

KERALA INDUSTRIAL INFRASTRUCTURE DEVELOPMENT CORPORATION (KINFRA)

(A statutory body of Govt of Kerala)

KINFRA HOUSE, TC 31/2312, Sasthamangalam, Thiruvananthapuram -695 010
Tel: 0471-2726585 | Fax: 0471-2724773 | Email: kinfraanexe@gmail.com | Web:
www.kinfra.org



Notice Inviting Tender (NIT) **(KINFRA - 6)**

Tender No : KIN/IITP/12/2022-23

Name of Work : Design, Engineering and Construction of Water Treatment Plant at KINFRA Integrated Industrial and Textile Park, Palakkad

PAC : Rs. 14,58,63,000/-

EMD : Rs. 5,00,000/-

Period of Completion : 18 Months

Bid Submission Fee : Rs. 17,700.00/-(Inclusive of 18% GST)

**KERALA INDUSTRIAL INFRASTRUCTURE DEVELOPMENT CORPORATION
(KINFRA)**

KINFRA HOUSE, TC 31/2312, Sasthamangalam, Thiruvananthapuram -695 010
Tel: 0471-2726585 | **Fax:** 0471-2724773 | **Email:** kinfraannexe@gmail.com |
Web: www.kinfra.org



Notice Inviting Tender (NIT)

KERALA INDUSTRIAL INFRASTRUCTURE DEVELOPMENT CORPORATION (KINFRA), a statutory body of Govt. of Kerala, now intends to install a drinking water plant at KINFRA Integrated Industrial & Textile Park, Palakkad, Kerala, India and invites sealed tenders on LSTK basis from experienced, reputed and competent contractors/firms for installation of the following package-

Tender No	:	KIN/IITP/12/2022-23
Name of Work	:	Design, Engineering and Construction of Water Treatment Plant at KINFRA Integrated Industrial and Textile Park, Palakkad.
PAC	:	Rs. 14,58,63,000/-
EMD	:	Rs 5,00,000.00/-
Period of Completion	:	a) Execution - 18 months from Effective date of Contract b) Defect Liability period including operation and maintenance for Civil Works- 60 months from the date of Commissioning c) Defect Liability period including operation and maintenance for Electromechanical works – 36 months from the date of commissioning
Bid Submission Fee	:	Rs. 17,700/- inclusive of GST @ 18%



KERALA INDUSTRIAL INFRASTRUCTURE DEVELOPMENT CORPORATION

(A Statutory Body of Govt. of Kerala)
KINFRA HOUSE, TC NO.31/2312, SASTHAMANGALAM P.O,
THIRUVANANTHAPURAM

- Tender No : KIN/IITP/12/2022-23
- Name of Work : Design, Engineering and Construction of Water Treatment Plant at KINFRA Integrated Industrial and Textile Park, Palakkad.
- Locality : KINFRA Integrated Industrial & Textile Park, Park Monitoring Hub, Menon Para Road, Kanjikode East PO Palakkad - 678 621
- Last date of online Submission : 19/07/2022, 5.00PM
- Name of Bidder :
- Address of Bidder :
- Validity of Bid : 120 Days from the date of opening of tenders.
- Valid Registration and Class :

GENERAL GUIDELINES

1. The book of "General Conditions of Contract" is applicable to both types of tenders i.e. "Percentage rate tenders and Item rate tenders". Accordingly, alternative provisions for conditions Nos. 4, 10 & 12 of the General Rules and Directions are given in this book. The appropriate alternatives will be applicable in specific cases depending on whether this is used for percentage rate tender (KINFRA-7) or item rate tender (KINFRA-8). "General Conditions of Contract" shall be available in downloadable manner from website "www.kinfra.org"
2. KINFRA-6 abridged from KINFRA-7/8, Schedules A to F, special conditions/specifications and drawings will be issued to intending tenderers only. The standard form will not be issued along with the Tender Documents but the same shall form part of the agreement to be drawn and signed by both parties after acceptance of tender. The standard form shall be available in downloadable manner from website "www.kinfra.org"
3. The intending bidders will quote their rates in Schedule A ie. Schedule of Quantities.
4. The proforma for registers and Schedules A to F are only for information and guidance. These are not to be filled in the Standard Form. The Schedules with all blanks, duly filled, shall be separately issued to all intending tenderers. For filling and returning in the manner prescribed. The **Schedule A** can be downloaded from website www.etenders.kerala.gov.in

**Information & Instructions to the Bidders for e-tendering
(Forming part of Bid Document)**

Managing Director, KINFRA invites Lumpsum turnkey (LSTK) online tenders in two cover bid system for the following work in the prescribed form, from competent and eligible contractors/firms with appropriate class of registration in PWD/CPWD/KWA/Irrigation/Indian Railways/MES/BSNL/State Govt departments/ PSUs, who fulfill the eligibility criteria prescribed.

Tender No.	Name of work & Location	EMD (Rupees)	Period of completion	Last date of submission of Tender document, EMD, Tender fee & Other documents as	Time & Date of opening of Technical bid	Tender Cost	Class of registration
1	2	4	5	6	7	8	9
KIN/IITP/12/2022-23	Design, Engineering and Construction of Water Treatment Plant at KINFRA Integrated Industrial and Textile Park, Palakkad.	Rs. 5,00,000.00	18 months	19/07/2022,5.00PM	22/07/2022, 11.00AM	17,700/- (incl. of GST @ 18%)	A Class and above (or equivalent)

1. **ELIGIBILITY CRITERIA**

Contractors who fulfill the following requirements shall be eligible to apply.

1. "A class" or equivalent contractor registration in Central/state Govt departments/
2. Should have satisfactorily completed the works as Principal Contractor mentioned below during the last Seven years ending the last date of month previous to the one in which the tender is invited.

Three *similar works each value not less than Rs. 584 Lakhs

OR

Two *similar works each value not less than Rs. 876 Lakhs

OR

One *similar work value not less than Rs. 1167 Lakhs

AND

One work of any nature (either part of (2) above or as separate work) of value not less than Rs. 584 Lakhs with any of the Central/State Government Department/Central Autonomous Body/ Central Public Sector Undertaking.

*'Similar work' shall mean works of construction of Water treatment plant to supply drinking water quality as per BIS 10500:2012. The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum; calculated from the date of completion to last date of receipt of applications for bids.

3. The Contractor should either have an in-house capacity having proven experience in design and engineering of at least one water treatment plant of 5MLD Capacity during the last seven years (Client Certificate to be enclosed) The CV of key personnel engaged for design and engineering should be enclosed.

OR

Contractor may engage reputed firms who have executed design and engineering of at least one water treatment plant of 5MLD Capacity during the last seven years (Certified credentials to be enclosed)

4. Should have a solvency certificate from any bank to an amount equivalent to 584 Lakhs (Scanned copy of original solvency certificate to be uploaded).
5. Should not have incurred any loss in more than two years during the last five financial years ending 31st March 2021 (balance sheet and profit and loss account certified by Chartered accountant to be uploaded).
6. Average annual financial turn over should be at least Rs. 1459 Lakhs in any three financial years out of last five years ending on 31.03.2021 (balance sheet and profit and loss account certified by Chartered accountant to be uploaded).
7. Joint Venture or Consortium constituted for participating in this tender alone is not permitted.

The intending bidder must read the terms and conditions of **KINFRA-6** carefully. He should only submit his bid if he considers himself eligible and he is in possession of all the documents required.

Information and Instructions for bidders posted on website shall form of bid document.

The tender document(s), may be downloaded free of cost from the e-Government Procurement (e-GP) website (www.etenders.kerala.gov.in). No payment is required for downloading the tender documents from the above website however a bid submission fee, as mentioned below in this document, is required to be remitted through online payment mechanism for e-procurement system of Govt. of Kerala. Only those bidders having a valid and active registration, on the date of bid submission, shall submit bids online on the e-GP website.

All bids shall be submitted online on the e-GP website only in the relevant envelope(s)/ cover(s), as per the type of tender. No manual submission of bids shall be entertained for the tenders published through e-GP system under any circumstances.

The e-GP system shall not allow submission of bids online after the stipulated date & time. The bidder is advised to submit the bids well before the stipulated date & time to avoid any kind of network issues, traffic congestion, etc. In this regard, KINFRA shall not be responsible for any kind of such issues faced by bidder.

Ineligible bidders or bidders who do not possess valid & active registration, on the date of bid submission, are strictly advised to refrain themselves from participating in this tender. If such instances are noticed, the same shall be treated as "fake bidding" by the respective bidder and such bidder shall be blacklisted as per KINFRA rules in force. The bidders, who submit their bids for this tender after digitally signing using their Digital Signature Certificate (DSC), accept

that they have clearly understood and agreed the terms and conditions including the Form/ Annexures of this tender. Mention of price details at any place other than the designated place, shall disqualify the bid and the bid shall be summarily rejected.

Tender duly signed using bidder's valid Digital Signature Certificate shall be submitted online on e-GP website www.etenders.kerala.gov.in

General Conditions of Contract KINFRA 7/8 shall be available in downloadable manner from www.kinfra.org and shall form part of bid document.

The Technical bid shall be opened first on due date and time as mentioned above. The time and date of opening of financial bid of contractors qualifying the technical bid shall be communicated to them at a later date.

Pre-Bid meeting shall be held at KINFRA Integrated Industrial & Textile Park, Kanjikkode, Palakkad on 05/07/2022 at 11.00 a.m. to clear the doubt of intending bidders, if any. The bidders can also attend the pre-bid meeting in online, the link will be shared with them, if they request through email kinfraitp@yahoo.in. The queries to be submitted atleast two working days prior to the pre-bid meeting. For further clarification, the bidders may contact Mr Sudeep S G – 8086601182.

List of Documents to be scanned and uploaded within the period of bid submission:

Cover 1

- I. NIT
- II. Technical Proposal with necessary drawing/document as specified in tender document.
- III. Registration certificate of the Contractor.
- IV. Certificates of Work Experience.
- V. Audited P&L and Balance Sheet
- VI. Bank Solvency Certificate.
- VII. Any other Document as specified in the Tender notice.
- VIII. Certificate of Registration for GST.
- IX. GCC duly signed & sealed by the bidder.

Cover 2

- I. Price Bid

Other Instructions to Bidders

1. All other relevant forms shall be in the format prescribed CPWD Manual.
2. All Statutory approvals both initial & final wherever necessary for the execution of work from the authorities concerned shall be obtained by Contractor at his own expense. However statutory fees will be reimbursed on submission of receipts.
3. All queries regarding the tender shall be sent to us by email kinfraitp@yahoo.in within 10 days from the from the date publishing of NIT.
4. Representatives of bidders/firms participating in the pre-bid meeting shall produce authorisation from the firm.
5. Important Dates:

Publishing of NIT	:	28/06/2022
Pre-bid Meeting	:	05/07/2022, 11.00 AM
Submission of bid	:	19/07/2022, 05.00 PM
Opening of Technical bid	:	22/07/2022, 11.00 AM



KERALA INDUSTRIAL INFRASTRUCTURE DEVELOPMENT CORPORATION

(A Statutory Body of Govt. of Kerala)

SPECIAL CONDITIONS OF CONTRACT

The following Special Conditions of Contract [SCC] shall supplement the General Conditions of Contract [GCC]. Whenever there is a conflict, the provisions herein shall prevail over those in the GCC. The corresponding clause number of the GCC is indicated in parentheses

1. Definitions [GCC Clause 1]

1.1 Client

Kerala Industrial Infrastructure Development Corporation (KINFRA)

KINFRA HOUSE, TC 31/2312,
Sasthamangalam, Thiruvananthapuram -695 010, India
Tel: 0471-2726585| **Fax:** 0471-2724773
Email: kinfraannexe@gmail.com

1.2 Contractor

M/s. _____

([Name and address])

Telephone No. _____

e-mail _____

Facsimile No. _____

1.3 Consultant

M. N. Dastur & Company (P) Ltd,
P-17, Mission Row Extension,
Kolkata – 700 013,
West Bengal,
India.
Telephone No. 0091-33-22250500, 0091-33-22255420
Facsimile No. 0091-33-22251422, 0091-33-22257101
E- Mail- kinfra.chn@dastur.com

2. Notices

2.1 Client

Kerala Industrial Infrastructure Development Corporation
(KINFRA)
KINFRA HOUSE, TC 31/2312,
Sasthamangalam, Thiruvananthapuram -695 010, India
Tel: 0471-2726585, Fax: 0471-2724773
Email: kinfraannexe@gmail.com

2.2 Contractor's Address for Notice purposes

M/s. _____

[Name and address]

Telephone No. _____

e-mail _____ Facsimile No. _____

3.0 Transportation by Wagons

The destination for consignments to be despatched by wagons by the Contractor shall be as under:

KINFRA Integrated Industrial & Textile Park, Park Monitoring
Hub,
Menon Para Road, Kanjikode East
PO: Palakkad - 678 621

4.0 Material Measurement

A. Cement

- i. Cement required for the works should be procured by the contractor.

Unless otherwise specified or called for by the owner cement shall be ordinary Portland cement in 50 Kg. bags. Changing brand or type of cement within the same structure will not be permitted.

- ii. A certified report attesting to the conformity of the cement to BIS specifications by the cement manufacturer shall be furnished to the Consultants. If demanded.
- i. Contractor will have to make his own arrangements for storage of adequate quantity of cement.
- ii. The site engineer shall be regularly notified when supplies of cement are made to the site store. Copies of invoices shall be made available to the site engineer and a common cement register shall be kept at his office showing the supply stock and issue on a daily basis.

B. Steel

- i. All the requirement of reinforcing steel bars shall be supplied by the contractor. The reinforcement bars shall conform to BIS 1139 in the case of medium tensile steel deformed bars and to BIS 1786 in the case of cold twisted steel bars.
- ii. All steel shall be of Fe 500 grade quality unless specifically permitted by the Consultants. No rerolled material will be accepted.
- iii. The reinforcing steel work will be measured and paid by measuring the lengths of reinforcing steel rods actually placed and embedded in concrete and weights calculated at the following unit rates for different diameters.

6mm dia	-	0.22 kg/m.
8mm dia	-	0.39 kg/m.
10mm dia	-	0.60 kg/m.
12mm dia	-	0.89 kg/m.
16mm dia	-	1.60 kg/m.
20mm dia	-	2.46 kg/m.
25mm dia	-	3.85 kg/m.
32mm dia	-	6.31 kg/m.

All wastage and other losses will be on contractors account.

- iv. The site engineer shall be regularly notified when supplies of steel are made to the site. Copies of invoices shall be made available to the site engineer and a common stock register of steel materials shall be kept in his office.

C. Pipes, Specials, Valves, etc.

- i. All the pipes, specials and valves shall be ISI marked. Latest ISI Certification of the manufacturer should also be provided for verification.

D. Pumps, blower and other mechanical equipments

Contractor shall submit 4 sets of detailed data sheet with specification, literature, drawings, etc. duly signed by the manufacturer and the contractor and got approved from KINFRA/Consultant before the procurement.

E. Other Materials

- i. All other materials required for the work is also to be procured by the contractors. All materials that are brought to site for use in the work shall conform to the relevant BIS specification.
- ii. All materials to be used in the works shall have the specific approval of the site engineer as to its quality and grade. If any batch of materials are found unacceptable and rejected by the engineer the same shall be removed from the site without demure.
- iii. In the event where there are no standard specification for any materials, the Judgement of the site engineer will be final as to its quality for incorporating the same in the works.

6. Scope of Work of the Contractor In addition to GCC 10A (Materials to be provided by the Contractor) as follows:

6.1 Scope of Supplies and Services

Unless otherwise expressly limited in the Technical Specifications, the Contractor's obligation cover design & engineering; civil engineering work; dismantling, if any, of existing building, structures & equipment; modification / diversion, if any, of utility / services; fabrication & supply of steel structures; manufacture (including associated purchases and / or supply of plant & equipment ; inland transportation; intermediate storage; insurance & handling; erection work; testing; pre-commissioning; start-up & commissioning and demonstration & establishment of performance guarantee parameters of the Works as detailed hereafter and operation & maintenance in accordance with the plans, specifications, drawings, codes and any other documents as specified in the Technical Specifications.

The Contractor shall, unless specifically excluded in the Contract, perform all such work and / or supply all such items and materials not specifically mentioned in the Contract but that can be reasonably inferred from the Contract as being required for attaining

Completion of the works (within the Battery limits as defined in the Technical Specification) as if such work and / or items and materials were expressly mentioned in the Contract without any extra cost to Employer.

6.2 Design, Drawings & Technical Documents

The Contractor shall be responsible for supply of all the detailed design, drawings and technical documents & information in respect of the plant & equipment as per Appendix 2 to Contract Agreement & commissioning spares. The Contractor shall deliver the design, drawing, technical documents & information, to KINFRA.

6.3 Dismantling & Demolition of Existing Building, Structures, Plant & Equipment (As specified in Technical Specifications)

The Contractor shall be responsible for carrying out dismantling / demolition of necessary existing buildings and structures including foundations, covered works and plant & equipment and stacking and expeditious removal of the debris to the dumping ground to be specified by KINFRA within a distance of 10 km from the site.

6.4 Supply of Plant & Equipment, Structures, Commissioning Spares, Operation & Maintenance Spares, Initial Fills, reagents & Lubricants and Special Tools & Tackles

6.4.1 Plant and Equipment

The Contractor shall be responsible for supply of plant & equipment as described in the Technical Specifications and Drawings/documents.

6.4.2 Commissioning Spares

The Contractor shall, within the Contract Price, supply adequate commissioning spares required during Start up and commissioning along with the plant & equipment mentioned in Clause 6.4.1, hereof.

Should the commissioning spares found to be inadequate, the Contractor shall supply without any extra cost to KINFRA, additional required commissioning spares within the time schedule to ensure successful commissioning of the Works.

6.4.3 Initial Fill and Consumables, chemicals etc.

The Contractor shall supply along with the Plant & Equipment the Initial Fill and Consumables, chemicals required for the initial fill including flushing liquor and chemicals, well in advance, for commissioning of the Works.

6.4.4 Special Tools & Tackles

The Contractor shall supply along with the Plant & Equipment special tools & tackles, instruments and appliances which will be required for erection, commissioning, operation and maintenance of the plant and equipment. The Contractor shall provide ordering specification including the names of suppliers giving sufficient details to enable KINFRA to procure such special tools, tackles, instruments and appliances, at a later date when necessary, after completion of the operation and maintenance period.

6.5 Civil Engineering Work (As specified in Technical Specifications)

Unless otherwise expressly limited and/or excluded elsewhere in the Contract from Contractor's scope, the Contractor shall be responsible for the construction of all civil foundation for structures and equipment, construction of super structures, buildings and all other connected civil construction works included in the scope of work as per Technical Specifications.

It is presumed that the Contractor has already inspected the site and satisfied itself about the actual site conditions and has collected any other information which may be required by the Contractor. All necessary soil tests over and above those carried out by KINFRA are to be undertaken by the Contractor and no extra claim on this account shall be admitted.

The Contractor shall be held responsible for proper performance for buildings and structures including all other civil work for a period of 60 months after commissioning of the plant and equipment. Any defect found during this period will be made good by the Contractor at its own cost failing which KINFRA reserves the right to take remedial measures at the Contractor's risk and cost.

6.6 Scope of work for Erection of Structures, Plant & Equipment

The scope of work of the Contractor amongst others, shall be complete erection of the Plant and Equipment, steel structures, etc., as given in the Technical Specifications.

The Contractor shall intimate KINFRA in writing well in advance about the requirement of shut down of any of the existing units / works for inter-connection / incorporation of additional works. The shutdown period shall be mutually discussed and finalised. The work to be undertaken during the shut down period shall be planned meticulously by the Contractor to reduce the shut down period to the minimum.

The Contactor shall use permanent pipe and clamps scaffolding for working at heights.

6.7 Technical Services

Technical Services to be provided by the Contractor shall include the following amongst others:

- a) Raw material testing
- b) Basic design, layout, engineering & drawings.
- c) Detailed design, layout, engineering & drawings.
- d) Drawings / data for carrying out Plant Engineering and detailed design/ drawings of civil, structural, mechanical, electrical and other services.
- e) Technical services relating to planning, procurement, manufacturing, inspection, expediting, packing, shipping, storage, etc.
- f) Supervision of civil & structural engineering work & erection work including specialised erection services.
- g) Technical consultation / liaison / guidance relating to detail design and plant engineering by Contractor's, Coordination relating to site work and other engineering work, feedback data and information to KINFRA / Consultant for the Contractor's scope of supply and services.
- h) Project Management Services including co-ordination relating to customs clearance, transportation, insurance, claim settlement, inspection of supplies, construction planning and scheduling, erection planning, field construction engineering, trial runs, start up, commissioning and performance guarantee tests.
- i) Quality control and adherence to time schedule, control of site work and other Indian works.
- j) The Contractor shall assist by providing necessary drawing and documents required by statutory and/or other concerned authorities.
- k) Post Commissioning services in accordance with terms and conditions stipulated under the Contract.

6.8 Training of Employer's Personnel

The Contractor shall arrange to impart on-site training to KINFRA's personnel during the defect liability period for operation of the plant

and equipment under the Contractor's scope of supply. KINFRA's operators shall be appointed during the defect liability period, at their own expense so that they may get experience in operation and of the plant of the entire period of one year. The plant and equipment shall be operated by such operators after the defect liability period.

6.9 Commissioning and Demonstration of Performance Guarantee

Commissioning and demonstration of performance guarantee test shall be conducted as per the Technical Specification.

The Contractor guarantees the equipment for its workmanship, materials, design and satisfactory performance in accordance with the relevant specifications & provisions of this Contract. The guarantee for performance includes individual items and systems for the ratings/output as well as for the integrated operation of the Plant. The Contractor's responsibility under this guarantee shall not in any way be reduced, diminished or absolved for any reason whatsoever in respect of supplies, materials and equipment not manufactured by the Contractor. The Contractor, upon successful commissioning of each equipment /system will conduct performance guarantee tests to demonstrate the integrated operation of all equipment / systems.

The details of the performance guarantee tests, test procedures, test schedules, for the demonstration of the performance guarantees shall be submitted to KINFRA which will be mutually agreed upon. Any subsequent deviation / modification in the agreed schedule, if considered necessary, at a later date shall be mutually discussed and agreed upon.

After commencing a test, it shall be completed unless in the opinion of either KINFRA or the Contractor a safety hazard exists which necessitates shutdown.

6.10 Operation and Maintenance services during Defect Liability Period

The Contractor shall provide operation and maintenance services for the plant and equipment during the defect liability period of 36 months from the date of Commissioning.

The Contractor shall maintain the plant on their own cost and no additional cost shall be paid to them for spares.

All necessary and incidental charges for providing operation and maintenance personnel during the defect liability period shall be borne by the Contractor. During this operation and maintenance tenure, KINFRA shall provide power supply and the raw water.

During the defect liability period, the Contractor shall perform the following services and obligations in accordance with the terms of this Agreement;

- a) operate and maintain the works and deliver drinking water as per the Technical Specification.
- b) deploy the requisite number of trained and experienced personnel as is considered necessary to perform the Operation and Maintenance services;
- c) maintain and make necessary repairs to the plant and equipment in accordance with the provisions of this Agreement;
- d) client shall provide only consumable like alum, lime, other chemicals if any, power supply. No spares shall be provided by the client during this period
- e) keep accurate and complete records of operating data and activity, and make them available to KINFRA, whenever required by KINFRA.

7. Commissioning and demonstration of Performance Guarantee Test

The commissioning and the demonstration of performance guarantee test shall be conducted as per the Technical Specification.

8. Compensation for Non-fulfillment of the Performance Guarantee parameters

Sl. No.	Guarantee parameter	Guaranteed value	Acceptable Tolerance Limit	Compensation within Tolerance Limit (<i>in absolute figures</i>)	Note
					Remarks: Case 1. Case 2.
					<i>(to use as applicable)</i>

Note:

Case 1: The plant will be rejected as per stipulations given in the General Conditions of Contract, if the results of the performance

tests are beyond/below the acceptable tolerance limits, as the case may be.

Case 2: The plant will be rejected as per stipulations given in the General Conditions of Contract, if the results of the performance tests are beyond/below the guaranteed value, as the case may be.

The compensation for non-fulfilment of the Performance Guarantee parameters/values within tolerance limits for reasons not attributable to KINFRA is limited to 5% (Five per cent of only) of the Contract Price.

9. Outage of plant and equipment (During defect liability period and maintenance period)

1.1 Scheduled Outage

The Contractor shall be eligible for scheduled outage of the works during defect liability period (as per clause 6.10 above) above for annual maintenance/checkup and repairs of the plant and equipment, allowed by KINFRA in accordance with this Contract. The scheduled outage shall be 10 days per year. Unused portion of the scheduled outage will not be carried over to the next accounting year.

The Contractor shall arrange its scheduled repair as per the mutual agreement with KINFRA.

9.2 Compensation for down time of plant and equipment

During Operation and Maintenance period (as per clause 6.10 above) above, in the event the plant and equipment is not producing the required output as per the stipulated quantity and quality, over and above the permitted scheduled outage, for reasons not attributable to KINFRA, compensation shall be levied on the Contractor as detailed below.

Sl. No.	Down time of Plant and Equipment/Production of drinking water	Compensation
01		
02		
03		
04		
05		

2. CLAUSE 25 (Settlement of Disputes & Arbitration) shall be amended as follows:

Any dispute or difference arising between the parties hereto in respect of any aspect of this Agreement or the interpretation construction or effect of the terms and condition of the Agreement shall be first settled mutually by negotiations between the parties. In case no settlement is reached, such dispute or difference shall be referred to a Sole Arbitrator if both the parties agree upon the same. Should the parties not agree to the appointment of a Sole Arbitrator, each party shall appoint its own Arbitrator and the two Arbitrators so appointed by the parties shall, before entering upon the reference, appoint the third Arbitrator who shall act as the presiding Arbitrator. The arbitration proceedings shall be conducted and governed by the Arbitration and Conciliation Act, 1996 in conjunction with Arbitration and Conciliation Act. [Amendment] 2015 and amendment made thereof. The language of the arbitration shall be English and the place of arbitration shall only be Thiruvananthapuram, Kerala.

The Award made by the Arbitral Tribunal shall become final and binding upon the parties and shall be enforced in accordance with applicable provisions of the Arbitration and Conciliation Act, 1996 in conjunction with Arbitration and Conciliation Act [Amendment] 2015 and any subsequent amendment made thereof.

APPENDIX – 2

TIME SCHEDULE

1.0 Time Schedule for Completion of the Works

The Works will be commissioned within Eighteen (18) months from the effective date of the Contract as per **Article-5** of the Contract Agreement. The overall time schedule for completion of the Works is given below:

Sl. No.	Items of Work	Commencement (No. of Month from Effective Date)	Completion (No. of Month from Effective Date)
1.	Basic Engineering		
2.	Detailed Design Engineering		
3.	Civil Work		
4.	Supply / Delivery of:		
	i) Building Steel Structures & Sheeting		
	ii) Mechanical Plant & Equipment including Technological Structures		
	iii) Electrical Plant & Equipment:		
5.	Erection of Building Steel Structures & Sheeting:		
6.	Erection:		
	i) Mechanical Plant & Equipment		
	ii) Electrical Plant & Equipment		
7.	Startup & Commissioning		
8.	Performance Guarantee Test		

2.0 Time Schedule for Feed back Data, Drawings and Documents

2.1 Within _____ weeks from the Effective Date of Contract, the Contractor shall submit to the Engineer/ Consultant preliminary list of all drawings and documents (with 3D model for assembly and sub-assembly drawings) by title using the approved numbering system and indicating the schedule of submission of drawings in conformity with the time schedule given in Clause 2.2 and 2.3 hereof. This list shall be updated and submitted by the Contractor at the end of every quarter of the year.

2.2 Drawing / Documents for Approval

2.2.1 The Contractor shall submit the various drawings and documents (with 3D model for assembly and sub-assembly drawings) to the Engineer / Consultant for approval, as per Technical Specification.

2.2.2 After approval by KINFRA / Consultant, the Contractor shall submit approved drawings and documents in 5 copies, to KINFRA.

2.3 Drawings / Documents for Information / Review

2.3.1 The Contractor shall submit to the Engineer / Consultant for information / review of the drawings and documents (with 3D model for assembly and sub-assembly drawings) as per Technical Specification.

2.3.2 After "no comment" clearance by the Engineer / Consultant, the Contractor shall submit the final drawings and documents in 5 copies, to KINFRA.

2.4 As-Built Drawings and Documents

2.4.1 The Contractor shall submit As-built drawings & documents (with 3D model for assembly and sub-assembly drawings) after Performance Guarantee Test, but before release of payment for PG Test certificate, as per the Schedule given below:

Sl. No.	Description	No. of Copies	Time of Submission in weeks from the Effective Date of Contract
1.	Classified Drawing List as per Technical Specification		
2.	Performance data		
3.	Test charts and inspection certificates in bound volumes		
4.	Operation and safety manuals		
5.	Maintenance manuals		
6.	List of spares (Operation, Maintenance)		
7.	Drawings & bill of materials for Operation & Maintenance Spares		
8.	Ordering Specifications including catalogues & details for Operation & Maintenance Spares		
9.	Drawings / ordering specifications for operating consumables / supplies		

Sl. No.	Description	No. of Copies	Time of Submission in weeks from the Effective Date of Contract
10.	One set of all documents as listed above, in Pen drive		

- 2.5 Equipment drawings and Erection Instructions drawings for the Plant and Equipment shall be supplied by the Contractor at least one month before the shipment / despatch of the Plant & Equipment.
- 2.6 Construction Management Manual: The successful Tenderer shall submit for Employer's review and approval a Construction Management Manual indicating the Contractor's organizational set up and responsibilities of various agencies.

KINFRA

TERMS OF PAYMENT

1. General

1.1 KINFRA shall pay the Contractor for the Scope of Works detailed under Clause 6 of SCC & Technical Specifications.

1.2 The Contractor shall reimburse KINFRA all costs, charges, damages or expenses which KINFRA may have paid or incurred, if and to the extent to which the Contractor is liable under this Contract to pay upon written request of the Engineer, failing which such costs, charges, damages or expenses shall be deducted by KINFRA from any money due or becoming due by KINFRA to the Contractor under this Contract or any other Contract failing which such amounts shall be considered as debt from the Contractor to KINFRA and shall be recoverable accordingly.

2. Terms of Payment-

2.1 Terms of Payment for Design, engineering, supply, erection, testing & commissioning and demonstration of PG tests of the works

2.1.1 Seventy percent (70%) of the Contract Price for Part-A shall be released against supply of major Equipment. The payments under this clause shall be released on submission of following documents:

- (a) Contractor's Invoice;
- (b) Packing list;
- (c) Manufacturer's test / Quality certificate;
- (d) Inspection certificate / Despatch clearance issued by Employer
- (e) Guarantee / Warranty certificate
- (f) Certificate from contractor/vendor certifying the materials are despatched are guarantee as new;
- (g) Necessary recommendations from Consultant are required for the above

2.1.1.1 All interim / progress payments shall be regarded as payments by way of advance against the final payment only and not as payment for work completed and shall not preclude defective / imperfect / incomplete Works to be removed. It will not be considered as an admission by KINFRA of the due performance of the Contract or any part thereof by the Contractor nor shall it

preclude, determine or affect in any way the powers of KINFRA under these conditions or in any way vary or affect the Contract.

2.1.2 Balance Twenty Percent (20%) of the contract price of Part A shall be released after successful installations of items. The payment under this clause shall be released on submission of following documents.

- a. Contractors's invoice
- b. Certificate for Consultant and KINFRA for completion of erection.

2.1.3 Balance Ten Percent (10%) will be made after the completion of work and on satisfactory commissioning of the project

2.2 Civil Works

90% on measured civil works. Balance 10% to be released after completion and commissioning of the Project.