing of the same.
 - (f) Opening of end cover & cleaning of dust by Air blowing of induction motors, PMCC and other panel & PCC
 - (g) Checking and replacement of bulbs, tubes, chokes, starters, switches, control etc. throughout the plant and including outdoor lights and high mast pole installation.
 - (h) Replacement of LT panel fuse base, links, fuse, relay, contactor kit (main and auxiliary) and timer.

- (i) Replacement of HT panel C/T or PT whenever required.
- (j) Check for any loose connection in electrical equipment and rectification of the same.
- (k) Monitoring power factor, take corrective steps and ensure optimum power consumption.
- (l) Replacement of gland packing for the pump, sluice valves etc. whenever required.
- (m) Greasing of bearings and lubricating all moving parts as per the schedule
- (n) Tightening of all loose nut-bolts and other fasteners
- (o) Cleaning of sump tanks
- (p) Lubricating and test operation of the valves
- (q) General cleaning of all equipment and building
- (r) Replacement of pump rubber bush, gland packing, sleeve, bearing, oil seal, shaft, liquid ring and impeller.
- (s) Replacement of motor bearings and terminal plate and rewinding of motor when needed.
- (t) Replacement of non-return valve T bolt, hinge pin, flap/ gate.

15.0 PREVENTIVE MAINTENANCE CHECKS

The Contractor shall adopt a preventive maintenance check's schedule as agreed mutually between the Contractor and the Employer.

15.1 The following checks as a minimum to be performed daily by the Contractor's personnel

- a) Whether there is a change in the sound of a running pump, abrupt changes in bearing temperature and seal leakage?
- b) The pump capacity, pressure, power consumption and vibration level to check if outage is required to address deterioration of specified performance values.
- c) Rise in temperature of bearings in motor, in moving parts and other units, etc.
- d) Working of gauges, sensors and other flow measuring devices
- e) Average power factor, kVARH, kWh consumed

The following checks as a minimum to be performed weekly by the Contractor's personnel

- a) Pipeline and valve leakage
- b) Functioning of non-return valve
- c) Tightness of all electrical connections of PMCC, APFC, PLC panel etc.
- d) Tightness all cable connections
- e) Temperature rise due to loose connections
- f) Operation of valves and sluice gates.
- g) Current and voltages in all electrical equipment
- h) Average power factor, kVARH, kWh consumed

15.3 The following checks as a minimum to be performed monthly by the Contractor's personnel

- a) Battery voltage, battery charger, topping of distilled water, tightness of termination etc.
- b) Gland packing
- c) Wear and tear of moving parts
- d) Adoption of Electrical energy conservation methods and energy consumption
- e) Electrical contacts
- f) Motors
- g) Meggering of electrical equipment
- i) Watering of earthing pits

15.4 The following checks as a minimum to be performed quarterly by the Contractor's personnel

- a) Relay testing and calibration, if possible, of meters, gauges, instruments
- b) Speed of motors
- c) Level gauges and flow meters signals
- d) Cleaning, checking/tightening of L.T. Circuit/Panel

- e) Tightening of PMCC components
- f) Auxiliary DB, Capacitor bank
- g) Battery and Battery charger

15.5 The following checks as a minimum to be performed bi-annually by the Contractor's personnel

- a) Free movement of stuffing box glands, gland bolts to be cleaned & lubricated and packing to be inspected to determine whether it requires replacement.
- b) Pump and motor alignment should be checked and corrected if necessary.
- c) Grease lubricated bearings should be checked to see that they contain the correct amount of grease and that it is still of suitable consistency.

15.6 The following checks as a minimum to be performed annually by the Contractor's personnel

- a) Vibration should be reviewed. If the pump is tending towards unacceptable vibration levels:
 - i. The bearing should be removed, cleaned and examined for flaws and wear.
 - ii. The bearing housing should be carefully cleaned.
 - iii. Rolling element bearings should be examined for scratches and wear.
 - iv. Immediately after cleaning, rolling element bearings that are considered acceptable for reinstallation should be coated with grease. If the bearings are damaged it shall be replaced with new bearing of the correct size and type as per O&M manual.
- b) Shaft sleeve and shaft should be examined for wear.
- c) When coupling halves are disconnected for an alignment check, the vertical shaft movement of a pump with sleeve (journal) bearing should be checked at both ends with packing or seals removed. Any movement exceeding the original design clearance should be investigated to determine the cause. Endplay allowed by bearings should also be checked. If it exceeds that recommended by the manufacturer, the cause should be determined and corrected.
- d) Stuffing boxes should be repacked and the pump & motor should be realigned and reconnected
- e) Overhauling requirement of all equipment
- f) Improvement required if any in operation of plant
- g) Testing and Calibration of all instruments
- h) Transformer cleaning, checking silica gel, oil checking filtering/replacing

15.7 This work is also inclusive of painting of plants as per following schedule and paint shall be of the same specification as described in respective unit/ mechanism as per original specification of the executed work.

Sr.	Item	Duration
1.	Civil work Once in two years i.e at the end of 2nd year (& 4th year if contract is extended) of O&M	No.
2.	Doors and windows	---do---
3.	Shutters, grills, collapsible gate etc	---do---
4.	All H.T./ L.T. panels	---do---
5.	All process equipment with its accessories and GI railings etc.	---do---
6.	Street / flood light pole	---do---
7.	Pump sets, valves, C.I. fittings,	---do---
8.	sluice gate, etc.	---do---

Note: However, if any unit mechanism will found to have some defect in paint work at anytime, the Contractor has to repaint the same under the instruction of Employer.

16.0 MINOR REPAIR GENERALLY ENCOUNTERED IN THE PLANT

16.1 The minor repairs which have been most often encountered are as given below:

- Electrical works**
- a) For H.T. Installations
 - i) Replacement of jumpers
 - ii) Replacement of insulator (Porcelain)
 - iii) Replacement of Air-Break Switch
 - b) For Both H.T. & L.T. Installations
 - i) Replacement of no-volt coil for VCB
 - ii) Replacement of Cable lugs including terminations
 - iii) Replacement of burnt out HRC fuses
 - iv) Replacement of moving and fixed contacts or contractors
 - v) Repairs to isolators and switch fuse units and replacement of it and fuse base units.
 - c) Pump sets
 - a) Replacement of coupling bolt and nuts including rubber bushes
 - b) Replacement of worn-out impeller nut
 - c) Replacement of spindle nut in the sluice valve.
 - d) Replacement of terminal plate in the motor
 - e) Replacement of faulty/dead spares in the battery charger and battery control panel.
 - f) Replacement of gland packing, graphite packing from the pump sets.
- 17.0 ADDITIONAL SCOPE OF WORK**
- 17.1 For other incidental additional work, if any, the Contractor on authorization in writing from the Employer shall execute which is not specifically mentioned in the scope at present.
- 18.0 ELECTRIC POWER AND WATER**
- 18.1 JDA shall pay all the power bills but it shall be Contractor's responsibility to collect the bill from JVVNL, Jaipur and submit the same to JDA within due dates so that payment of bill is not delayed. If any penalty is incurred due to late payment, then same shall be recoverable from the contractor. If the average power factor in the electric supply company (JVVNL) BILL IS LESS THAN 0.90, the PENALTY /CHARGE FOR THE SAME WILL BE RECOVERED FROM CONTRACTOR/THEIR BILL.
- 18.2 Contractor will have to make his own arrangements for supply of clear potable water in the plant. Contractor shall bear cost towards distribution of water within premises.
- 19.0 PLANT INSPECTION AND VISITS**
- 19.1 The Employer shall check the operation of the plant or designate an organization of his choice to carry out inspections. The Employer or the organization appointed by him shall check that the Contractor is performing the tasks for which he is responsible with due diligence. The Contractor shall at his cost provide all the assistance required by the Employer to complete these inspections.
- 19.2 Before any inspection, the Employer shall give prior notice of three days to the Contractor, indicating the name(s) of the person(s) empowered to carry out such inspection in the name of the Employer. In case of surprise visit, vigilance or other checks, such notice shall not be given.
- 19.3 At the end of each quarter period, or at the initiative of the Employer, a JOINT VISIT shall be organized so that both parties can check the condition of the installation at the plant.
- 19.4 A report shall be drawn up to record the suggestions and opinions of both parties. The Employer reserves the right to call in equipment manufacturers or specialized technicians for these visits.
- 19.5 These visits shall provide an opportunity for examining maintenance programs and operating procedures and improvements requiring therein.
- 19.6 In addition to the above, the Employer reserves the right to arrange the visits of. VIP's dignitaries and other persons of Social or Political repute, as and when necessary, at the Treatment Plant. The Contractor shall offer full cooperation to the Employer on the occasions of such visits.
- 20.0 MEASUREMENT AND ANALYSIS**
- 20.1 The Employer has the right to perform any analysis or inspection he deems necessary.
- 20.2 The Contractor shall be responsible for the security and protection of flow meters at the designed point. If there is any malfunctioning of the meters, action will be initiated by the Contractor to rectify the same and it shall be reported to the Employer immediately.

Signature of Contractors

Executive Engineer (PHE-I)
JDA, Jaipur

Mob. No.

02 CHAPTER
SPECIAL CONDITION OF CONTRACT FOR OPERATION & MAINTENANCE

1. DEFINITIONS:
The following definitions shall apply for this Condition of contract for operation and maintenance of Sewage Treatment Plant.
- 1.1 Facility
Shall mean Entire 30 MLD STP plant including additions, modifications, alterations, replacement and repairs as may be made thereto from time to time.
- 1.2 Adverse operation periods
The period during which conditions in clause 5.2 are present.
- 1.3 Alternative consumption norms
Consumption norms for Power, fuel, chemical and other consumables for the period during which alternative output standard prevail
- 1.4 Alternative output standards
Mutually acceptable output standards for the treated sewage from the treatment facility those are determined after discussion by the parties
- 1.5 Billing period
Billing Period means each calendar month, except that (1) the first billing period shall begin on the date of issue of completion certificate or any other date as notified by Engineer-In-Charge and shall continue till the last day of the month in which the date issue of Completion certificate occurs; and (2) the last Billing period shall end on the last day of the operation and maintenance period.
Any computation made on the basis of a billing period shall be adjusted on a pro rata basis to take into account any billing period of less than the actual number of days in the month to which such billing period relates.
- 1.6 Employer/Owner/Client
The “employer” means Jaipur Development Authority (JDA).
- 1.7 Clearances
Any consent, license, approval, permit, ruling, exemption or other authorization of whatsoever nature which is required to be granted by any competent Authority to undertake, implement, operate and maintain the facility.
- 1.8 Competent Authority
Any agency, legislative, judicial or executive authority, department, ministry, public or statutory person, whether autonomous or not, of the Government of India or Govt. of Rajasthan or any other sub-division or instrumentality thereof
- 1.9 Deleted
- 1.10 Contract Date
Shall mean the date stated in the Contract Agreement
- 1.11 Contractor
As in the Contract Agreement
- 1.12 Deleted.
- 1.13 Design Requirements
As per these tender specifications
- 1.14 Fixed Payments
The fixed payment to the Contractor to be made as per Schedule (furnished in Volume IV, Price Proposal) which shall include the cost of remedying of any defects during the defect’s liability period in accordance with the provisions of this contract.
- 1.15 Good Industry Practice / Good Engineering Practice
In respect of the Contractor, its subcontractors, and all other such third-party agents of the Contractor, practice methods, techniques and standards, as changed from time to time, that are generally accepted for use in international sewage treatment facility construction, development, operations and maintenance taking into account conditions in India.
- 1.16 Maximum Liquidated Damages
The maximum Liquidated Damages payable by the Contractor in any month shall not be more than 5 % of the Fixed and Variable payment receivable by the Contractor for the year calculated on Nominal Flow of 30 mld.

- The maximum Liquidated Damages payable by the Contractor in a year shall not be more than 10 % of the Fixed and Variable Payment receivable by the Contractor for the year calculated on Nominal Flow of 30 mld.
- The maximum liquidated damages payable by the Contractor on Termination shall not be more than the Fixed and Variable Payment receivable by the Contractor for the year preceding the termination calculated on Nominal Flow of 30 mld.
- 1.17 Output Standards
Refers to performance standards as intended in these tender specifications with which the facility has been taken over by the Employer at the time of issue of Completion Certificate to the contractor.
- 1.18 Nominal Flow
30 MLD, the designed output of the Facility.
- 1.19 Deleted
- 1.20 Operations and Maintenance Period (O&M Period)
The period 05 years from date of commencement and ending on the Termination Date.
- 1.21 Operations and Maintenance Manual
A comprehensive and regularly updated manual, which shall include and address the Treatment processes, maintenance, emergency, repair and replacement, preventive maintenance, corrosion protection, staffing, training and other plans required by the Technical Specifications.
- 1.22 Operations and Maintenance Services
All Services which are the responsibility of the Contractor and are laid out in these tender specifications for operation and maintenance including those obligations listed in Technical Specifications.
- 1.23 Raw Sewage
Incoming sewage to the facility / works supplied by employer for treatment purposes having characteristics as per this tender specifications / Conditions of Contract.
- 1.24 Termination Date
Five (5) years from the date of issue of Completion Certificate up to the date on which the contract is terminated according to Clause 8.
- 1.25 Treated Sewage
Sewage processed and treated in the Facility to meet the Required Output Standards as per these tender specifications at the designated Off Take Point for final disposal, as required.
- 1.26 Utility
Utility means any and all utility services and installations whatsoever (including gas, Water, sewer, electricity, telephone cable and telecommunications), and all piping, wiring, conduit, and other fixtures of every kind whatsoever related thereto or used in connection therewith.
- 1.27 Variable Payments
The per unit variable fee for the year as per Schedule multiplied by the actual quantity of sewage treated during the month (determined by the flow measurement as per Technical Specifications) payable to the contractor each month. However, the actual quantity of sewage treated shall not exceed the nominal flow for which the plant is designed.
2. THE CONTRACT:
- 2.1 Term
The terms and conditions of this section will be in effect during the Operations & Maintenance Period unless expressly specified otherwise.
- 2.2 Expiry of Operations & Maintenance Period / Term
On expiry of the Operations & Maintenance Period, the Contractor shall return the Facility in an operational condition failing which the Owner shall recover Liquidated Damages from the Contractor as per Annexure 21 (furnished at the end of this section).
3. SCOPE OF WORK / ALLOCATIONS OF RESPONSIBILITIES:
- 3.1 Deleted
- 3.2 Operations stage
During the O&M Period the Contractor shall -
- a) Be responsible for providing Operation & Maintenance Services.

- b) Procure and maintain insurance as specified in CLAUSE 11.
- c) Be responsible for the security of the Facility and comply with applicable laws and/or statutory requirements as may be applicable in the land from time to time.
- d) Plan, manage, coordinate and execute the treatment of sewage as per the instructions given by the Owner.
- e) Be responsible for the routine maintenance of the facility as well as any capital replacement that may be required from time to time to either enhance the performance of the facility or to meet the agreed specifications mentioned in the Operations and Maintenance Manual and pursuant to clause 5 of this Conditions of Contract for Operation and Maintenance

3.3 Releases

3.3.1 Release of Raw Sewage

The Contractor shall carry on its activities in the Facility in such manner that raw sewage will not be released, leak or spill onto the Site or elsewhere. The Contractor shall bear the cost of correcting any adverse consequences resulting from any such release, leakage or spillage, and shall make and file any reports with respect thereto required under this Conditions of Contract for Operation and Maintenance and Applicable Law.

3.3.2 Release of Hazardous Substances or Hazardous Waste

The Contractor, after first notifying the Owner, shall be responsible for fulfilling all notification or reporting requirements associated with any release of any substance into the environment from the Facility or the Site as required by Applicable Law or by any Legal Entitlement including, but not limited to, the notification or reporting of releases of Hazardous Substances or Hazardous Waste. The Contractor shall prepare a memorandum evidencing such notification or reporting and provide copies thereof to the Owner, along with any documents provided to the relevant regulatory agency regarding such release.

3.4 Disposal of Residue (Screenings, grit, sludge etc. from treatment facilities)

3.4.1 Residue Management

- 1) The Contractor shall make all necessary arrangements with the owner or operator thereof for the disposal of all Residues during the Term of this Conditions of Contract for Operation and Maintenance at the Residue Disposal Site identified by Employer, the location of which and approx. maximum distance from plant is approximately within 60 Km radius of treatment plant as specified elsewhere also as part of these tender specifications. The Contractor shall dispose of residue at the Facility in an enclosed in accordance with the Technical Specifications, so as not to create, nuisance, odour or degradation of the surrounding environment.
- 2) The Contractor shall operate the Facility and treat Raw Sewage so as to minimize the production of Residue and comply with the Required Output Standards. The Contractor shall segregate, collect and store all Residues from treatment operations. The Contractor shall transport all Residues to a Residue Disposal Facility after washing the same, when required in a safe and environmentally sound manner and in accordance with Applicable Law.
- 3) Except as otherwise provided in this sub clause, all cost and expense of Residue disposal shall be borne by the Contractor, and no Uncontrollable Circumstance [or Force Majeure shall entitle the Contractor to any relief or additional compensation hereunder.
- 4) In the event that the Residue, without Contractor's Fault, is deemed to be a Hazardous Substance or Hazardous Waste (i.e. due to quality of raw sewage), the Contractor shall be entitled to recover from the Owner, subject to Cost Substantiation, the difference between the cost and expense of disposing of the Residue as a Hazardous Substance or Hazardous Waste and the cost and expense of disposing the Residue if it were not a Hazardous Substance or Hazardous Waste.

3.4.2 On-Site Disposal of Residue

The parties acknowledge that the Contractor may dispose of Residue at a disposal location located outside the Site. The use of such disposal location for such purposes shall be subject to all of the requirements for a Residue Disposal Facility hereunder.

3.4.3 Transportation Operations

In the event of a spill, leak or loss of Residue during transit, the Contractor shall immediately arrange for the cleanup and transportation of the material to a Residue Disposal Facility at the Contractor's sole cost and expense, pay any resulting fines, assessments, penalties or damages resulting there from, and indemnify, defend and hold harmless the Owner in accordance with the procedures provided in this Conditions of Contract for Operation and Maintenance and from all Loss-and-Expense resulting thereof.

3.4.4 Residue Disposal Facility Information

The Contractor shall keep and maintain such logs, records, manifests, bills of lading or other documents as the Owner may deem to be necessary or appropriate to comply with Legal Entitlements and to monitor and confirm compliance by the Contractor with the requirements of this section, and shall collect and promptly provide the Owner with a copy of all weights and measures, data and information relating to Residue quantities generated and disposed of hereunder.

3.5 Owner's right to rectify

The Owner retains the right, at the cost of Contractor, to perform any of these material obligations on default of the Contractor,

3.6 Responsibilities of the Owner

During the O&M Period, the Owner will provide

- a) Free of charge Raw Sewage.
- b) Power supply to the Facility as per the requirement plant.

4 PAYMENTS

- a) The contractor will pay for any potable water supply supplied by the owner (subject to availability).
- b) The contractor has to make his own arrangement to receive, store and distribute water within the facility.

4.1.1 Electricity and Fuel Charges

(i) The energy charges shall be paid by the owner.

b) In case of contractor not able to maintain power factor of 0.90 or more during any particular month, any surcharge/penalty raised by JVVNL due to low power factor shall be payable by the contractor

(ii) In case of power failure, The DG set shall be operated to keep the STP operational. The charges for DG set operation shall be payable as per BOQ and scope of work

4.1.2 Billing and Payment Procedure

a) The contractor shall prepare and submit to the employer, each month, invoice for payments receivable by the contractor with all supporting documents. The calculations shall be submitted between the first and fifth working day of the month for the preceding month.

b) The payment calculation shall include

- > Fixed Payments
- > Variable Payments
- > Liquidated damages as per Clause 4.2

c) The employer shall have fifteen (15) calendar days from receipt of such invoice to notify in writing to the contractor its acceptance thereof or the grounds of disputing such invoice. The employer shall pay to the contractor the accepted amounts within Thirty (30) calendar days from the date of acceptance.

d) Security Deposit:

Refund of Security deposits already deducted shall be made after six month of issuance of Operation and Maintenance Completion Certificate.

4.1.3 Fixed and Variable Cost :

(i) Fixed payment shall include the payment for manpower, civil structures maintenance such as painting, white washing, laboratory analysis, office/fax/phone maintenance cost, major and minor repairs of all kinds including spares and replacement, oil and grease cost. Fixed cost shall be indicated for each year for Five Years of O&M.

(ii) Variable cost shall include the following

- > Cost towards chemicals if any required for treatment.
- > Chlorine Dosage

- Sludge / Silt / Screening / Grit disposal
- Fuel charges (HSD) for DG set

4.1.4 Disputed Payment

If there is any dispute in the whole or part of any invoice submitted by the contractor, the employer shall pay such amount of the invoice in question, which is not in dispute and shall be entitled to withhold the balance pending resolution of the dispute. Any or all amount so withheld, but subsequently found to be properly payable following the resolution of such dispute, shall not carry any interest.

4.1.5 Currency of Payment

The currency of payment shall be in Indian Rupees only.

4.1.6 Taxes

The contractor shall be responsible for paying all taxes including GST etc. assessed as due and enforced from time to time payable by the contractor associated with the carrying out of the services. The employer shall be entitled to withhold from payment to the contractor any amount it is required by law to so withhold.

4.2 Liquidated Damages

4.2.1 For the quantity of treated sewage

If the pumped sewage quantity parameters do not meet the output standards, then liquidated damages shall be payable as per Annexure III (furnished at the end of this section).

4.2.2 The treated sewage quantity levels shall be calculated on the basic average over the relevant period of 24 hours.

4.2.3 Limit on Liquidated Damages

Notwithstanding the above, the liquidated damages payable by the contractor shall not exceed the Maximum Liquidated Damages.

4.2.4 It is understood that liquidated damages are not a penalty but represents a reasonable estimate of fair compensation which are payable without proof of actual damage for a failure to meet the stipulated conditions which otherwise is impracticable or extremely difficult to fix the actual damages resulting from failure of the contractor to meet such output standards.

4.2.5 Silt / Sludge / Screening / Grit removal

If the contractor fails to remove silt / sludge / screening / grit etc. in the treatment plant from the date of receipt of letter from the employer, then the silt/sludge/screenings/grit shall be removed by the employer by engaging other agencies and the cost will be recovered from the contractor.

5. OPERATIONS:

5.1 Variability of Output

5.1.1 Variation in Treated Sewage Quantity required by Owner

- 1) Throughout the Operations & Maintenance Period, the Owner has the right to demand Treated Sewage in accordance herewith and to convey Raw Sewage to the Facility in order to enable the Contractor to meet such Treated Sewage discharges. The Owner shall not be liable to damages or otherwise for any failure to discharge Treated Sewage or to supply Raw Sewage, or for the quantity or quality of Raw Sewage conveyed to the Facility for treatment.
- 2) The Contractor shall have the obligation to discharge treated sewage in quantities up to the Nominal Flow in accordance with the terms and conditions of this Conditions of Contract for Operation and Maintenance and the schedules to this Conditions of Contract for Operation and Maintenance. Failure to comply with such obligations shall attract the levy of liquidated damages for the violation of stipulated treatment standards by the Contractor.
- 3) If the quantity of treated sewage from the facility can be increased in the existing system without impacting the annual fixed costs to the contractor, the contractor shall comply with such requirements.
If the per unit variable cost as per Schedule-H is adversely affected by such increase in quantity of treated Sewage, the additional costs to the Contractor, over and above the variable costs indicated in Schedule-H, will be reimbursed by the Owner.
- 5) For a sustained requirement of higher throughput from the Facility for a period beyond 2 months, the Contractor may be required to frame and submit a proposal for revising the periodic payments made by the Owner that shall be implemented if mutually acceptable.
- 6) For a sustained requirement of lower throughput from the Facility by the Owner for a period beyond 2 months, the Owner may frame and submit a proposal for revising the periodic

payments made by the Owner that shall be implemented if mutually acceptable.

5.1.2 Variation in Treated Sewage Quality Throughout the Operations & Maintenance Period, the Contractor shall, at its own cost and expense, ensure that the Treated Sewage output from the Facility shall meet the Required Output Standards. Failure to ensure such conformance shall invoke payment of Liquidated Damages along with the notices to be complied as well as the penalty imposed etc. or any action by the statutory controlling authorities shall be borne by the contractor.

5.2 Adverse Operating Conditions

5.2.1 Non-availability of Raw Sewage

- 1) Throughout the Term of this Conditions of Contract for Operation and Maintenance, the Owner shall be responsible for supplying Raw Sewage as per clause 3.6 of this Conditions of Contract for Operation and Maintenance.
- 2) Notwithstanding the above, inability of the Owner to supply Raw Sewage shall not construe default by Owner.
- 3) In the event of non-availability of Raw Sewage to the Facility, the responsibilities of the Contractor shall stand suspended. During such period of suspension, the Owner shall be liable to pay to the Contractor the Fixed Payments and the cost of inventory holding (such as consumables) which have been paid for by the contractor. In the event of sustained inability to supply Raw Sewage to the Facility for a period greater than two weeks, the Owner shall be liable to pay only inventory holding charges for chemicals and consumables that may have been stored by Contractor for the purpose of Treatment of Sewage, that may otherwise have been required, as per the consumption norms specified at the time of bidding. Such charges shall be payable for each day beyond the period of two weeks mentioned herein above, till such time as the Owner resumes supply of raw sewage to the contractor.

5.2.2 Deterioration of Raw Sewage Quality

- 1) In the event the Raw Sewage quality deteriorates, the following provisions will be applicable
 - a) If the Raw Sewage can still be treated to meet the Required Output Standards, the Contractor shall comply with such specifications.
 - b) In the event it is not possible to meet the Required Output Standards, the Contractor shall, as soon as practically possible, inform the Owner. The Parties shall consult in good faith to arrive at mutually acceptable alternative Output Standards, which the Contractor shall comply with till the time the Raw Sewage quality is restored.
 - c) In the event it is possible to meet the Required Output Standards, but an increase in fixed and variable costs is unavoidable, the Contractor shall, as soon as practically possible, inform the Owner, but shall continue to meet the Required Output Standards for a minimum period of 45 days within which period the Parties shall consult in good faith to arrive at the compensation payable to the Contractor.
 - d) The Liquidated Damages during the above Adverse Operating Period, if any, shall be recalculated using the Alternative Output Standards.

5.2.3 Deleted

5.3 Planned Outage

The contractor shall maintain the Output Standards at all times during the O&M period irrespective of any planned maintenance that may be undertaken by him.

5.4 Personnel

- (i) The Contractor shall appoint, on or before the date of issue of Completion Certificate, a properly qualified, competent and experienced person to act as the Contractor's Representative, which appointment shall be subject to the approval of the Owner and such approval shall not be unreasonably withheld or delayed.
- (ii) The Contractor's Representative shall be authorized and empowered to act for and on behalf of the Contractor on all matters relating to the rights and obligations of the Contractor during the O&M Period. In all such matters, the Contractor shall be bound by the written

- communications, directions, requests and decisions given or made by the Contractor's Representative. The Contractor's Representative shall not be entitled to amend this Contract on behalf of the Contractor.
- (iii) The Contractor's Representative will direct and manage the Contractor's resources and have full responsibility for the operation, maintenance and administration of the Facility along with the strict adherence to the stipulated discharge standards for final disposal of the treated sewage.
 - (iv) The Owner shall appoint, on or before the date of issue of Completion Certificate, an Owner's Representative and notify the Contractor of such appointment.
 - (v) The Owner's Representative shall have authority to act on behalf of the Owner in relation to all matters concerning the scope of work during the O&M Period, save to the extent of any limitation on such authority of which the Owner has given the Contractor notice. In no event shall the Owner's Representative have any authority to relieve the Contractor of any obligation or liability or to amend this Contract.
 - (vi) The Contractor shall identify, interview and hire sufficient number of qualified and trained (and if required, licensed) personnel to perform its obligations during the O&M Period as per these tender specifications / O&M specifications.
 - (vii) All Contractors' personnel employed at the plant at any time during the O&M Period will be provided by the Contractor. The Owner is not liable for personnel in any way and cannot be held responsible in the event of litigation of any sort between the Contractor and members of plant personnel or their representatives or non-performance of obligations due to any strike or other industrial action by the Contractor's workmen (including those of its subcontractors, suppliers etc).
 - (viii) The Contractor undertakes to comply with applicable legislation and the code of labour law on matters of health, hygiene and safety, and shall assume responsibility for works required in the event of any change in applicable regulations and shall also require its subcontractors to comply with this clause.
 - (ix) The minimum personnel required are mentioned in the operation and maintenance specification (Special).
 - (x) The Contractor undertakes to provide the training that may be necessary from time to time to all the personnel employed in the facility, at its own cost and responsibility.
 - (xi) The Contractor further undertakes to train persons nominated by the Owner in order to be able to effectively carry on the operation & maintenance of the facility during a period of emergency/Force Majeure when the obligations of the Contractor have been temporarily suspended. The Contractor also undertakes to provide training to the personnel nominated by Owner to take over the operation & maintenance of the facility at the time of termination/forced termination of this Conditions of Contract for Operation and Maintenance.

5.5 Maintenance/Repairs

5.5.1 Ordinary routine Maintenance, Repairs and Replacements

- (i) The contractor at its own cost and expenses shall maintain the Facility in good working order and repair and in a neat orderly condition, including the cleanup of litter and debris on a daily basis or more frequently, if required, shall maintain a spare parts inventory necessary to performance maintenance required as per the operation and maintenance manual, and shall maintain the aesthetic quality of the Facility as originally constructed and in accordance with the technical specifications, with due allowance for reasonable wear and tear and depreciation.
- (ii) The contractor shall provide or make provisions for all labour, materials, and equipment which are necessary for the normal operation and maintenance of the Facility and shall conduct the required predictive and preventive maintenance of the Facility consistent with the operation and maintenance manual. The contractor shall maintain maintenance logs in accordance with the preventive maintenance plan set forth in the operations and maintenance manual.

5.5.2 Major maintenance, Repairs and Replacements

- (i) The contractor shall be responsible for providing all Major Maintenance, Repairs and replacement of the machinery, equipment, structures and improvements constituting the facility during the Operation & Maintenance period. No such Major Maintenance, Repair or Replacement shall

- constitute a Facility Modification for which the Owner shall be financially responsible hereunder.
- (ii) The contractor shall submit a periodic statement outlining the scheduled maintenance, repairs and replacements, whether routine or major or otherwise, and the actual status of the maintenance, repairs and replacements carried out by the contractor up to that date, in order to prove compliance with the provisions of this conditions of contract and the Operations and Maintenance manual.
 - (iii) The Owner and the Owner's representative shall have the right to conduct inspections at the Owner's sole expense and risk at any time in order to assure that the Facility is being properly operated and maintained, repaired and replaced in accordance with this Conditions of Contract for Operation and Maintenance.
 - (iv) The Contractor shall at least semi-annually and at least once during each period when Major Maintenance, Repair and Replacement activities required hereunder are being carried out by the Contractor, at the Owner's request, conduct a day- long "Walk-through" of each component of the Facility in which the Contractor shall demonstrate to the Owner's inspectors that all Major Maintenance, Repair and Replacement activities required hereunder are in fact being carried out bythe Contractor.
 - (v) The Major Maintenance, Repair and Replacement plan set forth in the Operations and Maintenance Manual shall contain the basic principles under which the Contractor shall carry out its Major Maintenance, Repair and Replacement program required by this Conditions of Contract. Such plan shall also contain a detailed listing of Major maintenance repair and replacement activities which would be required to be performed by the Company over the Term of this conditions of Contract for Operation and Maintenance in order to achieve the standard of overall Facility over its expected useful life. The Contractor shall make and complete all Major Maintenance, Repairs and Replacements to the Facility that are necessary to achieve such standard of repair and replacement by performing all such listed activities within the timeframe indicated in the Operations & Maintenance Manual.
 - (vi) The parties acknowledge that, in light of the long-term nature of the Conditions of Contract for Operation and Maintenance and the practical limitations on predicting with specificity the useful life of any particular asset, it may be appropriate from time to time to alter such Major Maintenance, Repair and Replacement plan. Such alterations to the plan shall be made via updates to the appropriate sections of the Operations and Maintenance Manual. No such alteration shall be made unless the Contractor demonstrates to the satisfaction of the Owner that the sum of all Major Maintenance, Repair and Replacement services performed to date by the Contractor, and all Major Maintenance, Repair and Replacement services to be performed under any such alteration, shall result in a standard of overall Facility maintenance and repair which is equal to or better than the standard represented by the activities to be performed under the Operations and Maintenance Manual. The Contractor shall cooperate with the Owner in identifying any such alterations which may be desirable in order to anticipate or address the technological obsolescence of any component, system or process of the Facility, and in proposing alterations for the Owner's approval.

5.6 Additions / Modifications to the Facility

Any additions to the Facility sought by the Owner-, over and above those required to meet the Contractor's obligations under this Contract, including but not limited to expansion of the Facility, shall be carried out by the Contractor at the expense of the Owner. Such expenses will cover the costs of such additions as well as a percentage fee for the Contractor to be agreed between the Contractor and the Owner. The Owner shall also bear any incremental expenses (along with the percentage fee for the Contractor) required to maintain such additions during the O&M Period.

5.7 Owner's rights:

5.7.1 Inspection

- (i) The Owner may periodically check the operation as well maintenance of the Facility or designate an organization of its choice to carry out inspections of the Facility to satisfy itself that the Contractor is performing its obligations with due diligence, at its own cost.
- (ii) Any assistance required for such inspection of the Facility shall be provided by the Contractor at its own cost.

5.7.2 Technical Audit

The Owner has the right to conduct a technical audit of the Facility and to perform any analysis or inspection it deems necessary. Before any such inspection, the Owner shall give a prior written notice of one day to the Contractor. The Contractor shall at the Contractor's sole cost and expense provide all

assistance the Owner requires to complete these inspections. Such audits may cover all or any of the obligations of the

Contractor, including without limitation,

- a) Verification of the system capacity save for normal wear and tear during the O&M Period
- b) Verification of the performance standards and useful life of the individual assets of the Facility, save for normal wear and tear during the O&M Period
- c) Verification of the capacity of the Facility to meet Output Standards during the residual life of the Facility saves for normal deterioration expected during such residual life
- d) Sampling, testing and verification of the Output Standards for treated Sewage, Sewage losses

5.7.3 Facility / Plant Visits

- (i) At the end of each three-month period, or at the initiative of the Owner, a visit shall be organized so that both Parties can check the condition of the installations at the Facility.
- (ii) A report shall be drawn up to record the opinions of both Parties. The Owner reserves the right to call in equipment manufacturers or specialized technicians for these visits.
- (iii) These visits shall provide an opportunity for examining maintenance programs and operating procedures and improvements requiring additional investments.

5.8 Other Contracts

- (i) The Contractor shall not delegate its responsibilities hereunder nor subcontract any part of the services to be provided by him hereunder without the prior written consent of the Owner. If the Contractor subcontracts its responsibilities hereunder or subcontracts any part of the services to be provided by him hereunder with the consent of the Owner, the Contractor shall not be relieved from any liability or obligation under this Contract and the Contractor shall continue to be responsible for the act, defaults or negligence of any sub-contractor as fully as if it were the acts, defaults or negligence of the Contractor, its officers, employees or agents.
- (ii) The period of validity of any contractual commitment for provision of services or material or personnel to the Facility or any subcontract entered into by the Contractor with any party shall not extend beyond the Termination Date.
- (iii) All such contractual commitments to be entered into by the Contractor should be freely assignable to the Owner or to any other contractor during the O&M period.
- (iv) The Contractor cannot create a charge on any assets of the Owner or the assets purchased under the Contract.

6. Emergencies

6.1 Contractor Action

In the event of emergency endangering life or property, the Contractor shall take such action as may be reasonable and necessary, at the own cost and expense, to prevent, avoid or mitigate injury, damage or loss and shall, as soon as possible, report any such incidents, including the Contractor's response thereof, to Owner's Representative.

6.2 Personnel and Expenditure

The Contractor shall utilize its personnel to take such action as may be reasonable and necessary in the event of an emergency. Notwithstanding anything to the contrary in this Conditions of Contract for Operation and Maintenance, the Contractor may incur any expenditure or take any other measure, which the Contractor deems to be necessary (in accordance with Good Industry Practices) in the case of emergencies affecting the Facilities or the operation of the Facilities to counteract the effects where the Contractor considers immediate action is required to safeguard lives or property (and provided that any communication with the news media made by the Contractor shall provide only enough information to satisfy immediate public concern).

6.3 Notification

In the event of an emergency the Contractor shall forthwith notify the Owner's Representative of the emergency, the expenditures made and the actions taken. The Contractor shall discuss without delay the further actions which should be taken as a result of that emergency.

7. FORCE MAJEURE

7.1 Definition

- (i) "Force Majeure" ("FM") shall mean any event or circumstances or combination of events or

- circumstances (and their consequences) such as political or natural calamities/disaster occurring on or after the date of issue of Completion Certificate that materially adversely affect(s) the performance of the Employer's and/or the Contractor's (Affected Party) rights or obligations under this contract provided that such events and/or circumstances
- a) are beyond the reasonable control, directly or indirectly, of the Affected Party (it being understood that if a causing event is within reasonable control of an Affected Party, the direct consequences shall also be deemed to be within such Party's reasonable control); or
 - b) Could not have been avoided, overcome or remedied if the Affected Party has taken reasonable care or has acted in accordance with Good Industry Practices.
- (ii) "Reasonable care" includes any acts or activities that protect the Facility from a casualty event which are reasonable in the light of the likelihood of such event, the probable effect of such event should it occur, and the likely efficacy of the protection measures.
 - (iii) The following conditions shall not, however, constitute a Force Majeure event
 - a) Late delivery of plant, machinery, equipment, materials, spares parts or consumables for the Facility.
 - b) A delay in performance of any of the Contractor's sub-contractors.
 - (iv) Notwithstanding anything contained in this Section, insufficiency of funds shall not constitute a Force Majeure event.

8. Termination

Termination shall mean the termination of the O&M Contract by the Employer or the Contractor in accordance with Clause 8.1 or 8.2 respectively, giving 30 days written notice (Termination Notice) to the defaulting party.

8.1 Termination by Employer

8.2 The Employer may terminate the O & M Contract by notice on:

- (a) The dissolution or insolvency of the Contractor, pursuant to an order of a court or the bankruptcy of the Contractor; or
- (b) If 45 days having passed since the Contractor is in material breach of his obligations under these Conditions, or
- (c) sustained inability (for a continuous period of two weeks) to meet the minimum output standards.
- (d) If the cumulative liquidated damages in a year exceed the Maximum Liquidated Damages.
- (e) If the Contractor ceases to carry on its business; or
- (f) Abandonment;
- (g) The subsisting Force Majeure event as provided in Clause 7 above.

8.3 Termination by Contractor

8.4 The Contractor may terminate the O & M Contract by notice on:

- (a) The Employer has not paid to the Contractor any undisputed amounts for 3 months after they become due; or The dissolution or insolvency of the Employer, pursuant to an order of a court or the bankruptcy of the Employer; or 45 days having passed since the Employer is in material breach of his obligations under these Conditions.

8.5 Payments upon Termination

8.5.1 Upon termination or as soon as practicable thereafter an account shall be taken of the net amount owing from the Employer to the Contractor or from the Contractor to the Employer (as the case may be). The Employer shall forthwith pay to the Contractor (if the balance is due to the Contractor) all moneys due to the Contractor. If the account shows a balance due to the Employer from the Contractor, the Contractor shall forthwith pay any such balance to the Employer;

8.5.2 As part of the calculation made pursuant to clause 8.1 of the amounts due to the Contractor on Termination, the following amount shall be taken into account:

- 8.3.2.1 The portion of the O & M Price outstanding and payable by the Employer for the period prior to the Termination;
- 8.3.2.2 Any Delay Damages or indemnities for which the Contractor would be liable under these Conditions upto the date of Termination;
- 8.3.2.3 Any other amounts due to the Employer under these Conditions by the Employer.

- 8.5.3 In case of a Termination by the Employer in accordance with Clause 8.1 the Employer may recover other than the amounts due to him under Clause 8.3.2, any costs incurred by him in finding any replacement contractor.
- 8.5.4 In case of Termination under Clause 8.2 by the Contractor, the Contractor may recover the O & M Price payable for 15 days.
- 8.6 Successor to the Contractor
Upon Termination: -
- 8.6.1 The Contractor shall use all endeavors to facilitate the appointment and commencement of duties of any person to be appointed by the Employer to operate and maintain the facilities (the "Successor Contractor") so as not to disrupt the normal Operation & Maintenance of the Facilities and shall provide full access to the Facilities and to all relevant information, data and records relating thereto by the Successor Contractor and its representatives and accede to all reasonable requests made by such persons in connection with preparing for taking over the Operation & Maintenance of the Facilities,
- 8.6.2 Promptly after Termination, the Contractor, shall deliver to (and shall, with effect from Termination, hold on trust for and to the order of) the Employer or (if so required by the Employer by written notice) to the Successor Contractor all property in its possession or under its control owned by the Employer or leased or licensed to the Employer;
- 8.6.3 The Contractor shall transfer to the Successor Contractor, as from the date of Termination, its rights as the Contractor under all contracts entered into by it in the performance of its obligations under these Conditions or relating to the Operation & Maintenance of the Facilities. Pending such transfer, the Contractor shall hold its rights and interests there under for the account and to the order of the Successor Contractor.
- 8.6.4 The Employer shall be reimbursed any cost and expenses incurred by him due to default of the Contractor in discharging its obligations under this Clause 8.1.
- 8.6.5 The Contractor shall, upon Termination of the O & M Contract, co-operate with the Employer and the Successor Contractor and comply with all reasonable requests thereof, including the execution of documents etc.
- 8.6.6 Upon Termination of the O & M Contract on expiry of the terms of the O & M Contract, the Parties agree that: -
- 8.4.6.1 The Contractor will use reasonable efforts to ensure a transition to the next Contractor that will avoid operating difficulties for the Facilities.
- 8.4.6.2 For a six (6) month period after Termination or six (6) months prior to the expiration of the O & M Contract, the Contractor shall, at his expense, provide sufficient assistance to the Employer in the hiring and training of replacement personnel for those Facilities.
- 8.7 Notwithstanding anything else herein contained the Employer shall be entitled to terminate the O & M Contract, at any time at the Employer's convenience, by giving notice of such termination to the Contractor. The termination shall take effect 30 days after issuance of the notice of termination.
- 8.7.1 On the expiry of the O & M Contract or Termination of the O & M Contract, all the installations, works and equipment placed under the Contractor's responsibility shall be handed over to the Employer, at no cost, in good working order, except for normal wear and tear. The Employer may perform any inspections, tests or expert appraisals he shall consider necessary with a view to checking that the property is in good working order. The Contractor shall also hand over any unutilized spares, consumables etc. purchased for the Facilities.
- 8.7.2 At the end of O & M Period, the Contractor shall be entitled to receive an O & M Completion Certificate within thirty (30) days.
- 8.7.3 The delivery of such O & M Completion Certificate will relieve the Contractor from his responsibility as regard to the operation & maintenance of the Facilities and confirm that the Contractor has fulfilled all of his obligations under these Conditions.
- 9 INDEMNIFICATION
- 9.1 Loss or Damage to Facilities
- 9.2 The Contractor shall at its own expense make good any physical loss or damage to the Facilities occasioned by it in the course of the performance of its obligations under these Conditions if and to the extent such loss or damage is caused by the negligence, willful default or breach of statutory duty or failure to follow Good Industry Practices by the Contractor.

9.3 Other Loss or Damage

9.3.1 The Contractor shall indemnify, defend and hold harmless the Employer against any and all liabilities, losses, damages and claims of whatever kind and nature, including all related costs and expenses incurred in connection therewith, in respect of personal injury to or death of third parties or any employee of the Employer or in respect of loss of or damage to any third-party property or property belonging to employee of the Employer by:

- (i) Any breach by the Contractor of its obligations hereunder; and
- (ii) Any negligence, willful default or breach of statutory duty on the part of Contractor, or its subcontractors or their respective agents or employees.

9.3.2 The Contractor shall indemnify, defend and hold harmless the Employer against any and all liabilities, losses, damages and claims of whatever kind and nature, including all related costs and expenses incurred in connection therewith, in respect of personal injury to or death of any person employed by the contractor or its subcontractors in connection with the performance of the Contractor's obligations hereunder except to the extent that such death or injury is caused by the acts or omissions of the Employer or their employees.

10 Limitation of Liability

10.1 The total liability of the Contractor shall not exceed the yearly Fixed and Variable payments calculated on Nominal Flow.

10.2 This clause shall not limit the liability of the Contractor:

- a) under Clauses 4.2 & 9,
- b) Under any other provisions of the contract which expressly impose a greater liability,
- c) In case of fraud, willful misconduct or unlawful acts, or
- d) In case of acts or omissions of the Contractor which are contrary to the most elementary rules of diligence which a conscientious contractor would have followed in similar circumstances.

11. INSURANCE

- (i) The Contractor shall, without limiting its or the Owners obligations and responsibilities insure:
 - a) The Works, together with materials and Plant for incorporation therein, to the full replacement cost (term "cost" in this context shall include profit).
 - b) The Contractor's Equipment and other things brought onto the Site by the Contractor, for a sum sufficient to provide for their replacement at the Site.
- (ii) The insurance detailed above shall be in the joint names of the Contractor and the Owner at the Owner's cost and shall cover the Owner and the Contractor against all loss or damage from whatsoever cause arising, other than the Contractor's obligations as provided, from the start of the operation and maintenance in respect of the Facility or any Section or part thereof-as the case may be.
- (iii) Any amount not insured or not recovered from the insurers shall be borne by the Owner or the Contractor in accordance with their responsibilities.
- (iv) The insurance policy shall include a cross liability clause such that the insurance shall apply to the Contractor and to the Owner as separate insurers.
- (v) The Owner shall not be liable for or in respect of any damages or compensation payable to any workman or other person in the employment of the Contractor or any Subcontractor, other than death or injury resulting from any act or default of the Owner, its agents or servants, The Contractor shall indemnify and keep indemnified the Owner against all such damages and compensation, other than those for which the Owner is liable as aforesaid, and against all claims, proceedings, damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto.
- (vi) The Contractor shall insure against such liability and shall continue such insurance during the whole of the time that any persons are employed by the Contractor on the Facility Provided that, in respect of any persons employed by any Subcontractor, the Contractor's obligations to insure as aforesaid under this Sub-Clause shall be satisfied if the Subcontractor shall have insured against the liability in respect of such persons in such manner that the Owner is indemnified under the policy, but the Contractor shall require such Subcontractor to produce to the Owner, when required, such policy of insurance and receipt for the payment of the current premium.
- (vii) Notwithstanding the provisions of this or any other Clause, the Owner reserves the right to require the Contractor to procure the necessary insurance as laid out here above at the Owner's sole cost and expense.
- (viii) In the event that the Contractor or the Owner fails to comply with conditions imposed by the

insurance policies effected pursuant to the Contract, each will indemnify the other against all losses and claims arising from such failure according to the Contract conditions.

12 CONFIDENTIALITY AND INTELLECTUAL PROPERTY RIGHTS

12.1 Confidential Information

Subject to Clause 12.2, the Contractor shall at all time during the O & M Period and for a period of two years after that:

12.1.1 use all efforts to keep all information regarding the terms and conditions and any data or information acquired under or pursuant to these Conditions confidential and accordingly shall not disclose the same to any other person; and

12.1.2 not use any document or other information (whether technical or commercial) obtained by them by virtue of these Conditions or the Contract concerning the Employer's undertaking for any purpose other than performance of the its obligations under these Conditions;

12.1.3 Provided that the provisions of this Clause 12.1 shall not apply to information which at the time of disclosure was in the public domain other than by breach at the foregoing obligations of confidentiality.

12.1.4 Disclosure of Confidential Information

12.1.5 The Contractor shall not be entitled to disclose the terms and conditions of these Conditions and any data or information acquired by it under or pursuant to these Conditions without the prior written consent of the Employer unless such disclosure is made in good faith:

12.1.6 To any outside consultants engaged by or on behalf of the Contractor and acting in that capacity, having made them aware of the requirements of this Clause 12.

12.1.7 To the lenders, any security trustee, any bank or other financial institution and its advisers from which the Contractor is seeking or obtaining finance, having made them aware of the requirements of this Clause 12.

12.1.8 To the extent required by Applicable Law;

12.1.9 To any insurer under a policy of insurance; or

12.1.10 to the Contractor's Personnel having made them aware of the requirements of this Clause 12;

12.2 Information

The Contractor shall:

12.2.1 make available to the Employer without charge such materials, documents and data of any nature (except any materials documents and data protected by legal privilege or which is subject to any duty of confidentiality to any third party) acquired or brought into existence in any manner whatsoever by it as the Employer may request for the purposes of exercising its rights or carrying out its duties in respect of the Facilities or exercising its rights under or performing its obligations under these Conditions.

12.2.2 make available to the Employer other such materials and documents and data acquired or brought into existence by third parties as the Employer may request for the purposes referred to in clause 12.3.1 above.

12.3 Third Party Intellectual Property

The Contractor shall: -

12.3.1 procure that any intellectual property owned or developed by third parties and utilized by the Contractor in connection with the performance of its obligations under these Conditions is licensed to the Contractor for the purposes of the Operation & Maintenance or repair of the Facilities and otherwise for the purposes of the Facility; and

12.3.2 Ensure that the Contractor shall have the right to sub-license that intellectual property to the Employer and any Successor Contractor for use in connection with the operation, maintenance and repair of the Facilities. These licenses should survive termination under these Conditions. The Contractor shall grant all such sub-licenses. If any fee is payable to the licensor in consideration of any such sub-license, the Contractor shall pay such amount during the O & M Period and each such license shall be irrevocable.

12.3.3 Indemnify and hold harmless the Employer against any action, claims, damages, and losses caused to the Employer by the owner of the Intellectual Property due to the allegedly unauthorized or improper use of this intellectual property by the Contractor for the fulfilment of his obligations under these Conditions.

12.4 Successor Contractor

12.5

If the licenses and sub-licenses of intellectual property granted under this Clause respectively shall survive termination of the O & M Contract in accordance with the terms of this Clause, the Employer shall be permitted to grant sub-licenses of intellectual property licensed to it there under to any Successor Contractor of the Facilities for use only in connection with the operation, maintenance and repair of the Facilities provided that such Successor Contractor concludes an agreement with the Contractor or, as the case may be, the licensor of any such intellectual property on terms which it may reasonably require any payment in connection with those sub-licenses. Where intellectual property has been sub-licensed to the Employer under this Clause and such sub-license is not subject to revocation by the Contractor there under, the Contractor shall take such actions as the Employer may request in connection with the grant of licenses to any Successor Contractor for the purposes set out above.

Signature of Contractors

Executive Engineer (PHE-I)
JDA, Jaipur

Mob. No.

Section A-06
SPECIFICATIONS–ELECTRICAL
WORKS

1. DIESEL GENERATORSET ALONG WITH AMF & SYNCH. PANEL

DIESEL STANDBY GENERATOR

Applicable Standards: The Diesel Standby Generator and its components shall conform to the latest applicable standards specified below:-

Diesel Engines for General Purposes	BS 5514 /ISO 3046
The Electrical Performance of Rotating Electrical Machinery	BS 5000
Rotating Electrical Machines	IS 4722
Circuit breakers	IS-13118, BS-5311, IEC-56&694, BSEN-60942(P-2)
Air break switches air break disconnections, air break switch disconnectors and fuse combination units for voltage not exceeding 1000 V AC or 1200V DC	IS-13947 (P-3), BSEN60947, IEC-60947-3
Current transformer	IS-2705/BS-7626, IEC-60185
Voltage transformer	IS-3156/BS-7625/IEC60186
Electrical Relays	IS-3231, 3842/BS-142/IEC-60255
Contactors forvoltage not exceeding 1000 V ac or 1200VDC	IS-13947 Part-IV/ BSEN-60947-4-1/ IEC-60947-4-1
Control Switches	IS-6875/BSEN-60947/IEC-60947- 4-1
High Voltage Fuse	IS-9385/BS-2692/ IEC-60282
Low Voltage Fuse	IS-13703/BS-1362IEC-269-1
Electrical direct acting indicating instruments	IS-1248/BS-89/IEC-6005
A.C. electricity meters of induction type voltage greaterthan1000volts	IS722, 8530/BS-5685 /IEC-60145, 60211
Resistance wire, tape sand stripes for heating elements	IS-3725
Wrought aluminum and aluminum alloy bars, rods, tubes and sections for electrical purposes	IS-5082
Specification for copper rods and bars for electrical purposes	IS-613
Toggle switches	IS-3452/BS-3676
Control switches/push buttons	IS-6875/BSEN 60947
Noise and Emission Limit	As per latest notification of ministry of Environment and Forests

1.1 General Requirements:

The diesel engine and generator shall be skid mounted and shall be located in a room near Treatment plant substation building. The diesel engine shall draw cooling

air directly from outside the room through a weather proof, acoustically treated duct. The exhaust system shall be insulated to minimize the amount of heat entering the room and top revent injury to personnel. The silencer shall be of the,, residential "type and be located externally.

The generation voltage shall be 415V for DG capacity less than 2MVA and generation voltage shall be 11 kV for D.G capacity more than 2MVA. In case more than one D.G set is required for achieving the required capacity they shall be operated in parallel with necessary synchronizing arrangement. At no point DG sets will be operating parallel with grid.

The diesel engine fuel shall be stored in an above ground bulk storage steel tank to be located adjacent to the generator room at a site accessible for filling to local road tankers. The storage tank shall be sized to store fuel for one (1)day running of the engine at full load. The tank shall be provided with fitting stop permit the visual observation of fuel level and filling by local tanker operators. A level meter shall also be mounted in the tank so that remaining fuel volume can be monitored at the generator/substation PLC and the operator stations in the SCADA room.

The fuel storage tank shall be located in a bund capable of holding not less than 125 % of the maximum storage tank contents. Fuel transfer pumps shall be provided to automatically transfer fuel from the bulk storage tank to a high level 990 litres day tank located in the generator room or generator skid mounted day fuel tank. A semi- rotary hand pump shall be provided to permit transfer of fuel in the event of a failure of the transfer pump. Any leakage from the pumps shall be routed to the bund.

A system shall be provided with in the generator room to detect fire, to raise a local audible alarm (manually silenced locally) and if a high level day tank is used, to automatically dump the day fuel back to the bulk storage tank.

The system shall be constructed such that leakage of water, fuel or oil within the generator room shall be routed to a local sump where a detector shall be provided to raise an alarm.

The system shall be constructed such that the leakage of fuel or the accumulation of water within the fuel storage bund shall be detected and shall raise an alarm.

All alarms shall be conveyed to the central HMI through the PLC.

1.2 Diesel Generating Set Automatic Control

AMF Diesel Generator Set capable of automatic starting and picking the load within 30 seconds shall be provided to cater for emergency loads and lighting during mains power failure. Diesel generating set for use in auto mains failure mode shall have a three position automatic /off /manual selection and shall operate as follows:

- (i) Automatic mode :

On occurrence of mains failure the following sequence shall be followed.

Mains to Generator changeover

- mains failure detected
- delay of 10seconds
- generator is started and run upto speed

- time delay of 50 seconds
- mains supply is switched off
- generator supply is switched on Generator to Mains changeover
- mains healthy detected
- manual changeover signal received,
- generator supply is switched off
- mains supply is switched on
- generator runs for 2 minutes and stops All timer settings shall be adjustable.

If mains power is restored during the initial one minute delay then the power shall be monitored for a further one minute and if it is still healthy, mains power shall be restored. The generator shall be stopped after a further 2 minutes of running on no load. If the generator fails to start after an initial period of cranking, two further attempts shall be made with an appropriate interval between each attempt. If the engine fails to start after three attempts the system shall shutdown and a local and remote alarm shall be annunciated. The generator shall run to automatic changeover of mains to generator supply or vice versa shall take place. The generator shall be loaded by manual switching if required.

1.3 Alternator for Diesel Generating Set:

The generation voltage shall be 415 V for capacity less than 2 MVA and generation voltage shall be 11kV for capacity more than 2 MVA.

Alternator shall be 4 pole, 3 phase, 50Hz, 0.8P.F, salient pole, revolving field, brushless type, self-regulating continuously rated and manufactured in accordance with IS4722, BS5000: Part 99 or IEC 60034-1. They shall be totally enclosed, screen protected, fan ventilated and vertical drip-proof conforming to IP23. The Alternator shall be complete with excitation system, AVR and all necessary auxiliaries. The alternator shall be driven by diesel engine detailed be low and shall match the same in all respects. The terminal box shall be dustproof with IP54 degree of protection. The terminal box shall be suitably sized to terminate the size and number of cables involved. Alternators shall be capable of with standing a 10% over load for 1 hour in any 12 hour Period under the specified conditions of temperature, humidity and atmospheric pressure.

Alternator windings shall be of Class-H insulation with Class-F temperature rise and tropicalized. The alternator shall have pre-packed grease lubricated ball or roller bearings and provided with facilities for regressing whilst in service.

The alternator shall be foot mounted on a common bed frame with the prime mover close coupled to the engine flywheel housing. The direction of alternator rotation when viewed from the driven end shall be clockwise and phase voltage sequence UVW. The alternator vibration level shall not exceed the values defined in IS 12075.

The alternator shall be capable of maintaining a short circuit current of three times full load current for a period of 10 seconds. The alternator shall be fitted with an anti- condensation heater. No individual harmonic shall exceed 1 % and the total harmonic shall not exceed 3 %. The alternator, its neutral and control panel shall be earthed as per relevant standards.

The alternator rotor assembly shall comprise exciter rotor, full wave silicon bridge rectifier surge protection device and salient pole rotating field system. The rotor shall be fitted with inter connected pole face damping windings. Voltage regulation shall be maintained to within $\pm 2.5\%$ for a power factor of 0.8 to unity, including hot to cold variations. The steady state frequency droop between no load and full load shall not exceed 5 %. Transient voltage deviation following a step load of 60 % of rated at a power factor of between 0.4 and zero shall not exceed 15 % with a voltage recovery time to 97 % rated voltage not exceeding 0.5second. The set shall be capable of continuous operation with a phase current imbalance of 33 % of rated current whilst maintaining the output voltage within $\pm 5\%$ of rated.

1.4 Diesel Engine for Generating Set:

Engine shall be four stroke, direct injection, and turbocharged industrial machines. They shall be fitted with renewable wet cylinder liners if water cooled and shall be direct coupled to the alternator and mounted on a common rigid steel bedplate. Engines shall be rated for continuous duty at site ambient conditions with an inherent O/L Capacity of 10% for 1hour in any 12 hours. The engine shall be capable of running at full load for not less than 180 hours without maintenance adjustments and 10000 hours between major overhauls. The maximum operating speed shall be 1500 rpm. The range of manual adjustment shall not be less than $\pm 5\%$ of rated speed. The performance of engine governors under load conditions shall be to Class A2 in accordance with BS 5514: Part4. Engine governors shall be suitable for remote control loads having between identical engine units. In addition to any electrical over speed trips, there shall be a mechanical device which shall operate at 120 % of the rated speed. Re-setting of the over speed trip shall be possible by hand only. The steady state output speed drop between no load and full load shall not exceed 5 %. The transient output speed deviation shall not exceed 10% for a step of 60 %. Engines shall be designed to run on fuel oil complying with IS 1460 or BS 2869, Class-A2. Engines shall be cooled by means of a water jacket, heavy duty air blast radiator with integral radiator header tank, circulating pump and engine driven pusher type fan. The fan shall draw air in from the vicinity of the engine block and discharge it through the radiator core. The radiator shall be mounted on the same bed plate as the engine and Alternator on suitable vibration isolators and be arranged so that it is located directly behind automatic louvers set into the external wall of the engine room. A thermostatically operated by-pass valve shall be fitted in the cooling system to maintain an optimum operating temperature during starting and running conditions. Drain cocks shall be provided so that all the water can be drained from the system. A separate oil cooler shall be used for cooling the engine oil. A thermostatic by-pass valve shall be incorporated. Engine lubrication shall be by a closed circuit wet sump, forced feed system supplied by an engine driven pump fitted with pressure regulating and relief valves, sump suction filter and change over renewable micro-felt full flow line filters. A hand operated semi-rotary oil pump shall be installed to carry out initial priming or to fill or empty the sump as required. The sump shall be fitted with an easily accessible drain point. The oil shall be of the grade recommended by the engine manufacturer. The starting system shall comprise 12 or 24 V heavy duty lead acid batteries (positioned on a floor mounted stand adjacent to the engine) connected by heavy duty flexible butyl rubber cables. Batteries shall be sized to give six consecutive starts of the engine at 0°C. An engine driven alternator and charging system shall be provided. An automatic mains energised battery charger shall be provided, with

Sufficient capacity to maintain the battery in a condition to fulfil the starting requirements. Barring (hand turning) equipment shall be provided so that the engine

Can be manually rotated for maintenance purposes . It shall be arranged so that normal

Starting of the engine is inhibited whilst the hand turning equipment is connected.

Twin heavy duty air intake filters in accordance with IS 3169 or BS 7226 suitable for operating in dust laden atmospheres shall be fitted. The filters shall be of the paper element with pre-cleaner type. Turbo charger filters shall be fitted. Breathers shall be fitted with washable filters which are easily accessible for maintenance.

Instrumentation shall be provided to monitor speed, oil pressure, oil temperature (sets

larger than 250kVA), water temperature and battery charge current. The bed plate shall be of heavy gauge steel construction, stress relieved and free from distortion.

Machined surfaces shall be incorporated for mountings and for levelling. Anti-vibration mountings shall be fitted between the bed plate and the floor to prevent vibrations being transmitted to the building. The mountings shall be adjustable for leveling purposes and shall be designed to resist horizontal movement of the diesel set.

The fuel System shall comprise an engine driven feed pump with duplex filters, 990 litres day tank with supporting structure or generator skid mounted day fuel tank, with all inter connecting pipe work, flexible engine connection pipe etc.

1.5 Diesel Generator Control Panel:

The control panel shall be separately mounted on anti vibration mountings and shall comprise the following:

- Breaker incorporating short circuit and overload trip
- Earth fault protection for the Alternator
- Alternator Over & Under Voltage Protection
- Voltage Controlled Over Current Relay
- voltmeter and seven position selector switch
- ammeter and 4 Position selector switch
- frequency meter
- Power Factor Meter
- Kwh Meter
- engine temperature and oil pressure gauge
- service hours run indicator
- key switch start and stop control
- operational status indicator
- anti-condensation heater and thermostat
- alternator anti-condensation heater controls
- mains fed battery charger
- Auto start on mains power supply failure facility
- Fails to Start (Alarm)
- Over /Under Voltage Alarm
- Battery Charger Fault (Alarm)

- Low fuel Oil Level(Alarm)
- Over Load(Alarm)
- Low Lube Oil Pressure (Trip)
- High Water Temperature(Trip)
- High Lube Oil Temperature(Trip)
- Electrical Protection Relays (Trip).

A reset button shall be provided to cancel the alarm/shut-down condition prior to re-starting. Simple operating instructions shall be detailed on the fascia of the control panel.

1.6 Synchronizing Panel

Whenever two sets are required to operate together, necessary synchronizing panel complete with circuit breaker, synchroscope, relays, meters etc shall be provided. The Panel shall be floor standing, CRCA Sheet steel enclosed.

1.7 Acoustic Enclosure

- a) The DG Set shall be provided with acoustic enclosure, fully integrated, weather proof with superior finish for long and durable life.
- b) The acoustic enclosure shall be CRCA sheet steel enclosed with necessary panels and doors, inside lining of fire retardant foam /glass wool as acoustic material
- c) The sound level shall be restricted to 75 dB at a distance of 1 meter, under full Load, free field conditions as per relevant standards.
- d) The acoustic enclosure shall be certified to meet the emission norms.

1.8 Bulk Fuel Storage Tanks

Tanks and fittings, etc shall conform to IS 803 or BS 799: Part 5. The tank shall be constructed in mild steel and the fittings in materials other than:

- Yellow brass, including low grade alloys of copper and zinc.
- Lead and zinc.
- Galvanized metals.
- Natural rubber.

An ullage volume above maximum contents level of the tank shall not be less than 5% of the maximum volume of the fuel. The maximum fuel surface level below the point of entry of the vent shall not be less than 100 mm. The internal surface shall be cleaned and treated with temporary preservative, soluble in fuel oil, before shipment.

The following fittings shall be included:

- (a) 600 mm diameter manhole complete with portable cover situated in the top of the tank complete with ladder to the interior.
- (b) Dipstick, calibrated in litres with guide tube and striker plate.
- (c) Local indication of fuel level to be given at a position where it can be easily read during fuel delivery.

- (d) Billing pipe work and fittings complete with isolation valve and captive end cap. The filling point to be at the top of tank to prevent siphoning.
- (e) Outlet pipe situated at the raised end of the tank not less than 150 mm above tank bottom, complete with check valve, isolating valve and end cap.
- (f) Drain pipe situated at lowest point in tank complete with isolating valve and captive end cap.
- (g) Inlet fittings for overflow pipe from daily service tank or tanks (where specified).
- (h) Vent pipe situated at high level in the tank. The pipe shall rise continuously from the tank and terminate with an inverted 'U' bend and vermin screen.
- (i) External ladder for horizontal tanks more than 2 m diameter

Drawings / Documents Required:

All Drawings, data, technical particulars, calculations, detailed literature, catalogues Test certificates etc shall be submitted along with the bid/ after award of contract.

2. APPROVEDVENDORLIST-ELECTICALEQUIPMENT/COMPONENT

Sr.	Item Description		Approved Makes
1	D.G. Set (with AMF Panel)	-	
	a) Engine	-	Kirloskar Oil Engine / Greaves / Caterpillar /Cummins/sudhir
	b) Alternator	-	NGEF / KEC / Crompton / Jyoti / Stamford
	c) AMF Panel	-	Reputed CPRI approved vendor

The contractor shall distinctly understand that it will not be their prerogative to insist on a particular brand from the list, and final selection will be done with the approval of Client / Engineer in charge.

3. O & M of DG set

Scope of work for O & M of DG Set includes the comprehensive operation & maintenance of following as per instruction manual & log books of original make of D.G. Set.

- a. Engine
- b. Alternator
- c. AMF Panel
- d. Electrical Panel installed in the generator room interlocking wiring between D.G. Set, AMF Panel & LT (JVNL Supply Panel).
- e. Associated items like batteries, fuel tank, pumps etc.

Any repairs, settings, installation of spares required for successful operation will be in the scope of the contractor.

1. D.G. Set will normally not run but as and when required as JVNL supply goes off same shall be started immediately with the help of AMF Panel.
2. The contractor should note that D.G. Set is in comprehensive maintenance.

Arrangements to be made by the contractor for operation & maintenance:-

The contractor shall have to arrange the following T&P for successful operation & maintenance.

- a. Required lubricant & coolant as per norms in sufficient quantity. Separate battery charger of sufficient capacity should be maintained in DG Room for regular charging of battery and ensure all batteries are healthy.
- b. One set of standby battery should be maintained in the DG Room in full/float charging condition.
- c. One set of self-starter should always be maintained.
- d. Necessary stock of genuine spares at site for maintenance/repair for engine/alternator/AMF Panel and associated items.
- e. Necessary set of tools in safe custody as recommended by the original manufacturer of D.G. Set during operation & maintenance along with Ear Plugs/Headphones etc. as required.
- f. D.G. Set shall always be in auto mode.
- g. Servicing of D.G. Set with 'B' check maintenance will be responsibility of the contractor as & when required. All the material will be supplied by the contractor for maintenance of the D.G. Set.
- h. **The contractor is responsible and shall have the arrangements for checking & replacement of all the defective parts & maintenance works related to D.G. Set with AMF Panel & electric control Panel** such as Repair/servicing of voltage regulator, dynamo, self-starter, radiator, exhaust piping, silencer, calibration of fuel pump & injectors, **replacement of engine** oil & coolants, cleaning & replacement of air filters, checking & tightening of all nuts & bolts, replacement of rubber sleeves & hose piping, Checking & replacement of protective plugs, Checking & replacement for coupling in fuel pump drive, V-belts, safety control devices thermostats, nozzles etc. & all related works in case of breakdowns/routine maintenance.

Special terms & Conditions:-

- a. **Theft:-** If any theft occurs or any loss to the JDA property takes place, the same shall be recovered by the contractor.
- b. **Handing Over:-** After completion of contract, the contractor shall handover the entire system in proper working condition with genuine parts replacement as per instruction & maintenance manuals of original manufacture of D.G. Set.
- c. **Fuel :-** The required diesel will be arrange by the contractor & payment will be made by log book maintained by the contractor daily on the basis on hour meter reading, hour meter reading will be verified by Site Engineer (JEN) daily in log book. This will be the responsibility of the contractor. No payment will be given without

verifying by Site Engineer in log book. The contractor will keep all record of diesel consumption & ensure adequate full diesel in the tank.

- d. **Painting :-** As per schedule given for O & M of STP and scope of work.
- e. Nothing extra will be paid for cleaning of D.G. Set & AMF Panel. The contractor will have to arrange all the washing material such as old dhotis & detergent at site.
- f. The contractor shall be fully responsible for any type of accident with his employed staff.
- g. Penalty Clause :- The contractor is required to keep the system in proper working condition round the clock. In case of non-working of the system for more than 1-hour during normal period, penalty amounting Rs. 1000/- per hour will be imposed.
- h. Log Book :- The contractor shall have to maintain the log book as per prescribed Performa having all the details such as operation time of D.G. Set quantity of fuel as & when filled, details of maintenance works done time to time, shift wise details of operating staff etc. & as per engineer in charge.

The contractor shall be responsible for faithful compliance of the terms & conditions of this agreement, failure of which will attract for forfeit of the contractor dues & security deposits as well as termination of the contract & getting the work done from outside agency at the cost & risk of the contractor.

Signature of Contractors

Executive Engineer (PHE-I)
JDA, Jaipur

Mob. No.

Section A-07

Annexure

SCHEDULE-I
FINANCIAL RESOURCES AND CAPABILITY
(Reference clause 3(a))

1. Name of Bidder:-

2. Total financial turnover achieved by the bidder in the last seven financial years;

S.No.	Year	Turnover
(i)		
(ii)		
(iii)		
(iv)		
(v)		
(vi)		
(vii)		
(viii)		

Note: Balance Sheets and Profit & Loss Accounts is to be enclosed by the bidder which is considered by him as per criteria 2(a).

3. Total financial Turnover projected in the current financial year.
4. Has the bidder ever been debarred from tendering for Central Government/State Government/any Government undertaking?
Yes/No, If yes give details.
5. Has bidder ever been declared insolvent?
Yes/No, If yes give details.
6. Name(s) and Address of Branch/(s) for bidder's Bankers.

I/We hereby certify that the above information is correct to the best of my/our knowledge and belief.

Date:

SCHEDULE-III

(Reference clause 3(d))

Self Declaration

I/We.....Proprietor/Partner/ Authorized signatory of
M/s.....under take the oath that I/We will deploy the machinery
and equipment listed below as and when required in the execution of this work.

S. No.	Name of Machinery	Minimum Requirement	Availability	
			Owned	Leased
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				

I/We hereby certify that the above information is correct to the best of my/our knowledge and belie

Signature of Bidder

Note:- This self-declaration is mandatory to be signed by the bidder failing which the bid shall
summarily be rejected without asking any clarification.

SCHEDULE-IV

(Reference clause 3(e))

DETAILS OF MAXIMUM VALUE OF CIVIL WORKS EXECUTED IN ANY ONE YEAR DURING LAST SEVEN YEARS.

FINANCIAL YEAR IN LAST SEVEN YEARS	COST OF WORK EXECUTED IN FINANCIAL YEAR

SCHEDULE-V

(Reference clause 3(f))

DETAILS OF EXISTING COMMITMENTS & ON GOING WOERKS TO BE COMPLETED

S. No.	Name of Works (with agreement No. & Date)	Client	Cost of work as per Work Order	Stipulated date of commencement	Stipulated date of completion	Value of balance work on date of tender	Likely date of completion of balance work

SCHEDULE-VI

(Reference clause 3(g))

DETAILS OF LITIGATION OR ARBITRATION CONTRACTS

S. No.	Name of Works (with agreement No. & Date)	Client	Work Order	Disputed Amount claimed in Litigation/ Arbitration	Date of Raising Disputed Amount	Actual Award Amount, if the case is Decided	Cause of Litigation & matter in Dispute

SCHEDULE-VII

(Reference clause 3(h))

BID CAPACITY

1.	A= Maximum value of civil Engineering works Executed in any one year during the last Seven Years (Updated to present price level)Lacs	Certified details enclosed at Page No.....
2.	N= Number of years prescribed for completion of the work for which bids are invited	
3.	B= Value, at the present price level of existing Commitments and on going works to be completed during the next N Period.Lacs	Certified details enclosed at Page No.....

Bid Capacity= $A \times N - B$

=Lacs

Schedule- VIII
(Reference clause 3(J))

Details Regarding Evaluation Criteria

Name of work :-

S. No.	Item	Minimum Requirement (As per Bid)	Remark			
				Year	Qty.	Page No.
1	Copy of GST Reg. Certificate					
2	Copy of Registration certificate					
3	1. Proof of Bid Security deposition 2. Proof of bidding document cost deposition 3. Proof of RISL fees deposition.					
4	The bidder should have executed following quantities of work in any one financial year of the last seven financial years. However the bidder may opt current year in the said financial assessment period. (Schedule-II).					
	a.					
	b.					
	c.					
5	The bidder should have completed at least one similar nature work in last seven financial year (including current year, if opted by the bidder) of value not less than% of the estimated cost of the work (Bid cost) updated to present price level.					
6	The bidder should have achieved an annual financial turnover of at least Rs.% Lacs of the work (Bid cost) in any one of last seven financial year (including current year)					
7	The bidder should give declaration to deploy the machinery and equipment as psecified in schedule-III, for the execution of this work. Duly Self attested.					
8	Bid Capacity (AxNx3-B) Here A is Maximum value of civil engineering work executed in any one of last 7 financial years. N is number of Years Prescribed for completion of the work. B is value at present price level of existing commitments and ongoing.					
9	Declaration in support of information finished by bidder in Annexure-I					
10	Schedule-VI (Details of Litigation).					
11	Signed Annexure "B"(RTPP Act/Rules)					

Note:- This sheet must be prepared and submitted by the bidders.

Self Declaration



I/We.....Proprietor/Partner/Authorized signatory of
M/s.....under take the oath that the information furnished by me/us in
schedule I to VIII of the assessment Bid
for.....is correct to the
best of my/ our knowledge. If any information id found to be incorrect JDA has right to reject the Bid and to
take action against me/us as per rules.

.....
Proprietor/Partner/Authorized signatory
M/s.....
.....

Note:- This Self Declaration is mandatory to be signed by the bidder failing which the bid shall
summarily be rejected without asking any clarification.

NAME OF WORK:- Operation and Maintenance of existing 30 MLD STP (Based on Conventional Activated Sludge Process) at Ralawata for 5 years under EE PHE-I JDA, Jaipur.

SPECIAL CONDITIONS OF THE CONTRACT

- 1. No Price Variation shall be paid for this work.**
2. Contractor shall get the material inspected from the third party (CEIL SGS, RITES) before bringing the material at site. The inspection charges shall be borne by the contractor. No payment of these items shall be made before the third party inspection.
3. The quantity of work can be increased or decreased. However, no guarantee is given about the actual quantity of work.
4. No extra payment shall be made to the contractor on account of excavation in collapsible strata or in hard or rocky strata. The bidder shall have to make their own arrangement for completing the work and no claim in this respect will entertained.
5. On collection of complete material for each section the same shall be got checked by Engineer-in-Charge or his authorized representative. Such approval shall in no way release the contractor of his responsibility regarding completion of work, as per required specification until the contract is complete.
6. The contractor shall make his own arrangement regarding water required for the execution and testing of the work and shall also arrange for the supply of drinking water to his own employees. He shall defray all charges in this connection and should include in his rates a sufficient amount to cover such charges. All such facilities as are required now to be provided for the labour, made under labour welfare rules inforce, shall also be provided by the contractor at his own cost.
7. The security deposit of the work shall be refundable after six months from the date of completion of the work.
8. The contractor/firm or company while executing the work will adopt all safety measures at his cost to safeguard from any loss of life and damage of public and private property. If any loss and damage is occurred, they will pay the full compensation from their own pocket to the concern. All the consequence (legal and or financial) will be borne by the contractor only and JDA will not be responsible in any way.
9. No secured advance against material procured at site will be allowed.
10. The surplus earth and damaged materials will be immediately removed from the site of work and dumped as per instruction of Engineer-in-charge.
11. The material collected at site and paid provisionally shall remain under the watch and ward of the contractor till it is consumed fully on the work.
12. Any material not conforming to the specifications collected at site shall have to be removed by the contractor within a period of 3 days of the instructions, issued by the Engineer-in-charge, failing which, such material shall be removed by the Engineer-in-charge at risk and the contractor after expiry of 3 days period.
13. The contractor/firm/company is bound to get the workmen insured against accident from the Insurance Company at his own cost.
14. Contractor shall be the sole custodian of the men and material at work and will be fully responsible for any loss of life or otherwise occurred during the execution of the works.
15. If any extra item crop up during execution of work in the opinion of EIC then payment of extra item shall be paid based on JDA BSR or market rate analysis whichever is less.

Signature of Contractors

Executive Engineer (PHE-I)
JDA, Jaipur

Mob. No.

Liquidated Damages

(For non-conformance in meeting the Output Standards for Treated Sewage set as per this tender specifications)

Event triggering the recovery of Liquidated Damages.	During the O&M Period		Liquidated Damages recoverable on Termination as a percentage of the immediately preceding year's Fixed & Variable Payments
	Liquidated Damages	Frequency	
Non conformance with BOD standards as per Volume II, Technical Specifications	Rs. 2.00	For every 1000 litres for every day of non conformance	5%
Non conformance with COD standards as per Volume II, Technical Specifications	Rs. 2.00	For every 1000 litres for every day of non conformance	5%
Non conformance with TSS standards as per Volume II, Technical Specifications	Rs. 2.00	For every 1000 litres for every day of non conformance	5%

Signature of Contractor :

Name :

Company's Seal :

Date :

PAYMENT ME CHANISM FOR PARTICIPATING IN TENDER

Jaipur Development Authority has decided to receive Earnest Money Deposit (EMD) (Bid Security) Tender fee online through JDA portal. The bid security options available in tender for participants are as mentioned below :

A. Payment Options:

Option-1: Bank Guarantee (BG).against EMD/Bid Security

Bidder may opt Bank Guarantee (BG) against EMD (Bid Security) for which bidder requires to prepare BG before applying in the tender. The details of BG requires to be beefed on JDA portal before paying balance amount (Tender Fee). This amount will be paid through **Payment Gateway only**, option to make balance payment through EFT(RTGS/NEFT) will not be available

If bidder does not opt for BG against EMD, options of making complete payment through Payment Gateway or through EFT(NEFT/RTGS) will be available.

Option-2: Electronic Fund Transfer(EFT:NEFT/RTGS)

If the bidder selects payment mode as EFT (NEFT/RTGS) **"Paying Slip for EFT (NEFT/RTGS)"** will be generated by the system for the complete amount. The payment can be made from **any Bank any Branch** using this Paying Slip through NEFT/RTGS (Claim against payment made through EFT in any other JDA bank account will not be acceptable and bidder stands disqualified from participation in the bid applied for). After successful transaction through NEFT/RTGS, as per the standard procedures it may take 4 to 24 hours in process of confirmation of EFT through Auto-Process depending on the time of EFT done. Therefore, option to make payment through EFT (NEFT/RTGS) will be available till 2 days prior to closing date of bid participation.

Option-3: Payment Gateway (Aggregator)

The facility to make payment through Debit Card, Credit Card, Net banking etc., will be available. User can use this facility from **anywhere any time** till the closing date & time of bid participation.

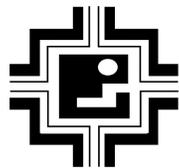
B. Bid Participation Receipt

After confirming payment, the bidder will get Bid Participation Receipt on the basis of which user will get the payment details along with other details for bidding one-Procurement portal of GOR.

- In case of BG as the remaining payment will be done through Payment Gateway, on successful transaction the **"Bid Participation Receipt"** will be generated on real time basis
- In case complete payment is done through Payment Gateway, on successful transaction the **"Bid Participation Receipt"** will be generated on real time basis.
- In case complete payment is done through EFT (NEFT/RTGS), on confirmation of payment from ICICI Bank (Auto Process) **"Bid Participation Receipt"** will be available on Log in of Bidder on JDA portal.

Executive Engineer (PHE-I)
JDA, Jaipur

JAIPUR DEVELOPMENT AUTHORITY, JAIPUR



Bid Document

For

Name of work:- Operation and Maintenance of existing 30 MLD STP (Based on Conventional Activated Sludge Process) at Ralawata for 5 years under EE PHE-I JDA, Jaipur.

Cost: Rs. 613.92 Lacs

NIT No. 06/2023-24

Due On: 07.08.2023

Volume-II

Envelope 'B' (Financial)

Executive Engineer (PHE-I)
Jaipur Development Authority
Jaipur

JAIPUR DEVELOPMENT AUTHORITY, JAIPUR

NAME OF WORK: - Operation and Maintenance of existing 30 MLD STP (Based on Conventional Activated Sludge Process) at Ralawata for 5 years under EE PHE-I JDA, Jaipur.

H-SCHEDULE

Sr. No.	Particular	Unit	Qty.	Rate to quoted by the Contractor (In Rs.)	Amount (In Rs.)
1.00	Operation and Maintenance of entire 30 MLD Sewerage Treatment Plant at site, including additional unit in this contract. (First Year)				
1.10	Man power (Fixed Cost)	Per Month	12.00		
1.20	Maintenance of Civil Structure (Fixed Cost)	Per Month	12.00		
1.30	Maintenance of office including laboratory (Fixed Cost)	Per Month	12.00		
1.40	All repairs including spares and replacement, Oil and Grease (Fixed Cost)	Per Month	12.00		
1.50	Chlorine Dosage for 30 MLD (Variable Cost)	Per Month	12.00		
1.60	Other Chemical Including Poly-Electrolyte for 30 MLD (Variable Cost)	Per Month	12.00		
1.70	Safe Disposal of Grit/Sludge including Transportation for 30 MLD Flow (Variable Cost)	Per Month	12.00		
2.00	Operation and Maintenance of entire 30 MLD Sewerage Treatment Plant at site, including additional unit in this contract. (Second Year)				
2.10	Man power (Fixed Cost)	Per Month	12.00		
2.20	Maintenance of Civil Structure (Fixed Cost)	Per Month	12.00		
2.30	Maintenance of office including laboratory (Fixed Cost)	Per Month	12.00		
2.40	All repairs including spares and replacement, Oil and Grease (Fixed Cost)	Per Month	12.00		
2.50	Chlorine Dosage for 30 MLD (Variable Cost)	Per Month	12.00		
2.60	Other Chemical Including Poly-Electrolyte for 30 MLD (Variable Cost)	Per Month	12.00		
2.70	Safe Disposal of Grit/Sludge including Transportation for 30 MLD Flow (Variable Cost)	Per Month	12.00		

Sr. No.	Particular	Unit	Qty.	Rate to quoted by the Contractor (In Rs.)	Amount (In Rs.)
3.00	Operation and Maintenance of entire 30 MLD Sewerage Treatment Plant at site, including additional unit in this contract. (Third Year)				
3.10	Man power (Fixed Cost)	Per Month	12.00		
3.20	Maintenance of Civil Structure (Fixed Cost)	Per Month	12.00		
3.30	Maintenance of office including laboratory (Fixed Cost)	Per Month	12.00		
3.40	All repairs including spares and replacement, Oil and Grease (Fixed Cost)	Per Month	12.00		
3.50	Chlorine Dosage for 30 MLD (Variable Cost)	Per Month	12.00		
3.60	Other Chemical Including Poly-Electrolyte for 30 MLD (Variable Cost)	Per Month	12.00		
3.70	Safe Disposal of Grit/Sludge including Transportation for 30 MLD Flow (Variable Cost)	Per Month	12.00		
4.00	Operation and Maintenance of entire 30 MLD Sewerage Treatment Plant at site, including additional unit in this contract. (Fourth Year)				
4.10	Man power (Fixed Cost)	Per Month	12.00		
4.20	Maintenance of Civil Structure (Fixed Cost)	Per Month	12.00		
4.30	Maintenance of office including laboratory (Fixed Cost)	Per Month	12.00		
4.40	All repairs including spares and replacement, Oil and Grease (Fixed Cost)	Per Month	12.00		
4.50	Chlorine Dosage for 30 MLD (Variable Cost)	Per Month	12.00		
4.60	Other Chemical Including Poly-Electrolyte for 30 MLD (Variable Cost)	Per Month	12.00		
4.70	Safe Disposal of Grit/Sludge including Transportation for 30 MLD Flow (Variable Cost)	Per Month	12.00		
5.00	Operation and Maintenance of entire 30 MLD Sewerage Treatment Plant at site, including additional unit in this contract. (Fifth Year)				
5.10	Man power (Fixed Cost)	Per Month	12.00		

Sr. No.	Particular	Unit	Qty.	Rate to quoted by the Contractor (In Rs.)	Amount (In Rs.)
5.20	Maintenance of Civil Structure (Fixed Cost)	Per Month	12.00		
5.30	Maintenance of office including laboratory (Fixed Cost)	Per Month	12.00		
5.40	All repairs including spares and replacement, Oil and Grease (Fixed Cost)	Per Month	12.00		
5.50	Chlorine Dosage for 30 MLD (Variable Cost)	Per Month	12.00		
5.60	Other Chemical Including Poly-Electrolyte for 30 MLD (Variable Cost)	Per Month	12.00		
5.70	Safe Disposal of Grit/Sludge including Transportation for 30 MLD Flow (Variable Cost)	Per Month	12.00		
Total Amount Rs					

Signature of Contractor

Executive Engineer (PHE-I)

JDA, Jaipur

Mobile

No.....