

# **SALEM CITY MUNICIPAL CORPORATION**

## **PACKAGE – III (STP)**

### **BID DOCUMENT**

#### **VOLUME – I**

**NAME OF THE WORK:** Designing, providing, constructing, erection and commissioning, startup and performance trial run for 6Months followed by 5 years of O & M of 35 mld capacity sewage treatment plant (STP) at MANKUTTAI with selected modern technology in Salem City Municipal Corporation in Tamil Nadu on DBOT Basis.

**TAMILNADU URBAN DEVELOPMENT PROJECT**

**AGREEMENT NO.**

**NATIONAL COMPETITIVE BIDDING**

**(CIVIL WORKS)**

**(LUMPSUM – CONTRACT)**

NAME OF WORK : Designing, providing, constructing, erection and commissioning, startup and performance trial run for 6 months followed by 5 years of O&M of 35 mld capacity sewage treatment plant (STP) at MANKUTTAL with selected modern technologies in Salem City Municipal Corporation on DBOT Basis.

PERIOD OF SALE OF BIDDING DOCUMENT : FROM **17.06.10** TO **20.07.10**

TIME AND DATE OF PRE-BID CONFERENCE : DATE **01.07.10** TIME 11.00 HOURS

LAST DATE AND TIME FOR RECEIPT OF BIDS : DATE **21.07.10** TIME 15.00 HOURS

TIME AND DATE OF OPENING OF BIDS : DATE **21.07.10** TIME 15.15 HOURS

PLACE OF OPENING OF BIDS : Conference Hall at fifth floor, Directorate of Municipal Administration, Ezhilagam Annex, Chepauk, Chennai-600 005.

OFFICER INVITING BIDS :

**INVITATION FOR BID**

**(IFB)**

**GOVERNMENT OF TAMIL NADU  
TAMIL NADU URBAN DEVELOPMENT PROJECT - III  
SALEM CITY MUNICIPAL CORPORATION  
INVITATION FOR BIDS (IFB)**

**NATIONAL COMPETITIVE BIDDING**

Bid No: E2/2304/2000/SS-1 (STP)

Dated: 14. 06. 2010

1. The Government of India has received a loan from the International Bank for Reconstruction and Development (IBRD) towards cost of Third Tamil Nadu Urban Development Project and intends to apply a part of the funds to cover eligible payments under contracts for construction of works as detailed below. Bidding is open to all bidders from eligible source countries as defined in the IBRD guidelines for procurement. Bidders from India should, however, be registered with the Government of Tamil Nadu or other state Governments / Government of India, or State / Central Government Undertakings. **Bidders are advised to note the minimum qualification criteria specified in Clause 4 of the instructions to Bidders to quality for the award of the contract.**

2. THE COMMISSIONER, Salem city Municipal Corporation, invites bids for the construction of works detailed in the table.

3. Bidding documents (and additional copies) may be purchased from the office of **The COMMISSIONER, SALEM CORPORATION, from 17.06.10 to 20.07.10** for a non-refundable fee (three sets) as indicated, in the form of cash or Demand Draft on any Scheduled bank payable at SALEM in favour of **The COMMISSIONER, SALEM CORPORATION**. Interested bidders may obtain further information at the same address. Bidding documents requested by mail will be despatched by registered/speed post on payment of an extra amount of **Rs.1000/-** **The COMMISSIONER, SALEM CORPORATION** will not be held responsible for the postal delay if any, in the delivery of the documents or non-receipt of the same.

4. The Bid document can also be freely downloaded from the websites: [www.tenders.gov.in](http://www.tenders.gov.in), [www.salemcorporation.gov.in](http://www.salemcorporation.gov.in) and [www.tenders.tn.gov.in](http://www.tenders.tn.gov.in) and used at free of cost. The bidders who have downloaded the bid documents, shall be solely responsible for checking the web site for any addendum / amendment issued subsequently to the bid document and take into consideration the same while preparing and submitting the bids.

5. Bids must be accompanied by bid security of the amount specified for the work in the table below, drawn in favour of THE COMMISSIONER, Salem City Municipal Corporation, SALEM. Bid security will have to be in any one of the forms as specified in the bidding documents and shall have to be valid for **45 days** beyond the validity of the bid.

6. Bids must be delivered to "The Commissioner, Salem City Municipal Corporation", at **Room No. 2, Office of the Director of Municipal Administration, VI Floor, Ezhilagam Annex, Chepauk, Chennai – 600 005** during normal working hours on any of the working days on or before 15.00 hrs. on 21.07.10 and will be opened on the same day at 15.15 hrs on 21.07.10 at the **Conference Hall at fifth floor, Directorate of Municipal Administration, Ezhilagam Annex, Chepauk, Chennai-600 005**, in the presence of the bidders who wish to attend. If the office happens to be closed on the date of receipt of the bids as specified, the bids will be received and opened on the next working day at the same time and venue.

7. A pre-bid meeting will be held on **01.07.10 at 11.00 hrs.** At the Office of the COMMISSIONER, Salem City Municipal Corporation, SALEM, to clarify the issues and to answer questions on any matter that may be raised at that stage as stated in Clause 9.2 of 'Instructions to Bidders' of the bidding document. Non attendance at the pre-bid conference will not be the cause of disqualification of the bidders.

8. Other details can be seen in the bidding documents.

Package No.	Name of work	Approximate value of work (Rs.)	Bid security (Rs.)	Cost of document (Rs.)	Period of completion
STP Package III	Designing, providing, constructing, erection and commissioning, startup and performance trial run for 6 months followed by 5 years of O&M of 35 mld capacity sewage treatment plant (STP) at MANKUTTAI with selected modern technologies in Salem City Municipal Corporation on DBOT Basis	24,50,00,000	24,50,000	5000+200 (VAT) Total Rs.5200 for one set containing three copies	90 months (1. Construction and Commissioning 24 months. 2. Performance trial run 6 months. 3. Subsequent O&M.-60 months)

**COMMISSIONER**  
**Salem City Municipal Corporation**

**SECTION 1: INSTRUCTIONS TO BIDDERS**  
**(ITB)**

## Section 1: Instructions to Bidders

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## **A. General**

### **1. Scope of Bid**

- 1.1 The Commissioner, Salem City Municipal Corporation, SALEM (referred to as Employer in these documents) invites bids for the construction of works (as defined in these documents and referred to as "the works") detailed in the table given in IFB.
- 1.2 The successful bidder will be expected to complete the works by the intended completion date specified in the Contract data.

### **2. Source of Funds**

- 2.1 The Government of India has received a loan from the International Bank for Reconstruction and Development/the International Development Association (hereinafter called "the Bank") towards the cost of Third Tamil Nadu Urban Development Project (TNUDP III) and intends to apply a part of the funds to cover eligible payments under the contract for the Works. Payments by the Bank will be made only at the request of the borrower and upon approval of the Bank in accordance with the *Loan Agreement*, and will be subject in all respects to the terms and conditions of that Agreement. Except as the Bank may specifically otherwise agree, no party other than the borrower shall derive any rights from the *Loan Agreement* or have any rights to the loan proceeds.
- 2.2 The loan agreement prohibits a withdrawal from the loan account for the purpose of any payment to persons or entities, or for any import of goods, if such payment or import, to the knowledge of the Bank, is prohibited by a decision of the United Nations Security Council, taken under Chapter VII of the Charter of the United Nations.

### **3. Eligible Bidders**

- 3.1 This *Invitation for Bids* is open to all bidders from the eligible countries as defined under the *IBRD Guidelines for Procurement*. Any materials, equipment, and services to be used in the performance of the Contract shall have their origin in the eligible source countries.
- 3.2 All bidders shall provide in Section 2, Forms of Bid and Qualification Information, a statement that the Bidder is not associated, nor has been associated in the past, directly or indirectly, with the Consultant or any other entity that has prepared the design, specifications, and other documents for the Project or being proposed as Project Manager for the Contract. A firm that has been engaged by the Borrower to provide consulting services for the preparation or supervision of the works, and any of its affiliates shall not be eligible to bid.
- 3.3 Government-owned enterprises in the Employer's country may only participate if they are legally and financially autonomous, operate under commercial law and are not a dependent agency of the Borrower or Sub-borrower.
- 3.4 Bidders shall not be under a declaration of ineligibility for corrupt and fraudulent practices issued by the Bank in accordance with sub-clause 37.1.

### **4. Qualification of the Bidder**

- 4.1 All bidders shall provide in Section 2, Forms of Bid and Qualification Information, a preliminary description of the proposed work method and schedule, including drawings and charts, as necessary.
- 4.2 Deleted.
- 4.3 All bidders shall include the following information and documents with their bids in Section 2:



- (a) Copies of original documents defining the constitution or legal status, place of registration, and principal place of business; written power of attorney of the signatory of the Bid to commit the Bidder;
- (b) Total monetary value of construction work performed for each of the last five years;
- (c) Experience in works of a similar nature and size for each of the last five years, and details of works under way or contractually committed; and clients who may be contacted for further information on those contracts;
- (d) Major items of construction equipment proposed to carry out the Contract;
- (e) Qualifications and experience of key site management and technical personnel proposed for the Contract;
- (f) Reports on the financial standing of the Bidder, such as profit and loss statements and auditor's reports for the past five years;
- (g) Evidence of adequacy of working capital for this contract (access to line (s) of credit and availability of other financial resources);
- (h) Authority to seek references from the Bidder's bankers;
- (i) Information regarding any litigation or arbitration resulting from contracts executed by the Bidder in the last five years or currently under execution. The information shall include the names of the parties concerned, the disputed amount, cause of litigation, and matter in dispute;
- (j) Proposals for subcontracting components of the Works which in aggregate add to more than 20 percent of the Bid Price *(for each, the qualifications and experience of the identified sub-contractor in the relevant field should be annexed. No vertical splitting of the work for sub-contracting is acceptable)*; and
- (k) The proposed methodology and program of construction including Environmental Management Plan backed with equipment, materials and manpower planning and deployment, duly supported with broad calculations and quality control procedures proposed to be adopted, justifying their capability of execution and completion of the work as per technical specifications within the stipulated period of completion as per milestones. Bidders may use the draft EMP covering minimum mitigation measures furnished in the Vol.II of Technical Specification for guidance.
- (l) Certificate from the engineer-in-charge duly attested by the Notary Public to be furnished.

#### **4.4 BIDS FROM JOINT VENTURES ARE NOT ACCEPTABLE.**

#### **4.5 A.To qualify for award of the contract, each bidder in its name should have in the last five years i.e., 2005-06, 2006-07, 2007- 2008 , 2008-09, and 2009-10**

- (a) Achieved, in at least two financial years, a minimum annual financial turnover (in all classes of civil engineering construction works only) of **Rs. 98 Million @**
- (b) Satisfactorily completed, as a prime contractor or as sub contractor duly certified by the employer or main contractor supported by authorization from the employer for sub-contracting, at least **one similar work** such as sewerage collection system, sewage pumping stations, Sewage Treatment Plants / Effluent Treatment Plant of value not less than **Rs. 98 Million @**
- (c) Executed in any one year as a prime contractor, or as subcontractor duly certified by the employer/main contractor supported by authorization from the employer for subcontracting, the following minimum quantities of work:

1. Should have designed, constructed and commissioned a Sewage Treatment Plant/ Effluent Treatment Plant with any technology of capacity not less than 7 MLD

As an alternative to (c) (1) above, the bidder should meet one of the following three criteria with other two having fully met by the identified sub-contractors whose name and qualification details should be furnished for verification:

- (i) Designed a Sewage Treatment Plant / Effluent Treatment Plant of any Technology of capacity not less than 7 MLD.
- (ii) Constructed and commissioned one sewage treatment plant / Effluent Treatment Plant with any technology of capacity not less than 7 MLD
- (iii) Executed sewerage collection system with sewers of any pipe material of size 150 mm dia. and above for 10 km length (or) sewage pumping station of capacity 7 MLD.

Note: In both the above cases under (c), if the contractor or his identified sub-contractor has experience in designing and construction of STP only in Waste Stabilization Pond (WSP) technology, or any other technology not opted for by the Employer under this contract, then the contractor has to provide an experienced designer with demonstrated and successful track record in the process technology being proposed by the bidders for this package.

*(@)at 2010-2011 price level. Financial turnover and cost of completed works of previous years shall be given weight age of 5% per year based on rupee value to bring them to 2010- 2011 price level.*

***\*The bidder has to furnish the qualification details of identified sub contractors along with the bid and ensure that the identified sub contractors are not changed during the execution of work***

**4.5 B. Each bidder should further demonstrate and confirm availability:**

(a) Availability (either owned or leased or by procurement against mobilization advances) of the following key and critical equipment for this work:

Tipplers	-	2 Nos (6 - 10 Ton capacity)
Mixer machine	-	2 Nos.( 0.30 m3)
Pock line	-	2 Nos. (20 Ton)
Dewatering Pump set's	-	2 Nos. (5.0 HP to 10 HP )
Chain Pully Block	-	3 Nos. (5 Ton capacity)
Welding Transformers	-	2 Nos
Mobile DG set	-	2 Nos. (100 KVA)
Drilling machine	-	1 No. (Up to 16mm drill size)
<b>Earth tester</b>	-	<b>1No. (500 V)</b>
Megger	-	1 No. (500 V)

**NOTE:**

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

The bidders should, however, undertake their own studies and furnish with their bid, a detailed construction planning and methodology supported with layout and necessary drawings and calculations (detailed) as stated in clause 4.3 (k) above to allow the employer to review their proposals. The numbers, types and capacities of each plant/equipment shall be shown in the proposals along with the cycle time for each operation for the given production capacity to match the requirements.

(b) availability for this work of a Project Manager with minimum of 10 years in the project of the size similar to the present work and other personnel with adequate experience as required.

(i) Project Manager - B.E. with Chemical/ Environmental/ Civil Engg – 1 No.

(ii) Senior Engineer - B.E. with Mechanical/ Electrical Engg. – 1 No.

(c) Liquid assets and/or availability of credit facilities of no less than Rs **30 million** in the format given in Section 2.

**(Credit lines/letter of credit/certificates from Banks in the specified format for meeting the funds requirement etc.) -**

**4.5 C.- Deleted**

**4.6** Sub-contractors' experience and resources shall not be taken into account in determining the bidder's compliance with the qualifying criteria except to the extent stated in 4.5 (A) above.

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

$$\text{Assessed Available Bid capacity} = (A*N*1.5 - B)$$

Where

A =Maximum value of civil engineering works executed in any one year during the last five years (updated to 2010-2011 price level) taking into account the completed as well as works in progress.

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

2 years.

B =Value, at 2010-2011 price level, of existing commitments and on-going works to be completed during the next 2 years

**Note:** *The statements showing the value of existing commitments and on-going works as well as the stipulated period of completion remaining for each of the works listed should be countersigned by the Engineer in charge, not below the rank of an Executive Engineer or equivalent.*

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

-made misleading or false representations in the forms, statements and attachments submitted in proof of the qualification requirements; and anywhere else in their bids and/or

-record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc.; for which the bidders will disclose such poor performance during last 5 years and/or

-participated in the previous bidding for the same work and had quoted unreasonably high bid prices and could not furnish rational justification to the employer.

## **5. One Bid per Bidder**

**5.1** Each bidder shall submit only one bid for one contract. A bidder who submits or participates in more than one Bid (other than as a subcontractor who will not submit his bid as bidder or in cases of alternatives that have been permitted or requested) will cause all the proposals with the Bidder's participation to be disqualified.

## **6. Cost of Bidding**

**6.1** The bidder shall bear all costs associated with the preparation and submission of his Bid, and the Employer will in no case be responsible and liable for those costs.

## **7. Site visit**

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

## **Bidding Documents**

### **8. Content of Bidding Documents**

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

Invitation for Bids

Section	1	Instructions to Bidders
Section	2	Forms of Bid and Qualification Information
Section	3	Conditions of Contract
Section	4	Contract Data
Section	5	Specifications
Section	6	Drawings
Section	7	Activity Schedule
Section	8	Forms of Securities

- 8.2** Of the three sets of the bidding documents supplied, two sets should be completed and returned with the bid.

### **9. Clarification of Bidding Documents**

- 9.1** A prospective bidder requiring any clarification of the bidding documents may notify the Employer in writing or by cable (hereinafter "cable" includes telex and facsimile) at the Employer's address indicated in the invitation to bid. The Employer will respond to any request for clarification, which he received earlier than 15 days prior to the deadline for submission of bids. Copies of the Employer's response will be forwarded to all purchasers of the bidding documents, including a description of the enquiry but without identifying its source.

#### **9.2 Pre-bid meeting**

- 9.2.1** The bidder or his official representative is invited to attend a pre-bid meeting which will take place at Office of THE COMMISSIONER, Salem City Municipal Corporation, SALEM -632 001, at 11.00 hours on 01.07.2010
- 9.2.2** The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.
- 9.2.3** The bidder is requested to submit any questions in writing or by cable to reach the Employer not later than one week before the meeting.
- 9.2.4** Minutes of the meeting, including the text of the questions raised (without identifying the source of enquiry) and the responses given will be transmitted without delay to all purchasers of the bidding documents. Any modification of the bidding documents listed in Sub-Clause 8.1 which may become necessary as a result of the pre-bid meeting shall be made by the Employer exclusively through the issue of an Addendum pursuant to Clause 10 and not through the minutes of the pre-bid meeting.
- 9.2.5** Non-attendance at the pre-bid meeting will not be a cause for disqualification of a bidder.

### **10. Amendment of Bidding Documents**

- 10.1** Before the deadline for submission of bids, the Employer may modify the bidding documents by issuing addenda.
- 10.2** Any addendum thus issued shall be part of the bidding documents and shall be communicated in writing to all the purchasers of the bidding documents. Prospective bidders shall acknowledge receipt of each addendum in writing to the Employer.
- 10.3** To give prospective bidders reasonable time in which to take an addendum into account in preparing their bids, the Employer shall extend as necessary the deadline for submission of bids, in accordance with Sub-Clause 20.2 below.

## C. Preparation of Bids

### 11. Language of the Bid

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

### 12. Documents comprising the Bid

12.1 The bid submitted by the bidder shall comprise the following:

- (a) The Bid (in the format indicated in Section 2).
- (b) Bid Security;
- (c) Priced Activity Schedule;
- (d) Qualification Information Form and Documents;

and any other materials required to be completed and submitted by bidders in accordance with these instructions. The documents listed under Sections 2, 4 and 7 of Sub-Clause 8.1 shall be filled in without exception.

### 12.2 Deleted

### 13. Bid Prices

13.1 The contract shall be for the whole works as described in Sub-Clause 1.1, based on the priced **Activity Schedule** submitted by the Bidder.

13.2 The bidder shall fill in rates and prices and line item total (both in figures and words) for all items of the Works described in technical specification **listed in the Activity Schedule** along with total bid price (both in figures and words). *Items for which no rate or price is entered by the bidder will not be paid for by the Employer when executed and shall be deemed covered by the other rates and prices in the Activity Schedule.* Corrections, if any, shall be made by crossing out, initialing, dating and rewriting. The bidder shall fill in the rates and prices for both fixed and variable cost for each year for the Operation and Maintenance.

13.3 All duties, taxes, and other levies payable by the contractor under the contract, or for any other cause shall be included in the total Bid Price submitted by the Bidder.

Note: *"Bidders may like to ascertain availability of excise/custom duty exemption benefits available in India to the contracts financed under World Bank loan/credits. They are solely responsible for obtaining such benefits which they have considered in their bid and in case of failure to receive such benefits for reasons whatsoever, the employer will not compensate the bidder (contractor). Where the bidder has quoted taking into account such benefits, he must give all information required for issue of certificates in terms of such notifications as per form attached to the Qualification Information in the bid. To the extent the employer determines the quantity indicated therein are reasonable keeping in view the bill of quantities, construction programme and methodology, the certificates will be issued within 60 [sixty] days of signing of contract and no subsequent changes will be permitted. No certificate will be issued for items where no quantity/capacity of equipment is indicated in the statement. The bids which do not conform to the above provisions will be treated as non responsive and rejected. Any delay in procurement of the construction equipment /machinery/goods as a result of the above shall not be a cause for granting any extension of time."*

13.4 The **lump sum price** quoted by the bidder is subject to adjustment during the performance of the Contract in accordance with the provisions of Clause 47 of the Conditions of Contract.

**14. Currencies of Bid and Payment**

**14.1** The **lump sum price** shall be quoted by the bidder entirely in Indian Rupees.

**15. Bid Validity**

**15.1** Bids shall remain valid for a period not less than ninety days after the deadline date for bid submission specified in Clause 20. A bid valid for a shorter period shall be rejected by the employer as non-responsive.

**15.2** In exceptional circumstances, prior to expiry of the original time limit, the employer may request that the bidders may extend the period of validity for a specified additional period. The request and the bidders' responses shall be made in writing or by cable. A bidder may refuse the request without forfeiting his bid security. A bidder agreeing to the request will not be required or permitted to modify his bid, but will be required to extend the validity of his bid security for a period of the extension, and in compliance with Clause 16 in all respects.

**15.3 Deleted**

**15.4 Deleted**

**16. Bid Security**

**16.1** The Bidder shall furnish, as part of his Bid, a Bid security in the amount as shown in column 4 of the table of IFB for this particular work. This bid security shall be in favour of THE COMMISSIONER, Salem City Municipal Corporation, SALEM and may be in one of the following forms:

-a bank guarantee issued by a nationalized / scheduled bank located in India or a reputable bank located abroad in the form given in Section 8; or

-Certified cheque, Bank draft or Letter of Credit in favour of THE COMMISSIONER, Salem City Municipal Corporation, Salem-636 001 payable at SALEM

**16.2** Bank guarantees issued as surety for the bid shall be valid for 45 days beyond the validity of the bid.

**16.3** Any bid not accompanied by an acceptable Bid Security and not secured as indicated in Sub-Clauses 16.1 and 16.2 above shall be rejected by the Employer as non-responsive.

**16.4** The Bid Security of unsuccessful bidders will be returned within 28 days of the end of the bid validity period specified in Sub-Clause 15.1.

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

**16.6** The Bid Security may be forfeited

- (a) if the Bidder withdraws the Bid after Bid opening during the period of Bid validity;
- (b) if the Bidder does not accept the correction of the Bid Price, pursuant to Clause 27;  
or
- (c) in the case of a successful Bidder, if the Bidder fails within the specified time limit to



- (i) sign the Agreement; or
- (ii) furnish the required Performance Security.

**17. Alternative Proposals by Bidders**

17.1 Deleted.

**18. Format and Signing of Bid**

**18.1** The Bidder shall prepare one original and one copy of the documents comprising the bid as described in Clause 12 of these *Instructions to Bidders*, bound with the volume containing the Form of Bid, and clearly marked "**ORIGINAL**" and "**COPY**" as appropriate. In the event of discrepancy between them, the original shall prevail.

**18.2** The original and copy of the Bid shall be typed or written in indelible ink and shall be signed by a person or persons duly authorized to sign on behalf of the Bidder, pursuant to Sub-Clauses 4.3. All pages of the bid where entries or amendments have been made shall be initialled by the person or persons signing the bid.

**18.3** The Bid shall contain no alterations or additions, except those to comply with instructions issued by the employer, or as necessary to correct errors made by the bidder, in which case such corrections shall be initialled by the person or persons signing the bid.

**18.4** The Bidder shall furnish information as described in the Form of Bid on commissions or gratuities, if any, paid or to be paid to agents relating to this Bid, and to contract execution if the Bidder is awarded the contract.

## D. Submission of Bids

### 19. Sealing and Marking of Bids

19.1 The Bidder shall seal the original and copy of the Bid in separate envelopes, duly marking the envelopes as "**ORIGINAL**" and "**COPY**". These envelopes (called as inner envelopes) shall then be put inside one outer envelope.

19.2 The **inner and outer** envelopes shall

(a) be addressed to the at the following address:

**The Commissioner, Salem City Municipal Corporation,  
Room no :2,  
O/o Director of Municipal Administration,  
Ezhilagam Annex, 6<sup>th</sup> Floor,  
Chepauk, Chennai-600 005.**

and

(b) bear the following identification:

-Bid for Designing, providing, constructing, erection and commissioning, startup and performance run followed by 5 years of O&M of 35 mld capacity sewage treatment plant (STP) at Mankuttai with selected modern technologies in Salem City Municipal Corporation in Tamil Nadu on DBOT Basis.

**Bid Reference No: E2/2304/2000/SS-1**

DO NOT OPEN BEFORE 15.15 hours on 21.07.10

19.3 In addition to the identification required in Sub-Clause 19.2, the inner envelopes shall indicate the name and address of the bidder to enable the bid to be returned unopened in case it is declared late, pursuant to Clause 21.

19.4 If the outer envelope is not sealed and marked as above, the employer will assume no responsibility for the misplacement or premature opening of the bid.

### 20. Deadline for Submission of the Bids

20.1 Bids must be received by the employer at the address specified above no later than 15:00 hours 21.07.10 In the event of the specified date for the submission of bids declared a holiday for the employer, the Bids will be received up to the appointed time on the next working day.

20.2 The employer may extend the deadline for submission of bids by issuing an amendment in accordance with Clause 10, in which case all rights and obligations of the employer and the bidders previously subject to the original deadline will then be subject to the new deadline.

**21. Late Bids**

**21.1** Any Bid received by the employer after the deadline prescribed in Clause 20 will be returned unopened to the bidder.

**22. Modification and Withdrawal of Bids**

**22.1** Bidders may modify or withdraw their bids by giving notice in writing before the deadline prescribed in Clause 20.

**22.2** Each Bidder's modification or withdrawal notice shall be prepared, sealed, marked, and delivered in accordance with Clause 18 & 19, with the outer and inner envelopes additionally marked "**MODIFICATION**" or "**WITHDRAWAL**", as appropriate.

**22.3** No bid may be modified after the deadline for submission of Bids.

**22.4** Withdrawal or modification of a Bid between the deadline for submission of bids and the expiration of the original period of bid validity specified in Clause 15.1 above or as extended pursuant to Clause 15.2 may result in the forfeiture of the Bid security pursuant to Clause 16.

**22.5** Bidders may offer discounts to, or modify the prices of their Bids only by submitting Bid modifications in accordance with this clause, or included in the original Bid submission.

## **E. Bid Opening and Evaluation**

### **23. Bid Opening**

- 23.1** The employer will open all the Bids received (except those received late), including modifications made pursuant to Clause 22, in the presence of the Bidders or their representatives who choose to attend at 15.15 hours on the date and the place specified in Clause 20. In the event of the specified date of Bid opening being declared a holiday for the employer, the Bids will be opened at the appointed time and location on the next working day.
- 23.2** Envelopes marked "**WITHDRAWAL**" shall be opened and read out first. Bids for which an acceptable notice of withdrawal has been submitted pursuant to Clause 22 shall not be opened. Subsequently all envelopes marked "Modification" shall be opened and the submissions therein read out in appropriate detail.
- 23.3** The Bidders' names, the Bid prices, the total amount of each Bid and of any alternative Bid (if alternatives have been requested or permitted), any discounts, Bid modifications and withdrawals, the presence or absence of Bid security, and such other details as the Employer may consider appropriate, will be announced by the Employer at the opening. No bid shall be rejected at bid opening except for the late bids pursuant to Clause 21. Bids [and modifications] sent pursuant to Clause 22 that are not opened and read out at bid opening will not be considered for further evaluation regardless of the circumstances. Late and withdrawn bids will be returned un-opened to bidders.
- 23.4** The employer shall prepare minutes of the Bid opening, including the information disclosed to those present in accordance with Sub-Clause 23.3.

### **24. Process to be Confidential**

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

### **25. Clarification of Bids**

- 25.1** To assist in the examination, evaluation, and comparison of Bids, the employer may, at his discretion, ask any Bidder for clarification of his Bid, including breakdowns of the prices in the activity schedule as per the Table furnished in Clause 29.6.3. The request for clarification and the response shall be in writing or by cable, but no change in the price or substance of the Bid shall be sought, offered, or permitted except as required to confirm the correction of arithmetic errors discovered by the employer in the evaluation of the Bids in accordance with Clause 27.
- 25.2** Subject to sub-clause 25.1, no Bidder shall contact the employer on any matter relating to its bid from the time of the bid opening to the time the contract is awarded. If the Bidder wishes to bring additional information to the notice of the employer, it should do so in writing.
- 25.3** Any effort by the Bidder to influence the employer in the employer's bid evaluation, bid comparison or contract award decisions may result in the rejection of the Bidders' bid.

### **26. Examination of Bids and Determination of Responsiveness**

**26.1** Prior to the detailed evaluation of Bids, the Employer will determine whether each Bid (a) meets the eligibility criteria defined in Clause 3; (b) has been properly signed; (c) is accompanied by the required securities and; (d) is substantially responsive to the requirements of the Bidding documents.

**26.2** A substantially responsive Bid is one which conforms to all the terms, conditions, and specifications of the Bidding documents, without material deviation or reservation. A material deviation or reservation is one (a) which affects in any substantial way the scope, quality, or performance of the Works; (b) which limits in any substantial way, inconsistent with the Bidding documents, the employer's rights or the Bidder's obligations under the Contract; or (c) whose rectification would affect unfairly the competitive position of other Bidders presenting substantially responsive Bids.

**26.3** If a Bid is not substantially responsive, it will be rejected by the employer, and may not subsequently be made responsive by correction or withdrawal of the non-conforming deviation or reservation.

**27. Correction of Errors**

**27.1** Bids determined to be substantially responsive will be checked by the employer for any arithmetic errors. Errors will be corrected by the employer as follows:

- **Where there is a discrepancy between the amounts in figures and words, the amount in words will govern.**

**27.2** The amount stated in the Bid will be adjusted by the Employer in accordance with the above procedure for the correction of errors and, with the concurrence of the Bidder, shall be considered as binding upon the Bidder. If the Bidder does not accept the corrected amount the Bid will be rejected, and the Bid security may be forfeited in accordance with Sub-Clause 16.6 (b).

**28. Deleted**

**29. Evaluation and Comparison of Bids**

The employer will evaluate and compare only the Bids determined to be substantially responsive in accordance with Clause 26.

**29.2** In evaluating the Bids, the employer will determine for each Bid the evaluated Bid Price by adjusting the Bid Price as follows:

- (a) making any correction for errors pursuant to Clause 27; or
- (b) making an appropriate adjustments for any other acceptable variations, deviations; and
- (c) making appropriate adjustments to reflect discounts or other price modifications offered in accordance with Sub Clause 22.5.
- (d) Other factors considered in evaluation include the optimal land usage.

The evaluation shall be made based on the area occupied by the plant which includes the area occupied by the civil structures, service roads inside the plant, area for green belt.

**29.3** The employer reserves the right to accept or reject any variation, deviation, or alternative offer. Variations, deviations, and alternative offers and other factors which are in excess of the requirements of the Bidding documents or otherwise result in unsolicited benefits for the employer shall not be taken into account in Bid evaluation.

**29.4** The estimated effect of the price adjustment conditions under Clause 47 of the *Conditions of Contract*, during the period of implementation of the Contract, will not be taken into account in Bid evaluation.

**29.5 Deleted.**

**29.6.1** On the basis of life cycle cost of the plant by adding the capitalized cost of the O&M for 5 years which includes cost of power at the rate of Rs.3.50 per kwh and cost of chemicals as furnished by the bidder and discounted to net present value at 10% for the Five years period.

**29.6.2**

**30. Deleted**

## F. Award of Contract

### 31. Award Criteria

**31.1** Subject to Clause 32, the employer will award the Contract to the Bidder whose Bid has been determined to be substantially responsive to the Bidding documents and who has offered the lowest evaluated Bid Price, provided that such Bidder has been determined to be (a) eligible in accordance with the provisions of Clause 3, and (b) qualified in accordance with the provisions of Clause 4. **For comparison, the bid price will be calculated as given in Clause 29.**

**31.2 Deleted.**

### 32. Employer 's Right to accept any Bid and to -reject any or all Bids

**32.1** Notwithstanding Clause 31, the employer reserves the right to accept or reject any Bid, and to cancel the Bidding process and reject all Bids, at any time prior to the award of Contract, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for the Employer's action.

### 33. Notification of Award and Signing of Agreement

**33.1** The Bidder whose Bid has been accepted will be notified of the award by the employer prior to expiration of the Bid validity period by cable, telex or facsimile confirmed by registered letter. This letter (hereinafter and in the *Conditions of Contract* called the "Letter of Acceptance") will state the sum that the Employer will pay the Contractor in consideration of the execution, completion, and maintenance of the Works by the Contractor as prescribed by the Contract (hereinafter and in the Contract called the "Contract Price").

**33.2** The notification of award will constitute the formation of the Contract, subject only to the furnishing of a performance security in accordance with the provisions of Clause 34.

**33.3** The Agreement will incorporate all agreements between the employer and the successful Bidder. It will be signed by the employer and kept ready for signature of the successful bidder in the office of employer within 28 days following the notification of award along with the Letter of Acceptance. Within 21 days of receipt, the successful Bidder will sign the Agreement and deliver it to the employer.

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

**34. Performance Security**

- 34.1** Within 21 days of receipt of the Letter of Acceptance, the successful Bidder shall deliver to the employer a Performance Security in any of the forms given below for an amount equivalent to 5% of the Contract price

a bank guarantee in the form given in Section 8; or

Certified cheque/Bank draft, in favour of THE COMMISSIONER, Salem City Municipal Corporation, payable at Salem

- 34.2** If the performance security is provided by the successful Bidder in the form of a Bank Guarantee, it shall be issued either (a) at the Bidder's option, by a Nationalized/Scheduled Indian bank or (b) by a foreign bank located in India and acceptable to the Employer or (c) by a foreign bank through a correspondent Bank in India [scheduled or nationalized].

- 34.3** Failure of the successful bidder to comply with the requirements of sub-clause 34.1 shall constitute a breach of contract, cause for annulment of the award, forfeiture of the bid security and any such other remedy the Employer may take under the contract, and the Employer may resort to awarding the contract to the next ranked bidder.

**35 Advance Payment and Security**

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

**36. Adjudicator**

- 36.1** The employer proposes that Thiru. L.Viswanathan, Rtd SE/TWAD Board department shall be appointed as Adjudicator under the Contract, at a daily fee of Rs. 5,000/- plus reimbursable expenses. If the Bidder disagrees with this proposal, the Bidder should so state in the Bid. If in the Letter of Acceptance, the employer has not agreed on the appointment of the Adjudicator, the Adjudicator shall be appointed by the President, Institution of Engineers, Tamil Nadu Chapter, at the request of either party.



### 37. Fraud and Corruption

**37.1** It is the Bank's policy to require that Borrowers (including beneficiaries of Bank loans), as well as bidders, suppliers, and contractors and their sub contractors under Bank-financed contracts, observe the highest standard of ethics during the procurement and execution of such contracts<sup>1</sup>. In pursuance of this policy, the Bank:

- (a) defines, for the purposes of this provision, the items set forth below as follows:
    - (i) "Corrupt practice"<sup>2</sup> is the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party.
    - (ii) "fraudulent practice"<sup>3</sup> is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;
    - (iii) "Collusive practice"<sup>4</sup> is an arrangements between two or more parties designed to achieve an improper purpose, including to influence improperly the action of another party;
    - (iv) "coercive practice"<sup>5</sup> is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the action of party;
    - (v) "obstructive practice" is
      - (aa) deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements to investigation in order to materially impede a Bank investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation, or
      - (bb) acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under sub-clause 37-1 (e) below.
- 
- <sup>1</sup> In this contract, any action taken by a bidder, supplier, contractor, or a sub-contractor to influence the procurement process or contract execution for undue advantage is improper
- <sup>2</sup> "another party" refers to a public official acting on relation to the procurement process or contract execution) In this context, "public official" – includes World Bank Staff and employees of other organizations taking or reviewing procurement decisions.
- <sup>3</sup> "a party" refers to a public official the terms "benefit" and "obligation" relate to the procurement process or contract execution and the "act or omission" is intended to influence the procurement process or contract execution.
- <sup>4</sup> "parties" refers to participants in the procurement process (including public officials) attempting to establish bid prices at artificial non competitive levels.
- <sup>5</sup> a "party" refers to a participant in the procurement process or contract execution.
- (b) will reject a proposal for award if it determines that the bidder recommended for award has, directly, or through an agent, engaged in corrupt, fraudulent, collusive, coercive or obstructive practices in competing for the contract in question,
  - (c) will cancel the portion of the loan allocated to a contract if it determines at any time that representatives of the Borrower or of a beneficiary of the loan engaged in corrupt, fraudulent, collusive, or coercive practices during the procurement or the execution of that

contract, without the Borrower having taken timely and appropriate action satisfactory to the Bank to address such practices when they occur.

- (d) will sanction a firm or individual, including declaring ineligible, either indefinitely or for a stated period of time, to be awarded a Bank-financed contract if it at any time determines that the firm has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive or obstructive practices in competing for, or in executing, a Bank-financed contract, and
- (e) will have the right to require that a provision be included in bidding documents and in contracts financed by a Bank loan, requiring bidders, suppliers, and contractors and their sub-contractors to permit the Bank to inspect their accounts and records and other documents relating to the bid submission and contract performance and to have them audited by auditors appointed by the Bank.

**37.2** Furthermore, Bidders shall be aware of the provision stated in Sub-Clause 23.2 and 59.2 (h) of the Conditions of Contract.

**SECTION 2: FORMS OF BID, QUALIFICATION INFORMATION AND LETTER OF ACCEPTANCE**

**Table of Forms:**

- **CONTRACTOR'S BID**
- **QUALIFICATION INFORMATION**
- **LETTER OF ACCEPTANCE**
- **NOTICE TO PROCEED WITH THE WORK**
- **AGREEMENT FORM**

**Contractor's Bid**

Description of the Works: \_\_\_ Designing, providing, constructing, erection and commissioning, startup and performance run followed by 5 years of O&M of 35 mld capacity sewage treatment plant (STP) at MANKUTTAI with selected modern technologies in Salem City Municipal Corporation in Tamil Nadu on DBOT Basis. \_

**BID**

To : The Commissioner

Address : Salem City Municipal Corporation, SALEM - 636 001.

GENTLEMEN,

Having examined the bidding documents including addendum, we offer to execute the Works described above in accordance with the Conditions of Contract, Specifications, Drawings and Activity Schedule accompanying this Bid for the Contract Price of \_\_\_\_\_ [in figures] ( \_\_\_\_\_ ) [in letters].<sup>1</sup>

The advance Payment required is: Rupees \_\_\_\_\_.

We accept the appointment of \_\_\_\_\_ as the Adjudicator.

(OR)

We do not accept the appointment of \_\_\_\_\_ as the Adjudicator and propose instead that \_\_\_\_\_ be appointed as Adjudicator whose daily fees and biographical data are attached.

This Bid and your written acceptance of it shall constitute a binding contract between us. We understand that you are not bound to accept the lowest or any Bid you receive.

We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in bribery.

We also undertake that, in competing for (and, if the award is made to us, in executing) the above contract, we will strictly observe the laws against fraud and corruption in force in India namely "Prevention of Corruption Act 1988".

Commissions or gratuities, if any, paid or to be paid by us to agents relating to this Bid, and to contract execution if we are awarded the contract, are listed below:

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1. To be filled in by the Bidder, together with his particulars and date of submission at the bottom of the Form of Bid.

<u>Name and address of agent</u>	<u>Amount</u>	<u>Purpose of Commission or gratuity</u>
_____		
_____		
_____		

(if none, state "none")

We hereby confirm that this Bid complies with the Eligibility, Bid Validity and Bid Security required by the Bidding documents.

Yours faithfully,

Authorized Signature:

Name & Title of Signatory: \_\_\_\_\_

Name of Bidder : \_\_\_\_\_

Address

## Qualification Information

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

### 1. For Individual Bidders

#### 1.1 Constitution or legal status of Bidder

**[Attach copy]**

Place of registration:

\_\_\_\_\_

Principal place of business:

\_\_\_\_\_

Power of attorney of signatory of Bid

**[Attach]**

#### 1.2 Total value of Civil Engineering construction

Work executed and payments received in the last five years\*\*

(In Rs. Million)

2005- 2006 \_\_\_\_\_β

2006- 2007 \_\_\_\_\_

2007- 2008 \_\_\_\_\_

2008- 2009 \_\_\_\_\_

2009- 2010 \_\_\_\_\_

#### 1.3.1 Work performed as prime contractor (in the same name) on works of a similar nature (STP, ETP, Sewerage Collection System, Sewage Pumping Stations only) over the last five years. \*\*

<u>Project Name</u>	<u>Name of the Employer *</u>	<u>Descripti on of work</u>	<u>Contract No.</u>	<u>Value of contract (Rs. Million)</u>	<u>Date of issue of work order</u>	<u>Stipulated period of completion</u>	<u>Actual date of completion *</u>	<u>Remarks explaining reasons for delay and work completed</u>
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\*\* (List all STP / ETP designed / constructed by the firm in the last 5 years with details.)

#### 1.3.2 Quantities of work executed as prime contractor (in the same name and style) in the last five years: i.e., 2005-06 to 2009-10

<u>Year</u>	<u>Name</u>	<u>Name</u>	<u>Quantity of work performed (MLD)</u>	<u>Remarks *</u>
-------------	-------------	-------------	---	------------------

<u>of the Work</u>	<u>of the *</u>	STP/ETP Capacity not less than 2 mld	(indicate contract Ref)
	—	Design	Construction
2005-2006			
2006-2007			
2007-2008			
2008-2009			
2009-2010			

\*Attach certificate(s) from the Engineer(s)-in-Charge  
 β Attach certificate from Chartered Accountant.

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

Existing commitments and on-going works:

Description of work	Place & State	Contract No. & date	Name and address of Employer	Value of Contract Rs. In Million	Stipulated Period of completion	Value of Remaining work to be completed	Anticipated date of completion
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)

B. Works for which bids already submitted:

Description of work	Place and State	Name and address of Employer	Estimated value of work	Stipulated period of completion	Date when decision is expected	Remarks if any
(1)	(2)	(3)	(4)	(5)	(6)	(7)

\* Attach certificate(s) from the Engineer(s)-in-Charge.

1.5 The following items of Contractor's Equipment are essential for carrying out the Works. The Bidder should list all the information requested below. Refer also to Sub Clause 4.3 (d) of the Instructions to Bidders.

<u>Item of equipment</u>	<u>Requirement</u>		<u>Availability proposals</u>			<u>Remarks</u> (From whom to be procured)
	<u>No.</u>	<u>Capacity</u>	<u>Owned/leased/ capacity</u>	<u>Nos/ condition</u>	<u>Age/ purchased</u>	
Tippers				- 2 No	(6 - 10 Ton cap)	
Mixer machine				- 2 Nos.	(0.30 m3)	
Pock line				- 2 Nos	(20 Tonnes)	
Dewatering Pump set's				- 2 Nos.	(5.0 HP to 10 HP)	
Chain Pully Block				- 3 Nos.	(5 Tonnes Capacity)	
Welding Transformers for structural Steel works				- 2 Nos.		
welding mobile DG set				- 2 Nos.	(100 KVA)	
Drilling machine			- 1 No.	(Upto 16mm drill size)		
Earth tester				- 1 No.	(500 V)	
Megger				- 1 No.	(500 V)	

Qualifications and experience of key personnel proposed for administration and execution of the Contract. Attach biographical data. Refer also to Sub Clause 4.3 (e) and 4.5 (B) (b) of instructions to Bidders and Sub Clause 9.1 of the Conditions of Contract.

<u>Position</u>	<u>Name</u>	<u>Qualifications</u>	<u>Years of Experience General</u>	<u>of</u>	<u>Years of Experience in the proposed position</u>
Project Manager				-	
Senior Engineer					

1.7 Proposed subcontracts and firms involved. [Refer ITB Clause 4.3 (j)]

<u>Sections of the works</u>	<u>Value of Sub-contract</u>	<u>Sub-contractor (name and address)</u>	<u>Experience in similar work</u>

1.8 Financial reports for the last five years: balance sheets, profit and loss statements, auditors' reports (in case of companies/corporation), etc. List them below and attach copies.

1.9 Evidence of access to financial resources to meet the qualification requirements: cash in hand, lines of credit, etc. List them below and attach copies of support documents *[sample format attached]*.



1.10. Name, address, and telephone, telex, and fax numbers of the Bidders' bankers who may provide references if contacted by the Employer.

1.11 Information on litigation history in which the Bidder is involved.

<u>Other party (ies)</u>	<u>Employer</u>	<u>Cause of dispute</u>	<u>Amount involved</u>	<u>Remarks showing present status</u>
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1.12 Statement of compliance under the requirements of Sub Clause 3.2 of the instructions to Bidders.

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1.13 Proposed work method and schedule. The Bidder should attach descriptions, drawings and charts as necessary to comply with the requirements of the Bidding documents. [Refer ITB Clause 4.1 and 4.3 (k)].

2. Joint Ventures - Deleted

3. Additional Requirements

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

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**SAMPLE FORMAT FOR EVIDENCE OF ACCESS TO OR AVAILABILITY OF CREDIT  
FACILITIES \*- CLAUSE 4.5 [B] [c] OF ITB**

**BANK CERTIFICATE**

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

If the contract for the work, namely ..... [funded by the World Bank] is awarded to the above firm, we shall be able to provide overdraft/credit facilities to the extent of Rs. .... to meet their working capital requirements for executing the above contract.

\_\_ Sd. \_\_

Name of Bank

Senior Bank Manager

Address of the Bank

(No other certificate for credit facility will be accepted.)

(Name of the Project)

(Declaration regarding customs/excise duty exemption for materials/  
Construction equipment bought for the work)

From .....

To: .....

(Bidder's Name and Address)

(Name of the Employer)

Dear Sir:

Re: [Name of Work] ..... -

Certificate for Import/Procurement of Goods/Construction Equipment

1. We confirm that we are solely responsible for obtaining customs/excise duty waivers which we have considered in our bid and in case of failure to receive such waivers for reasons whatsoever, the **Employer** will not compensate us.
2. We are furnishing below the information required by the employer for issue of the necessary certificates in terms of the Government of India Central Excise Notification No. 108/95 and Customs Notification No. 85/99.
3. The goods/construction equipment for which certificates are required are as under:

Items	Make/ Brand Name	Capacity [where applicable]	Quantity	Value	State whether it will be procured locally or imported [if so from which country]	Remarks regarding justification for the quantity and their usage in works
<b>Materials</b>						
[a] Cement						
b] Steel						
c] Others (Please Specify)						
Construction Equipment						

4. We agree that no modification to the above list is permitted after bids are opened.
5. We agree that the certificate will be issued only to the extent considered reasonable by the **Employer** for the work, based on the Bill of Quantities and the construction programme and methodology as furnished by us along with the bid.
6. We confirm that the above goods will be exclusively used for the construction of the above work and construction equipment will not be sold or otherwise disposed of in any manner for a period of five years from the date of acquisition.

Date: \_\_\_\_\_

(Signature)

Place: \_\_\_\_\_

(Printed Name)

(Designation) \_\_\_\_\_

(Common Seal) \_\_\_\_\_

***This certificate will be issued within 60 days of signing of contract and no subsequent change will be permitted.***

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

\_\_\_\_\_ [date]

To: \_\_\_\_\_  
\_\_\_\_\_ [name and address of the Contractor]

Dear Sirs,

This is to notify you that your Bid dated \_\_\_\_\_ for execution of the \_\_\_\_\_ [name of the contract and identification number, as given in the Instructions to Bidders] for the Contract Price of Rupees \_\_\_\_\_ (\_\_\_\_\_) [amount in words and figures], as corrected and modified in accordance with the Instructions to Bidders<sup>1</sup> is hereby accepted by our Agency.

We accept/do not accept that \_\_\_\_\_ be appointed as the Adjudicator<sup>2</sup>.

We note that as per bid, you do not intend to subcontract any component of work.  
[OR]

We note that as per bid, you propose to employ M/s. ....  
as sub-contractor for executing.....

*[Delete whichever is not applicable].*

You are hereby requested to furnish Performance Security, plus additional security for unbalanced bids in terms of ITB clause 29.5, in the form detailed in Para 34.1 of ITB for an amount of Rs. \_\_\_\_\_ within 21 days of the receipt of this letter of acceptance valid upto 28 days from the date of expiry of Defects Liability Period i.e. upto ..... and sign the contract, failing which action as stated in Para 34.3 of ITB will be taken.

We have reviewed the construction methodology submitted by you along with the bid in response to ITB Clause 4.3[k] and our comments are given in the attachment. You are requested to submit a revised Program including environmental management plan as per Clause 27 of General Conditions of Contract within 14 days of receipt of this letter.

Yours faithfully,

Authorized Signature

Name and Title of Signatory  
Name of Agency

1 Delete "corrected and" or "and modified" if only one of these actions applies. Delete "as corrected and modified in accordance with the Instructions to Bidders" if corrections or modifications have not been effected.

2 To be used only if the Contractor disagrees in his Bid with the Adjudicator proposed by the Employer in the "Instructions to Bidders."

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

\_\_\_\_\_ (date)

To

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

\_\_\_\_\_

\_\_\_\_\_

Dear Sirs:

Pursuant to your furnishing the requisite security as stipulated in ITB clause 34.1 and signing of the contract agreement for the construction of \_\_\_\_\_ @ a Bid Price of Rs. \_\_\_\_\_, you are hereby instructed to proceed with the execution of the said works in accordance with the contract documents.

Yours faithfully,

## Agreement Form

### **Agreement**

This agreement, made the \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_\_,  
between \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_[name and address of  
Employer]

(hereinafter called "the Employer") and

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_[name and  
address of contractor] (hereinafter called "the Contractor" of the other part).

Whereas the Employer is desirous that the Contractor execute

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_[name and identification number of Contract] (hereinafter called

"the Works") and the Employer has accepted the Bid by the Contractor for the execution and  
completion of such Works and the remedying of any defects therein, at a contract price of  
Rs.....

NOW THIS AGREEMENT WITNESSETH as follows:

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

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

The Common Seal of

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was hereunto affixed in the presence of:

Signed, Sealed and Delivered by the said

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in the presence of:

Binding Signature of the Employer

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Binding Signature of Contractor

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## **SECTION 3: CONDITIONS OF CONTRACT**



**Conditions of Contract**

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## Conditions of Contract

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## Conditions of Contract

### A. General

#### 1. Definitions

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

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

**Activity Schedule** means the priced and completed Activity Schedule forming part of the Bid.

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

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

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

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

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

The **Contractor's Bid** is the completed Bidding document submitted by the Contractor to the Employer.

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

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

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

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

The Employer is the party who will employ the Contractor to carry out the Works.

The **Engineer** is the person named in the Contract Data (or any other competent person appointed and notified to the contractor to act in replacement of the Engineer) who is responsible for supervising the execution of the works and administering the Contract.

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

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

The **Intended Completion Date** is the date on which it is intended that the Contractor shall complete the Works. The Intended Completion Date is specified in the Contract Data. The Intended Completion Date may be revised only by the Engineer by issuing an extension of time.

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

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

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

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

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

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

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

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

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

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

## **2. Interpretation**

**2.1** In interpreting these Conditions of Contract, singular also means plural, male also means female or neuter, and the other way around. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Engineer will provide instructions clarifying queries about the Conditions of Contract.

**2.2** If sectional completion is specified in the Contract Data, references in the Conditions of Contract to the Works, the Completion Date, and the Intended Completion Date apply to any Section of the Works (other than references to the Completion Date and Intended Completion date for the whole of the Works).

**2.3** The documents forming the Contract shall be interpreted in the following order of priority:

- (1) Agreement
- (2) Letter of Acceptance, notice to proceed with the works
- (3) Contractor's Bid
- (4) Contract Data
- (5) Conditions of Contract including Special Conditions of Contract
- (6) Specifications
- (7) Drawings
- (8) Activity Schedule
- (9) Construction Methodology

(10) Any other document listed in the Contract Data as forming part of the Contract.

## **3. Language and Law**

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

#### **4. Engineer's Decisions**

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

#### **5. Delegation**

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

#### **6. Communications**

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

#### **7. Subcontracting**

- 7.1 The Contractor may subcontract with the approval of the Engineer but may not assign the Contract without the approval of the employer in writing. Subcontracting does not alter the Contractor's obligations.

#### **8. Other Contractors**

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

#### **9. Personnel**

- 9.1 The Contractor shall employ the key personnel named in the Schedule of Key Personnel as referred to in the Contract Data (9) to carry out the functions stated in the Schedule or other personnel approved by the Engineer. The Engineer will approve any proposed replacement of key personnel only if their qualifications, abilities, and relevant experience are substantially equal to or better than those of the personnel listed in the Schedule.
- 9.2 If the Engineer asks the Contractor to remove a person who is a member of the Contractor's staff or his work force stating the reasons the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the work in the Contract.

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

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

#### **11. Employer's Risks**

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

## **12. Contractor's Risks**

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

## **13. Insurance**

- 13.1** The Contractor shall provide, in the joint names of the Employer and the Contractor, insurance cover from the Start Date to the end of the Agreement Period including the O&M period, in the amounts and deductibles stated in the Contract Data for the following events which are due to the Contractor's risks:

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

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

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

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

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

## **14. Site Investigation Reports**

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

## **15. Queries about the Contract Data**

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

## **16. Contractor to Construct the Works**

- 16.1** The Contractor shall construct and install the Works in accordance with the Specification and Drawings as approved by the Employer, and as per instructions of Engineer.

## **17. The Works to Be Completed by the Intended Completion Date**

- 17.1** The Contractor may commence execution of the Works on the Start Date and shall carry out the Works in accordance with the program submitted by the Contractor, as

updated with the approval of the Engineer, and complete them by the Intended Completion Date.

## **18. Approval by the Engineer**

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

## **19. Safety**

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

## **20. Discoveries**

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

## **21. Possession of the Site**

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

## **22. Access to the Site**

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

## **23. Instructions**

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

- 23.2** The Contractor shall permit the Bank and/or persons appointed by the Bank to inspect the Site and/or the accounts and records of the Contractor and its sub-contractors relating to the performance of the Contract, and to have such accounts and records audited by auditors appointed by the Bank if required by the Bank. The Contractor's attention is drawn to Sub-Clause 64 (Corrupt or Fraudulent Practices) which provides, inter alia, that acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under Sub-Clause 23.2 constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility under the Procurement Guidelines)

## **24. Disputes**

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

## **25. Procedure for Disputes**

- 25.1** The Adjudicator shall give a decision in writing within 28 days of receipt of a notification of a dispute.
- 25.2** The Adjudicator shall be paid daily at the rate specified in the Contract Data together with reimbursable expenses of the types specified in the Contract Data and the cost shall be divided equally between the Employer and the Contractor, whatever decision is reached by the Adjudicator. Either party may refer a decision of the Adjudicator to an Arbitrator within 28 days of the Adjudicator's written decision. If neither party refers the dispute to arbitration within the above 28 days, the Adjudicator's decision will be final and binding.
- 25.3** The arbitration shall be conducted in accordance with the arbitration procedure stated in the Special Conditions of Contract. The Arbitrators shall give a decision in writing within 120- days of start of the proceedings. The Arbitration shall entertain only those issues which have been earlier referred to the Adjudicator and either party is dissatisfied with the decision given by the Adjudicator.

The procedure for arbitration will be as follows:



- a) In case of Dispute or difference arising between the Employer and a domestic contractor relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Arbitration and Conciliation Act, 1996. The arbitral tribunal shall consist of 3 arbitrators one each to be appointed by the Employer and the Contractor. The third Arbitrator shall be chosen by the two Arbitrators so appointed by the Parties and shall act as Presiding arbitrator. In case of failure of the two arbitrators appointed by the parties to reach upon a consensus within a period of 30 days from the appointment of the arbitrator appointed subsequently, the Presiding Arbitrator shall be appointed by the President of the Institution of Engineers (India), Tamil Nadu Chapter.

In the case of dispute with a Foreign contractor the dispute shall be settled in accordance with provisions of UNCITRAL Arbitration Rules. The Arbitral Tribunal shall consist of three Arbitrators one each to be appointed by the Employer and the Contractor. The third Arbitrator shall be chosen by the two Arbitrators so appointed by the Parties, and shall act a presiding arbitrator. In case of failure of the two arbitrators appointed by the parties to reach upon a consensus within a period of 30 days from the appointment of the arbitrator appointed subsequently, the Presiding arbitrator shall be appointed by the President of the Institution of Engineers (India), Tamil Nadu Chapter.

If one of the parties fails to appoint its arbitrator in pursuance of sub-clause (a) and (b) above within 30 days after receipt of the notice of the appointment of its arbitrator by the other party, then the President of the Institution of Engineers (India), Tamil Nadu Chapter both in cases of the Foreign Contractor as well as Indian Contractor, shall appoint the arbitrator. A certified copy of the order of the President of the Institution of Engineers (India), Tamil Nadu Chapter making such appointment shall be furnished to each parties.

- (d) Arbitration proceedings shall be held at Chennai, Tamilnadu, India, and the language of the arbitration proceedings and that of all documents and communications between the parties shall be English.
- (e) The decision of the majority of arbitrators shall be final and binding upon both parties. The cost and expenses of Arbitration proceedings will be paid as determined by the arbitral tribunal. However, the expenses incurred by each party in connection with the preparation, presentation, etc. of its proceedings as also the fees and expenses paid to the arbitrator appointed by such party or on its behalf shall be borne by each party itself.
- (f) Where the value of the contract is Rs.50 millions and below, the disputes or differences arising shall be referred to the Sole Arbitrator. The Sole Arbitrator should be appointed by agreement between the parties; failing such agreement, by the appointing authority, namely the President of the Institution of Engineers (India), Tamil Nadu Chapter.
- (g) Performance under the contract shall continue during the arbitration proceedings and payments due to the contractor by the owners shall not be withheld, unless they are the subject matter of the arbitration proceedings.

## **26. Replacement of Adjudicator**

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

## **Time Control**

### **27. Program**

- 27.1** Within the time stated in the Contract Data the Contractor shall submit to the Engineer for approval a Program including Environmental Management Plan showing the general methods, arrangements, order, and timing for all the activities in the Works along with monthly cash flow forecast.
- 27.2** An update of the Program shall be a program showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining work including any changes to the sequence of the activities.
- 27.3** The Contractor shall submit to the Engineer, for approval, an updated Program at intervals no longer than the period stated in the Contract Data. If the Contractor does not submit an updated Program within this period, the Engineer may withhold the amount stated in the Contract Data from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Program has been submitted.
- 27.4** The Engineer's approval of the Program shall not alter the Contractor's obligations. The Contractor may revise the Program and submit it to the Engineer again at any time. A revised Program is to show the effect of Variations and Compensation Events.

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

- 28.1** The Engineer shall extend the Intended Completion Date if a Compensation Event occurs or a Variation is issued which makes it impossible for Completion to be achieved by the Intended Completion Date without the Contractor taking steps to accelerate the remaining work and which would cause the Contractor to incur additional cost.
- 28.2** The Engineer shall decide whether and by how much to extend the Intended Completion Date within 21 days of the Contractor asking the Engineer for a decision upon the effect of a Compensation Event or Variation and submitting full supporting information. If the Contractor has failed to give early warning of a delay or has failed to cooperate in dealing with a delay, the delay by this failure shall not be considered in assessing the new Intended Completion Date.

### **29. Deleted**

### **30. Delays Ordered by the Engineer**

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

### **31. Management Meetings**

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

## **32. Early Warning**

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

## C. Quality Control

### 33. Identifying Defects

- 33.1** The Engineer shall check the Contractor's work and notify the Contractor of any Defects that are found. Such checking shall not affect the Contractor's responsibilities. The Engineer may instruct the Contractor to search for a Defect and to uncover and test any work that the Engineer considers may have a Defect
- 33.2** The contractor shall permit the Employer's Technical auditor to check the Contractor's work and notify the Engineer and Contractor of any defects that are found. Such a check shall not affect the Contractor's or the Engineer's responsibility as defined in the Contract Agreement.

### 34. Tests

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

### 35. Correction of Defects

- 35.1** The Engineer shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at Completion and is defined in the Contract Data. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.
- 35.2** Every time notice of a Defect is given, the Contractor shall correct the notified defect within the length of time specified by the Engineer's notice.
- 35.3** The Contractor shall correct the defects noticed during the Operation and Maintenance of the Plant within the time specified in the Engineers notice.

### 36. Uncorrected Defects

- 36.1** If the Contractor has not corrected a Defect within the time specified in the Engineer's notice, the Engineer will assess the cost of having the Defect corrected, and the Contractor will pay this amount.
- 36.2** If the Contractor has not corrected the defects during the operation and Maintenance of the Plant within the Engineers notice, the Engineer will access the cost of having the defect corrected and the Contractor will pay this amount.

*Note: Where in certain cases, the technical specifications provide for acceptance of works within specified tolerance limits at reduced rates, Engineer will certify payments to Contractor accordingly.*

## **D. Cost Control**

### **37. Activity Schedule**

- 37.1** The Contractor shall provide updated Activity Schedules within 14 days of being instructed to by the Executive Engineer. The activities on the Activity Schedule will be coordinated with the activities on the Program.
- 37.2** The Contractor shall show delivery of Materials to the Site separately on the Activity Schedule if payment for materials on Site shall be made separately.

### **38. Changes in the Quantities**

- 38.1** The Activity Schedule shall be amended by the Contractor to accommodate changes of program or method of working made at the Contractor's own discretion. Prices in the Activity Schedule shall not be altered when the Contractor makes such changes to the Activity Schedule.

### **39. Variations**

- 39.1** All Variations shall be included in updated Programs and Activity Schedule produced by the Contractor.

### **40. Payments for Variations**

- 40.1** The Contractor shall provide the Engineer with a quotation (with breakdown of unit rates) for carrying out the Variation when requested to do so by the Engineer. The Engineer shall assess the quotation, which shall be given within seven days of the request or within any longer period stated by the Engineer and before the Variation is ordered.
- 40.2** Deleted.
- 40.3** If the Contractor's quotation is unreasonable (or if the contractor fails to provide the Engineer with the quotation within a reasonable time specified by the Engineer in accordance with Clause 40.1) the Engineer may order the Variation and make a change to the Contract Price which shall be based on Engineer's own forecast of the effects of the Variation on the Contractor's costs.
- 40.4** If the Engineer decides that the urgency of varying the work would prevent a quotation being given and considered without delaying the work, no quotation shall be given and the Variation shall be treated as a Compensation Event.
- 40.5** The Contractor shall not be entitled to additional payment for costs which could have been avoided by giving early warning.

## **41. Cash flow forecasts**

- 41.1 When the Program or Activity Schedule is updated, the contractor is to provide the Engineer with an updated cash flow forecast.

## **42. Payment Certificates**

- 42.1 The Contractor shall submit to the Engineer monthly statements of the estimated value of the work completed less the cumulative amount certified previously along with the details of measurement of the quantity of works executed in a tabulated form as approved by the Engineer.
- 42.2 The Engineer shall check the details given in the Contractor's monthly statement and within 14 days certify the amounts to be paid to the Contractor after taking into account any credit or debit for the month in question in respect of materials for the works in the relevant amounts and under conditions set forth in sub-clause 51(4) of the Contract Data (Secured Advance).
- 42.3 The value of work executed shall be determined by the Engineer after due check measurement of the quantities claimed as executed by the Contractor.
- 42.4 The value of work executed shall comprise the value of completed activities in the Activity Schedule.
- 42.5 The value of work executed shall include the valuation of Variations and Compensation Events.
- 42.6 The Engineer may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.

## **Billing and Payment procedure**

- 1) 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.
- 2) The payment calculations shall include
  - a) Fixed Payments
  - b) Variable Payments
  - c) Liquidated Damages as per Clause 4.4
- 3) 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 for disputing such invoice. The shall pay to the Contractor the accepted amounts, within thirty (30) calendar days from the date of acceptance.

- 4) 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 withheld, but subsequently found to be properly payable following the resolution of such dispute, shall not carry any interest

**Note:** Payment towards Variable Cost will be made only as per actual quantity of sewage treated.

### **43. Payments**

**Payment terms for the work done as per the contract shall be as specified in the Contract Data**

- 43.1** Payments shall be adjusted for deductions for advance payments, retention, other recoveries in terms of the contract and taxes, at source, as applicable under the law. The Employer shall pay the Contractor the amounts certified by the Engineer within 28 days of the date of each certificate. If the Employer makes a late payment, the Contractor shall be paid interest on the late payment in the next payment. Interest shall be calculated from the date by which the payment should have been made upto the date when the late payment is made at 8% per annum.
- 43.2** If an amount certified is increased in a later certificate or as a result of an award by the Adjudicator or an Arbitrator, the Contractor shall be paid interest upon the delayed payment as set out in this clause. Interest shall be calculated from the date upon which the increased amount would have been certified in the absence of dispute.
- 43.3** Activities for which no rate or price has been entered in will not be paid for by the Employer and shall be deemed covered by other rates and prices in the Contract.

### **44. Compensation Events**

- 44.1** The following are Compensation Events unless they are caused by the Contractor:
- (a) The Employer does not give access to a part of the Site by the Site Possession Date stated in the Contract Data.
  - (b) The Employer modifies the schedule of other contractors in a way which affects the work of the contractor under the contract.
  - (c) The Engineer orders a delay or does not issue drawings, specifications or instructions required for execution of works on time.
  - (d) The Engineer instructs the Contractor to uncover or to carry out additional tests upon work which is then found to have no Defects.
  - (e) The Engineer unreasonably does not approve for a subcontract to be let.
  - (f) Ground conditions are substantially more adverse than could reasonably have been assumed before issuance of Letter of Acceptance from the information issued to Bidders (including the Site Investigation Reports), from information available publicly and from a visual inspection of the Site.
  - (g) The Engineer gives an instruction for dealing with an unforeseen condition, caused by the Employer, or additional work required for safety or other reasons.

- (h) Other contractors, public authorities, utilities or the Employer does not work within the dates and other constraints stated in the Contract, and they cause delay or extra cost to the Contractor.
- (i) The advance payment is delayed.
- (j) The effect on the Contractor of any of the Employer's Risks.
- (k) The Engineer unreasonably delays issuing a Certificate of Completion.
- (l) Other Compensation Events listed in the Contract Data or mentioned in the Contract.

**44.2** If a Compensation Event would cause additional cost or would prevent the work being completed before the Intended Completion Date, the Contract Price shall be increased and/or the Intended Completion Date is extended. The Engineer shall decide whether and by how much the Contract Price shall be increased and whether and by how much the Intended Completion Date shall be extended.

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

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

#### **45. Tax**

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

#### **46. Currencies**

**46.1** All payments shall be made in Indian Rupees.

#### **47. Price Adjustment**

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

- (a) The price adjustment shall apply for the work done from the start date given in the contract data upto end of the initial intended completion date or extensions granted by the Engineer and shall not apply to the work carried out beyond the stipulated time for reasons attributable to the contractor.
- (b) The price adjustment shall be determined during each quarter from the formula given in the contract data.
- (c) Following expressions and meanings are assigned to the work done during each quarter:

R = Total value of work done during the quarter. It would include the amount of secured advance for materials paid for (if any) during the quarter, less the



amount of the secured advance recovered, during the quarter. It will exclude value for works executed under variations for which price adjustment will be worked separately based on the terms mutually agreed.

47.2 To the extent that full compensation for any rise or fall in costs to the contractor is not covered by the provisions of this or other clauses in the contract, the rates and prices included in the contract shall be deemed to include amounts to cover the contingency of such other rise or fall in costs.

**47.3 Price escalation clause for O & M over 5 years**

The Project Manager Shall adjust the contract price if taxes, duties and other levies are changed between the date 28 days before the submission of bids for the contract and the date of the last completion certificate. The adjustment shall be the change in the amount of tax payable by the contractor, provided such changes are not already reflected in the contract price or a result of price adjustment clause. If taxes are identifiable it needs to be noted that adjustment will work in both directions viz, if there is a decrease in tax rates, the contractors will be paid less and vice versa.

**48. Retention**

48.1 The Employer shall retain from each payment due to the Contractor the proportion stated in the Contract Data until Completion of the whole of the Works under capital cost indicated in the Activity Schedule. This will be in addition to the recovery of advance payment, if any.

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

48.3 On completion of the whole works, under capital cost indicated in the Activity Schedule the contractor may substitute retention money (*balance half*) with an "on demand" Bank guarantee.

**49. Liquidated Damages**

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

**50. Bonus**

The Employer shall pay bonus to the Contractor of the amount and extent stated in the Contract Data for early completion of the whole works.

**51. Advance Payment**

51.1 The Employer shall make advance payment to the Contractor of the amounts stated in the Contract Data by the date stated in the Contract Data, against provision by the Contractor of an Unconditional Bank Guarantee in a form and by a bank acceptable to the Employer in amounts and currencies equal to the advance payment. The guarantee shall remain effective until the advance payment has been repaid, but the amount of the guarantee shall be progressively reduced by the

amounts repaid by the Contractor. Interest will not be charged on the advance payment.

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

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

**51.4 Secured Advance:**

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

**52. Securities**

52.1 The Performance Security shall be provided to the Employer no later than the date specified in the Letter of Acceptance and shall be issued in an amount and form and by a bank or surety acceptable to the Employer, and denominated in Indian Rupees. The Performance Security shall be valid until a date 28 days from the date of expiry of Defects Liability Period and the additional security for unbalanced bids shall be valid until a date 28 days from the date of issue of the certificate of completion "50% of the Performance Security shall be valid until a date 28 days from the date of expiry of Defects Liability Period and the balance 50% of the Performance Security shall be valid until a date 28 days from the date of expiry of Agreement Period."

The Performance Security for the O & M contract shall be furnished within 14 days from the date of commencement of O & M at the end of construction Contract. In case of failure of the Contractor to furnish the required performance security for O&M Contract within the stipulated time, Employer shall encash the performance security for construction Contract. The Performance Security for O&M Contract shall be valid until 28 days from the date of handing over the Works to the Employer on completion of O&M period. The Bank Guarantee of a Consortium shall be in the name of the Consortium.

**53. Deleted**

**54. Cost of Repairs**

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

## **E. Finishing the Contract**

### **55. Completion**

- 55.1** The Contractor shall request the Engineer to issue a Certificate of Completion of the Works and the Engineer will do so upon deciding that the Work is completed.
- 55.2** The Contractor shall request the Engineer to issue a Certificate of Completion of operation and maintenance and the Engineer will do so upon deciding that the Work is completed.

### **56. Taking Over**

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

### **57. Final Account**

- 57.1** The Contractor shall supply to the Engineer a detailed account of the total amount that the Contractor considers payable under the Contract before the end of the Defects Liability Period. The Engineer shall issue a Defect Liability Certificate and certify any final payment that is due to the Contractor within 56 days of receiving the Contractor's account if it is correct and complete. If it is not, the Engineer shall issue within 56 days a schedule that states the scope of the corrections or additions that are necessary. If the Final Account is still unsatisfactory after it has been resubmitted, the Engineer shall decide on the amount payable to the Contractor and issue a payment certificate, within 56 days of receiving the Contractor's revised account. This needs to be done separately after construction and Operation & Maintenance.

### **58. Operating and Maintenance Manuals**

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

### **59. Termination**

- 59.1** The Employer or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract.
- 59.2** Fundamental breaches of Contract include, but shall not be limited to the following:
- (a) the Contractor stops work for 28 days when no stoppage of work is shown on the current Program and the stoppage has not been authorized by the Engineer;
  - (b) the Engineer instructs the Contractor to delay the progress of the Works and the instruction is not withdrawn within 28 days;
  - (c) the Employer or the Contractor is made bankrupt or goes into liquidation other than for a reconstruction or amalgamation;

- (d) a payment certified by the Engineer is not paid by the Employer to the Contractor within 56 days of the date of the Engineer's certificate;
- (e) the Engineer gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Engineer;
- (f) the Contractor does not maintain a security which is required;
- (g) the Contractor has delayed the completion of works by the number of days for which the maximum amount of liquidated damages can be paid as defined in the Contract data; and
- (h) if the contractor, in the judgment of the Purchaser has engaged in fraud and corruption, as defined in GCC Clause 64, in competing for or in executing the Contract.

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

**59.4** Notwithstanding the above, the Employer may terminate the Contract for convenience.

**59.5** If the Contract is terminated the Contractor shall stop work immediately, make the Site safe and secure and leave the Site as soon as reasonably possible.

## **60. Payment upon Termination**

**60.1** If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Engineer shall issue a certificate for the value of the work done less advance payments received up to the date of the issue of the certificate, less other recoveries due in terms of the contract, less taxes due to be deducted at source as per applicable law and less the percentage to apply to the work not completed as indicated in the Contract Data. Additional Liquidated Damages shall not apply. If the total amount due to the Employer exceeds any payment due to the Contractor the difference shall be a debt payable to the Employer.

**60.2** If the Contract is terminated at the Employer's convenience or because of a fundamental breach of Contract by the Employer, the Engineer shall issue a certificate for the value of the work done, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works and less advance payments received up to the date of the certificate, less other recoveries due in terms of the contract and less taxes due to be deducted at source as per applicable law.

## **61. Property**

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

## **62. Release from Performance**

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

## **63. Suspension of World Bank Loan or Credit**

**63.1** In the event that the World Bank suspends the Loan or Credit to the Employer, from which part of the payments to the Contractor are being made:

(a) The Employer is obligated to notify the Contractor of such suspension within 7 days of having received the World Bank's suspension notice.

(b) If the Contractor has not received sums due to it upon the expiration of the 28 days for payment provided for in Sub-Clause 43.1, the Contractor may immediately issue a 14-day termination notice.

## **64. Corrupt or Fraudulent Practices**

**64.1** If the Employer determines that the Contractor has engaged in corrupt, fraudulent, collusive, coercive or obstructive practices, in competing for or in executing the Contract, then the Employer may, after giving 14 days notice to the Contractor, terminate the Contractor's employment under the Contract and expel him from the Site, and the provisions of Clause 59.5 shall apply.

**64.2** Should any employees of the Contractor be determined to have engaged in corrupt, fraudulent, collusive, coercive, or obstructive practice during the execution of the Works, then that employee shall be removed in accordance with Clause 9.1 (Personnel)

**64.3** For the purposes of this Sub-Clause:

(i) Corrupt practice<sup>46</sup> is the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party.

a. "fraudulent practice"<sup>47</sup> is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation:

- b. “collusive practice”<sup>48</sup> is an arrangement between two or more parties designed to achieve an improper purpose including to influence improperly the actions of another Party:
- c. “coercive practice”<sup>49</sup> is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party ;
- d. “obstructive practice” is
  - (aa) deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation into allegations of a corrupt, fraudulent, coercive or collusive practice, and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or
  - (bb) acts intended to materially impede the exercise of the Bank’s inspection and audit rights provided for under Clause 23 (Instructions, Inspections and Audits)

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....<sup>46</sup> “another party” refers to a public official acting in relation to the procurement process or contract execution) In this context, “public official” inclusive World Bank staff and employees of other organisations taking or reviewing procurement decisions.

....<sup>47</sup> “a party” refers to a public official , the terms “benefit” and “obligation” relate to the procurement process or contract execution and the “act or omission” is intended to influence the procurement process or contract execution.

....<sup>48</sup> “parties” refers to participants in the procurement process (including public officials) attempting to establish bid prices at artificial non competitive levels.

....<sup>49</sup> a “party ” refers to a participant in the procurement process or contract execution.

## F. Special Conditions of Contract

### 1. LABOUR:

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

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

### 2. COMPLIANCE WITH LABOUR REGULATIONS:

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

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

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

a) Workmen Compensation Act 1923 :- The Act provides for compensation in case of injury by accident arising out of and during the course of employment.

b) Payment of Gratuity Act 1972 :- Gratuity is payable to an employee under the Act on satisfaction of certain conditions on separation if an employee has completed 5 years service or more or on death the rate of 15 days wages for every completed year of service. The Act is applicable to all establishments employing 10 or more employees.

c) Employees P.F. and Miscellaneous Provision Act 1952: The Act Provides for monthly contributions by the employer plus workers @ 10% or 8.33%. The benefits payable under the Act are:

- (i) Pension or family pension on retirement or death, as the case may be.
- (ii) Deposit linked insurance on the death in harness of the worker.
- (iii) Payment of P.F. accumulation on retirement/death etc.



- d) Maternity Benefit Act 1951:- The Act provides for leave and some other benefits to women employees in case of confinement or miscarriage etc.
- e) Contract Labour (Regulation & Abolition) Act 1970:- The Act provides for certain welfare measures to be provided by the Contractor to contract labour and in case the Contractor fails to provide, the same are required to be provided, by the Principal Employer by Law. The Principal Employer is required to take Certificate of Registration and the Contractor is required to take license from the designated Officer. The Act is applicable to the establishments or Contractor of Principal Employer if they employ 20 or more contract labour.
- f) Minimum Wages Act 1948:- The Employer is supposed to pay not less than the Minimum Wages fixed by appropriate Government as per provisions of the Act if the employment is a scheduled employment. Construction of Buildings, Roads, Runways are scheduled employments.
- g) Payment of Wages Act 1936:- It lays down as to by what date the wages are to be paid, when it will be paid and what deductions can be made from the wages of the workers.
- h) Equal Remuneration Act 1979:- The Act provides for payment of equal wages for work of equal nature to Male and Female workers and for not making discrimination against Female employees in the matters of transfers, training and promotions etc.
- i) Payment of Bonus Act 1965:- The Act is applicable to all establishments employing 20 or more employees. The Act provides for payments of annual bonus subject to a minimum of 8.33% of wages and maximum of 20% of wages to employees drawing Rs.3500/-per month or less. The bonus to be paid to employees getting Rs.2500/-per month or above upto Rs.3500/- per month shall be worked out by taking wages as Rs.2500/-per month only. The Act does not apply to certain establishments. The newly set-up establishments are exempted for five years in certain circumstances. Some of the State Governments have reduced the employment size from 20 to 10 for the purpose of applicability of this Act.
- j) Industrial Disputes Act 1947:- The Act lays down the machinery and procedure for resolution of Industrial disputes, in what situations a strike or lock-out becomes illegal and what are the requirements for laying off or retrenching the employees or closing down the establishment.
- k) Industrial Employment (Standing Orders) Act 1946:- It is applicable to all establishments employing 100 or more workmen (employment size reduced by some of the States and Central Government to 50). The Act provides for laying down rules governing the conditions of employment by the Employer on matters provided in the Act and get the same certified by the designated Authority.
- l) Trade Unions Act 1926:- The Act lays down the procedure for registration of trade unions of workmen and employers. The Trade Unions registered under the Act have been given certain immunities from civil and criminal liabilities.
- m) Child Labour (Prohibition & Regulation) Act 1986:- The Act prohibits employment of children below 14 years of age in certain occupations and processes and provides for regulation of employment of children in all other occupations and processes. Employment of Child Labour is prohibited in Building and Construction Industry.
- n) Inter-State Migrant workmen's (Regulation of Employment & Conditions of Service) Act 1979:- The Act is applicable to an establishment which employs 5 or more inter-state migrant workmen through an intermediary (who has recruited workmen in one state for employment in the establishment situated in another state). The Inter-State migrant workmen, in an establishment to which this Act becomes applicable, are

required to be provided certain facilities such as housing, medical aid, travelling expenses from home upto the establishment and back, etc.

- o) The Building and Other Construction workers (Regulation of Employment and Conditions of Service) Act 1996 and the Cess Act of 1996 :- All the establishments who carry on any building or other construction work and employs 10 or more workers are covered under this Act. All such establishments are required to pay cess at the rate not exceeding 2% of the cost of construction as may be modified by the Government. The Employer of the establishment is required to provide safety measures at the Building or construction work and other welfare measures, such as Canteens, First-Aid facilities, Ambulance, Housing accommodations for workers near the work place etc. The Employer to whom the Act applies has to obtain a registration certificate from the Registering Officer appointed by the Government.
- p) Factories Act 1948 :- The Act lays down the procedure for approval at plans before setting up a factory, health and safety provisions, welfare provisions, working hours, annual earned leave and rendering information regarding accidents or dangerous occurrences to designated authorities. It is applicable to premises employing 10 persons or more with aid of power or 20 or more persons without the aid of power engaged in manufacturing process.

### **3.SUB-CONTRACTING (GCC Clause 7)**

Please add the following as Clause 7.2:

The contractor shall not be required to obtain any consent from the Employer for:

- a) the sub-contracting of any part of the Works for which the Sub-contractor is named in the contract;
- b) the provision of labour; and
- c) the purchase of materials which are in accordance with the standards specified in the Contract.

Beyond this if the contractor proposes sub-contracting any part of the work during execution of works, because of some unforeseen circumstances to enable him to complete the work as per terms of the contract; the Engineer will consider the following before according approval:

- The contractor shall not sub-contract the whole of the Works.
- The contractor shall not sub-contract any part of the Work without prior consent of the Engineer. Any such consent shall not relieve the contractor from any liability or obligations under the contract and he shall be responsible for the acts, defaults and neglects of any sub-contractor, his agents or workmen as fully as if they were the acts, defaults or neglects of the contractor, his agents or workmen.
- The Engineer should satisfy whether (a) the circumstances warrant such sub-contracting; and (b) the sub-contractors so proposed for the Work possess the experience, qualifications and equipment necessary for the job proposed to be entrusted to them in proportion to the quantum of work to be sub-contracted.
  - If payments are proposed to be made directly to that sub-contractor, this should be subject to specific authorization by the prime contractor so that this arrangement does not alter the contractor's liability or obligations under the contract.

*(Note: 1. All bidders are expected to indicate clearly in the bid, if they proposed sub-contracting elements of the works amounting to more than 20 percent of the Bid Price. For each such proposal the qualification and the experience of the identified sub-contractor in the relevant field should be furnished along with the bid to enable the employer to satisfy himself about their qualifications before agreeing for such sub-contracting and include it in the contract. In view of the above, normally no additional sub-contracting should arise during execution of the contract. 2. However [a] sub contracting for certain specialized elements of the work is not unusual and acceptable for carrying out the works more effectively; but vertical splitting of the works for subcontracting is not acceptable [b] In any case, proposal for sub-contracting in*

*addition to what was specified in bid and stated in contract agreement will not be acceptable if the value of such additional sub-contracting exceeds 25% of value of work which was to be executed by Contractor without sub-contracting.*

3. *Assignment of the contract may be acceptable only under exceptional circumstances such as insolvencies/liquidation or merger of companies etc.*

4. **ARBITRATION** (GCC Clause 25.3)

The procedure for arbitration will be as follows:

- 25.3 (a) In case of Dispute or difference arising between the Employer and a domestic contractor relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Arbitration and Conciliation Act, 1996. The arbitral tribunal shall consist of 3 arbitrators one each to be appointed by the Employer and the Contractor. The third Arbitrator shall be chosen by the two Arbitrators so appointed by the Parties and shall act as Presiding arbitrator. In case of failure of the two arbitrators appointed by the parties to reach upon a consensus within a period of 30 days from the appointment of the arbitrator appointed subsequently, the Presiding Arbitrator shall be appointed by the President of the Institution of Engineers (India), Tamil Nadu Chapter.
- (b) In the case of dispute with a Foreign contractor the dispute shall be settled in accordance with provisions of UNCITRAL Arbitration Rules. The Arbitral Tribunal shall consist of three Arbitrators one each to be appointed by the Employer and the Contractor. The third Arbitrator shall be chosen by the two Arbitrators so appointed by the Parties, and shall act a presiding arbitrator. In case of failure of the two arbitrators appointed by the parties to reach upon a consensus within a period of 30 days from the appointment of the arbitrator appointed subsequently, the Presiding arbitrator shall be appointed by the President of the Institution of Engineers (India), Tamil Nadu Chapter.
- (c) If one of the parties fails to appoint its arbitrator in pursuance of sub-clause (a) and (b) above within 30 days after receipt of the notice of the appointment of its arbitrator by the other party, then the President of the Institution of Engineers (India), Tamil Nadu Chapter both in cases of the Foreign Contractor as well as Indian Contractor, shall appoint the arbitrator. A certified copy of the order of the President of the Institution of Engineers (India), Tamil Nadu Chapter making such appointment shall be furnished to each parties.
- (d) Arbitration proceedings shall be held at Salem, Tamilnadu, India, and the language of the arbitration proceedings and that of all documents and communications between the parties shall be English. )
- (e) The decision of the majority of arbitrators shall be final and binding upon both parties. The cost and expenses of Arbitration proceedings will be paid as determined by the arbitral tribunal. However, the expenses incurred by each party in connection with the preparation, presentation, etc. of its proceedings as also the fees and expenses paid to the arbitrator appointed by such party or on its behalf shall be borne by each party itself.
- (f) Where the value of the contract is Rs.50 millions and below, the disputes or differences arising shall be referred to the Sole Arbitrator. The Sole Arbitrator should be appointed by agreement between the parties; failing such agreement, by the appointing authority, namely the President of the Institution of Engineers (India), Tamil Nadu Chapter.
- (g) Performance under the contract shall continue during the arbitration proceedings and payments due to the contractor by the owners shall not be withheld, unless they are the subject matter of the arbitration proceedings.

5. **PROTECTION OF ENVIRONMENT:**

Add the following as GCC Clause 16.2:

The Contractor shall also operate and maintain the plant in accordance with the specification and as per instructions of the Engineer.

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

During continuance of the contract, the contractor and his sub-contractors shall abide at all times by all existing enactments on environmental protection and rules made there under, regulations, notifications and bye-laws of the State or Central Government, or local authorities and any other law, bye-law, regulations that may be passed or notification that may be issued in this respect in future by the State or Central Government or the local authority.

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

The Water (Prevention and Control of Pollution) Act, 1974, This provides for the prevention and control of water pollution and the maintaining and restoring of wholesomeness of water. 'Pollution' means such contamination of water or such alteration of the physical, chemical or biological properties of water or such discharge of any sewage or trade effluent or of any other liquid, gaseous or solid substance into water (whether directly or indirectly) as may, or is likely to, create a nuisance or render such water harmful or injurious to public health or safety, or to domestic, commercial, industrial, agricultural or other legitimate uses, or to the life and health of animals or plants or of aquatic organisms.

The Air (Prevention and Control of Pollution) Act, 1981, This provides for prevention, control and abatement of air pollution. 'Air Pollution' means the presence in the atmosphere of any 'air pollutant', which means any solid, liquid or gaseous substance (including noise) present in the atmosphere in such concentration as may be or tend to be injurious to human beings or other living creatures or plants or property or environment.

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

The Public Liability Insurance Act, 1991, This provides for public liability insurance for the purpose of providing immediate relief to the persons affected by accident occurring while handling hazardous substances and for matters connected herewith or incidental thereto. Hazardous substance means any substance or preparation which is defined as hazardous substance under the Environment (Protection) Act 1986, and exceeding such quantity as may be specified by notification by the Central Government.

## **6. LIQUIDATED DAMAGES**

Sub-clause 49.1:

Substitute the last sentence with the following:

“Time is the essence of the contract and payment or deduction of liquidated damages shall not relieve the contract from his obligations to complete the work as per agreed construction program and milestones or from any other of the contractor’s obligations and liabilities under the contract.”

Add the following as Sub clause 49.2:

Liquidated damage for O&M shall be levied as per the following from the monthly payments to the Contractor.

1). The Liquidated Damages will be levied during adverse operating period subject to the conditions stipulated in Clause 3.0 , Chapter VII of Vol II

2) Silt / Sludge removal

If the contractor fails to remove silt / sludge in the treatment plants from the date of receipt of letter from the, then the silt / sludge will be removed by the Employer by engaging other agencies and the cost will be recovered from the Contractor at Rs. 500/cubic meter.

3). Liquidated damages for deficiencies in operation and maintenance is listed below:

S. No	Description	Nature of Deficiency	Liquidated Damages
<b>1</b>	<b>Deficiency in manpower</b>		
	Plant Operator	Not present on duty	Rs 1000 per day.
	Lab Chemist	Not present on duty	Rs. 500 per day
	Junior Engineer/Electrical Superintendent./ Sewer Inspector/ Chemist	Not present on duty	Rs. 500 per day
	Electrician	Not present on duty	Rs.100 per day
	Helper	Not present on duty	Rs.100 per day
<b>2</b>	<b>Deficiency in Service</b>		
	Clearing of site	Not attended up to 1 day	Rs.500 per day beyond 1 day.
	Non-compliance with safety measures (e.g. not wearing safety belt, helmets, etc.) and first aid facilities	Any time on duty	Rs.500 per occurrence
	Non-observance of Preventive Maintenance Schedule	Any time on duty	Rs.500 per occurrence
	House Keeping	Not kept up tidy	Rs.500 per day
	Delay in getting the equipments repaired within specified period	To be specified by the considering type of equipment	Rs.500 per day
<b>3.</b>	<b>Non-Compliance of Env. Management Measures ( as referred in Section IX and any specific additional measures as outcome of Environmental Assessment)</b>		
	Disruption of utility lines during construction (water supply, telephone lines, etc.)	Unscheduled disruption without prior notice	Rs. 500/- per day beyond 1 day
	Traffic diversions, barricading and signage for public convenience	Deviation from approved plans by the engineer	Rs. 500/- per day beyond 1 day
	Tree cutting	Tree cutting without prior approval and written permission from Engineer	Liquidated Damages levied by competent authority + Rs. 1000/- and remedial corrective action
	Construction camp site management	Any deviation from the Minimum Environmental Management Measures	Rs. 500/- per day beyond 10 working days
	Conditions of Consent to Establish/Consent to operate	Non-Compliance or any occurrence during the contract period	Rs. 1000/- per day beyond 5 working days
	Debris disposal	Any litigation during construction and operation phase of the project	Remedial action within 1 day + Rs. 500/- per day

	Non-compliance with any other measures	Case to case basis	Rs. 500 – 1000/- per day after 5 working days as per Engineer's discretion
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4) Liquidated damage for power consumption:

Power Consumption	Exceeding the power Consumption calculated for the quantity of sewage treated for the month based on the power consumption furnished by the bidder.	The Excess power cost will be recovered from the Contractor.
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5) Liquidated damages will be levied as below for non compliance of treated effluent standards.

<i>Event triggering the recovery of Liquidated Damages</i>	<i>During the O &amp; M Period</i>		<i>Liquidated Damages recoverable on Termination as a percentage of the immediately preceding years' Fixed and Variable Payments</i>
	<i>Liquidated Damages</i>	<i>Frequency</i>	
Non conformance with BOD Standards	Rs 2.00	For every 1000 litres for every day of non conformance	5 %
Non conformance with TSS Standards	Rs 2.00	For every 1000 litres for every day of non conformance	5 %
Non conformance with faecal coliform	Rs 2.00	For every 1000 litres for every day of non conformance	5 %

**7. PAYMENT**

Add the Following as GCC Clause 42.7 for O&M

**42.7 Billing and Payment procedure**

- 1) 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.
- 2) The payment calculations shall include
  - a) Fixed Payments
  - b) Variable Payments
  - c) Liquidated Damages as per Clause 4.4
- 3) 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 for disputing such invoice. The shall pay to the Contractor the accepted amounts, within thirty (30) calendar days from the date of acceptance.

- 4) 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 withheld, but subsequently found to be properly payable following the resolution of such dispute, shall not carry any interest

**Note:** Payment towards Variable Cost will be made only as per actual quantity of sewage treated.

## **8. Indemnification**

- 1) The Contractor to indemnify the employer against the following
  - a) The Contractor shall at its own expense make good any physical loss or damage to the Facility occasioned by it in the course of the performance of its obligations under this Contract if and to the extent such loss or damage is caused by the wilful misconduct or failure to follow Good Industry Practices of the Contractor, any sub-contractor or their respective agents or employees.
  - b) The Contractor shall indemnify, defend and hold harmless the Employer and its shareholders and their respective directors, officers, employees, agents and affiliates against any and all claims of loss, damage and expense 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 and in respect of loss of or damage to any third party to the extent that the same arises out of:
    - i) Any breach by the Contractor of its obligations hereunder;
    - ii) Any negligent act or omission on the part of the Contractor, its subcontractors or their respective agents or employees; and
    - iii) Any wilful misconduct or breach of statutory duty on the part of the Contractor, its subcontractors or their respective agents and employees.
  - c) The Contractor shall indemnify, defend and hold harmless the Employer and its shareholders and their respective directors, officers, employees, agents and affiliates against any and all claims of loss, damage and expense of whatever kind and nature, including all related costs and expenses incurred in connection therewith in respect of the death or injury to 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 , its shareholders , its contractors (other than the Contractor, its agents, employees or any subcontractor) or their respective directors, employees or agents.

## **9. Limitation of liability**

- 1) The total liability of the Contractor shall not exceed the yearly Fixed and Variable Payments.
- 2) This clause shall not limit the liability of the Contractor:
  - a) under any other provisions of the Contract which expressly impose a greater liability,
  - b) in case of fraud, wilful misconduct or unlawful acts, or
  - c) 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.

## **10. Securities**

Substitute the last sentence of GCC Clause 52.1 as follows:

“50% of the Performance Security shall be valid until a date 28 days from the date of expiry of Defects Liability Period and the balance 50% of the Performance Security shall be valid until a date 28 days from the date of expiry of Agreement Period.”

Add the following as GCC Clause 52.2:

### **52.2 Release of Performance Securities**

- (i) 50% Performance Security towards capital cost will be released after expiry of Defects Liability Period along with settlement of final accounts after recovering any amount due.
- (ii) The balance 50% of Performance Security will be released after expiry of the Operation and Maintenance Period of 5 years commencing from the date of completion of performance trial run of the plant after recovering any amount due.

## **11. Add the following as GCC Clause No. 65:**

### **65. Special Conditions for Operation and Maintenance**

#### **65.1 Definitions**

65.1.1 Clearance: 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.

65.1.2 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 GOTN or any other sub-division or instrumentality thereof.

65.1.3 Facility: Shall mean the entire plant and premises to be designed and constructed in accordance with the provisions of Contract and including any additions, modifications, alterations, replacement and repairs as may be made thereto from time to time.



65.1.4 Good Industry 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.

65.1.5. Minimum Output Standards Refers to values of output requirements of facility as agreed between the and the Contractor at the time of issue of Taking over Certificate.

65.1.6. Nominal Flow 35.00 mld is the design flow of the Facility.

65.1.7 Operations and Maintenance Period (O&M Period)

The period commencing on the date of issue of Taking Over Certificate and ending on the Termination Date i.e. after 5 years of O&M contract period.

65.1.8 Contract Completion date

Five years from the date of issue of Taking over Certificate (or) as extended as per the provisions of this section 2.2 (or) the date on which the contract is terminated according to Clause 1

## **65.2 The Contract**

### **65.2.1 Term**

The terms and conditions of this section will be in effect during the O&M Period for a period of five years and any extended period as per clause 65.2.2, unless expressly specified otherwise.

### **65.2.2 Extension of Term**

The O&M Period can be extended for a further period of 6 months based on such terms acceptable to both Parties (“Contractor” and the “employer”)

Either Party (“Contractor” or the “employer”) may notify its intention to extend the O&M Period at least six months before its expiry and commence discussions with the other Party.

### **65.2.3 Expiry of Term**

On expiry of the Term, the Contractor shall return the Facilities in the designed operational condition failing which the Employer shall forfeit the retention and recover Liquidated Damages from the Contractor.

## **65.3 During the pre-operations stage (within the construction period)**

Without limiting the Contractor’s obligations during the O&M Period, the Contractor shall

- a) Identify and acquire all Clearances required for the operation of the Facility and for the fulfilment of his obligations under this section.
  
- b) Obtain and maintain the insurance identified in Clause 12

## **12. INTELLECTUAL PROPERTY**

- 1) All Intellectual Property conceived, originated, devised, developed or created by the Contractor specifically for the Facility or the carrying out of the obligations under this Contract shall vest in the Employer as sole beneficial owner and shall be disclosed to the Employer upon its coming into existence.
- 2) Source code for computer programmes and associated documentation, storage media shall be made available to the Employer by the Contractor free of cost

- 3) Any Intellectual Property of the Employer that is required in connection with the performance of the obligations of the Contractor shall be made available to the Contractor free of charge for the purposes of this Contract alone
- 4) Prior to concluding any Contract with any third parties relating to the supply of materials specifically created by third parties for the purposes of this Facility, the Contractor shall request such third party to grant licenses to each of the Contractor and the Employer with rights to sub-license any Successor Operator in relation to all Intellectual Property which may arise in connection herewith. If that third party refuses to grant such licenses, the Contractor shall refer that matter to the Employer and shall act in accordance with the Employer's instructions as to the terms on which such Contract may be concluded.
- 5) The Contractor shall, as far as practicable, use its best efforts
  - a) To procure that Intellectual Property owned or developed by third parties and utilised by the Contractor in connection with the performance of its obligations under this Contract for the production of treated sewage from the Facility and otherwise for the Facility but for no other purpose on reasonable terms
  - b) To ensure that no Intellectual Property of a third party is otherwise used in the performance of the Contractor's obligations under this Contract without the approval from the Employer

1 License / Use of Technical Information For the operation and maintenance of the Plant, the Contractor hereby grants a non-exclusive and non-transferable license (without the right to sub-license) to the Employer under the patents, utility models or other industrial property rights owned by the Contractor or by a third party from whom the Contractor has received the right to grant licenses there under, and shall also grant to the a non-exclusive and non-transferable right (without the right to sub-license) to use the know-how and other technical information disclosed to the Employer under the Contract. Nothing contained herein shall be construed as transferring ownership of any patent, utility model, trademark, design, copyright, know-how or other intellectual property right from the Contractor or any third party to the . Employer

The copyright in all drawings, documents and other materials containing data and information furnished to the Employer by the Contractor herein shall remain vested in the Contractor or Employer, if they are furnished to the directly or through the Contractor by any third party, including suppliers of materials, the copyright in such materials shall remain vested in such third party.

2 Confidential Information The Employer and the Contractor shall keep confidential and shall not, without the written consent of the other party hereto, divulge to any third party any documents, data or other information furnished directly or indirectly by the other party hereto in connection with the Contract, whether such information has been furnished prior to, during or following termination of the Contract. Notwithstanding the above, the Contractor may furnish to its Subcontractor(s) such documents, data and other information it receives from the to the extent required for the Subcontractor(s) to perform its work under the Contract, in which event the Contractor shall obtain from such Subcontractor(s) an undertaking of confidentiality similar to that imposed on the Contractor under this GC Clause 16.

The Employer shall not use such documents, data and other information received from the Contractor for any purpose other than the operation and maintenance of the Facilities. Similarly, the Contractor shall not use such documents, data and other information received from the for any purpose other than the design, procurement of Plant, construction or such other work and services as are required for the performance of the Contract.

The obligation of a party under GC Sub-Clauses 16.1 and 16.2 above, however, shall not apply to that information which

- (a) now or hereafter enters the public domain through no fault of that party
- (b) can be proven to have been possessed by that party at the time of disclosure and which was not previously obtained, directly or indirectly, from the other party hereto
- (c) otherwise lawfully becomes available to that party from a third party that has no obligation of confidentiality

The above provisions of this GC Clause 16 shall not in any way modify any undertaking of confidentiality given by either of the parties hereto prior to the date of the Contract in respect of the Facilities or any part thereof.

The provisions of this GC Clause 16 shall survive termination, for whatever reason, of the Contract.

## **SECTION 4: CONTRACT DATA**

## Contract Data

**Items marked "N/A" do not apply in this Contract.**

The following documents are also part of the Contract:

### Clause Reference

- The Schedule of Operating and Maintenance Manuals [58]
- The Schedule of Other Contractors [8]
- The Schedule of Key Personnel [9]
- The Methodology and Program of Construction [27]
- The Schedule of Key and Critical equipment to be deployed on the work as per agreed program of construction [27]
- Site Investigation reports [14]

The Borrower is Government of India/Government of Tamil Nadu [1.1]  
Salem City Municipal Corporation

The World Bank means International Bank for Reconstruction and Development (IBRD) and loan refers to an IBRD Loan [1.1]

The employer is

Name: The Commissioner (1.1)

Address: Kottai main road, Salem City Municipal Corporation, SALEM-636 001

Name of authorized Representative: The Assistant Commissioner, Salem City Municipal Corporation, Salem.

The Engineer is (1.1)

Name: The City Engineer,

Address: Kottai main road, Salem City Municipal Corporation, SALEM - 636 001.

Name of Authorized Representative: The Executive Engineer,  
Salem City Municipal Corporation, SALEM - 636 001.

The Adjudicator appointed jointly by the employer and Contractor is:

Name : L.Viswanathan, Rtd SE / TWAD Board Dept.  
Address: 24/1 BHARATHI NAGAR,  
SWAMI SIVANANDHA SALAI,  
RASIPURAM (PO) – SALEM (Dt).

The name and identification number of the Contract is: Designing, providing, constructing, erection and commissioning, startup and performance run followed by 5 years of O&M of 35 mld capacity sewage treatment plant (STP) at MANKUTTAI with selected modern technologies at Salem City Municipal Corporation in Salem District in Tamil Nadu as DBOT Basis.

Bid No: E2/2304/2000//SS-1

The Works consist of Designing, providing, constructing, erection and commissioning, startup and performance run followed by 5 years of O&M of 35 mld capacity sewage treatment plant

(STP) at MANKUTTAI with selected modern technology at Salem City Municipal Corporation of Salem District in Tamil Nadu on DBOT Basis.

[brief summary, including relationship to other contracts under the Project].  
The Start Date shall be the date of issue of notice to proceed with the work. (1.1)

The Intended Completion Date for the whole of the Works is 90 months with the following milestones: [17, 28]

Milestone dates: Physical works to be completed Period from the date of issue of notice to proceed with the work

Milestone 1: Detailed designs and drawings including EIA with EMP - 2 months.

Milestone 2: Civil works 30%; Electrical & Mechanical works 20% - 12 months.

Milestone 3: Civil works 70%; Electrical & Mechanical works 40% - 18 months.

Milestone 4: Civil works 100%; Electrical & Mechanical works 100% - 24 months.

Milestone 5: Operation and Maintenance of the Plant 100% - 60 months.

The following documents also form part of the Contract: None [2.3]

The Contractor shall submit a revised Program including Environmental Management Plan (in such form and detail as the Engineer Shall reasonably prescribe) for the Works within 14 days of delivery of the Letter of Acceptance. [27]

The Site Possession Dates shall be: The date of issue of notice to proceed with the work [21]

The Site is located at Survey No: 24/2 in Bodinaickenpatti village (salem-Dt) [1]

and is defined in drawings enclosed.

The Defects Liability Period is 365 days. [35]

Insurance requirements are as under:

		Minimum Cover for Insurance	Maximum deductible for Insurance as per insurance company/institution	
(i)	Works and Plant and Materials	Rs.24,50,00,000	5% of Claim amount subject to Minimum of	
			Normal – Rs. 3,000	Act of God (natural calamities)– Rs.10,000
(ii)	Loss or damage to Equipment	Rs 10,00,000	5% of Claim amount subject to Minimum of	
			Normal – Rs. 3,000	Act of God (natural calamities)– Rs.10,000

(iii)	Other Property	Rs10, 00,000	5% of Claim amount subject to Minimum of	
			Normal – Rs. 3,000	Act of God (natural calamities)– Rs.10,000
(iv)	Personal injury or death insurance: a) for other people;	Rs 20,00,000( For 4 occurrence each of Rs 5,00,000)	Nil	
	b) for Contractor’s Employees	In accordance with the statutory requirements applicable to India		

[13]

The following events shall also be Compensation Events:

[44]

The compensation Events are as stated in the Clause 44.1 of general conditions of Contract.

The period between Program updates shall be 60 days.

[27]

The amount to be withheld for late submission of an updated Program shall be Rs. 5,00,000/-

[27]

The language of the Contract documents is English

[3]

The law which applies to the Contract is the laws of Union of India

[3]

The currency of the Contract is Indian Rupees.

[46]

Fees and types of reimbursable expenses to be paid to the Adjudicator Rs. 5,000/- per day plus reimbursable as per actual.

[25]

Appointing Authority for the Adjudicator: President of the Institution of Engineers, Tamil Nadu Chapter

[26]

The formula (e) for adjustment of prices are:

[47]

R = value of works as defined in clause 47.1 of the conditions of contract

Adjustment for labour component

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

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

$V_L$  = increase or decrease in the cost of work during the quarter under consideration due to changes in rates for local labour.

$L_o$  = the average consumer price index for industrial workers for Salem centre for the quarter preceding the date of opening of Bids as published by Labour Bureau, Ministry of Labour, Government of India.

$L_i$  = The average consumer price index for industrial workers for Salem centre for the quarter under consideration as published by Labour Bureau, Ministry of Labour, Government of India.

$P_i$  = Percentage of labour component of the work.

Adjustment for cement component

(ii) Price adjustment for increase or decrease in the cost of cement procured by the contractor shall be paid in accordance with the following formula.

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

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

$C_o$  = The all India average wholesale price index for cement for the quarter preceding the date of opening of Bids as published by the Ministry of Industrial Development, Government of India, New Delhi

$C_i$  = The all India average wholesale price index for cement for the quarter under consideration as published by Ministry of Industrial Development, Government of India, New Delhi

$P_c$  = Percentage of cement component of the work



### Adjustment for steel component

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

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

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

$S_o$  = The all India average wholesale price index for steel (Bars and Rods) for the quarter preceding the date of opening of Bids as published by the Ministry of Industrial Development, Government of India, New Delhi

$S_i$  = The all India average wholesale price index for steel (Bars and Rods) for the quarter under consideration as published by Ministry of Industrial Development, New Delhi

$P_s$  = Percentage of steel component of the work

Note: For the application of this clause, index of Bars and Rods has been chosen to represent steel group.

### Adjustment of Bitumen component

(iv) Price adjustment for increase or decrease in the cost of bitumen shall be paid in accordance with the following formula:

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

$V_b$  = Increase or decrease in the cost of work during the quarter under consideration due to changes in the rate for bitumen.

$B_o$  = The average official retail price of bitumen at the IOC depot at Salem on the day 30 days prior to date of opening of Bids.

$B_i$  = The average official retail price of bitumen at IOC depot at Salem for the 15th day of the middle calendar month of the quarter under consideration.

$P_b$  = Percentage of bitumen component of the work.

### Adjustment of POL (fuel and lubricant) component

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

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

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

$F_o$  = The average official retail price of High Speed Diesel (HSD) at the existing consumer pumps of IOC at Salem on the day thirty days prior to the date of opening of Bids.

$F_i$  = The average official retail price of HSD at the existing consumer pumps of IOC at Salem for the 15th day of the middle calendar month of the quarter under consideration.

$P_f$  = Percentage of fuel and lubricants component of the work.

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

Adjustment for Plant and Machinery Spares component

(vi) Price adjustment for increase or decrease in the cost of plant and machinery spares procured by the Contractor shall be paid in accordance with the following formula:

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

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

$P_o$  = The all India average wholesale price index for heavy machinery and parts for the quarter preceding the date of opening of Bids as published by the Ministry of Industrial Development, Government of India, New Delhi

$P_i$  = The all India average wholesale price index for heavy machinery and parts for the quarter under consideration as published by Ministry of Industrial Development, New Delhi

$P_p$  = Percentage of plant and machinery spares component of the work

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

Adjustment of Local materials

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

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

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

$M_o$  = The all India average wholesale price index (all commodities) for the quarter preceding the date of opening of Bids, as published by the Ministry of Industrial Development, Government of India, New Delhi.

$M_i$  = The all India average wholesale price index (all commodities) for the quarter under consideration as published by Ministry of Industrial Development, Government of India, New Delhi.

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

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

- |    |                                  |      |
|----|----------------------------------|------|
| 1. | Labour - $P_l$                   | —— % |
| 2. | Cement - $P_c$                   | —— % |
| 3. | Steel - $P_s$                    | —— % |
| 4. | Bitumen - $P_b$                  | —— % |
| 5. | POL - $P_f$                      | —— % |
| 6. | Plant & Machinery Spares - $P_p$ | —— % |
| 7. | Other materials - $P_m$          | —— % |

Total 100%

The above has to be furnished by the bidder based on his design, work plan and methodology along with the bid separately for construction of STP and O&M.

The proportion of payments retained (retention money) shall be 6% from each bill Subject to a maximum of 5% of final contract price [48]

The liquidated damages for the whole of the construction works are Rs. 1, 22,500/- per day and that for the milestone are as under: [49]

For milestone 1	Rs. 10,300/- per day
For milestone 2	Rs. 30,600/- per day
For milestone 3	Rs. 40,800/- per day
For milestone 4	Rs. 40,800/- per day

The maximum amount of liquidated damages for the whole of the construction works is ten percent of final contract price.

Maximum Liquidated Damages for O&M: The maximum Liquidated Damages payable by the Contractor in any month shall not be more than 5 % of the payment receivable by the Contractor for the year.

The maximum Liquidated Damages payable by the Contractor in a year shall not be more than 15 % of the payment receivable by the Contractor towards O&M for the year.

The maximum liquidated damages payable by the Contractor on Termination shall not be more than 25 % of the payment receivable by the Contractor towards O&M for the year preceding the Termination.

Bonus for early completion of whole works is Rs. 1,22,500/- per day of early completion. [50]  
The maximum amount of bonus for the whole of the works is 5% of final contract price.

The amounts of the advance payment are: [51]

<u>Nature of Advance</u>	<u>Amount (Rs.)</u>	<u>Conditions to be fulfilled</u>
1. Mobilization	10% of the Contract price	On submission of un-conditional Bank Guarantee. (to be drawn before end of 20% of Contract period)
2. Equipment	Nil	.
(This advance is not applicable for equipment already owned or hired/ leased by the contractor.)		
3. Secured advance (for electro mechanical equipments, pipes and valves only and	75 % of contract value or market value or invoice value, whichever is less.	a) The materials are in-accordance with the specification for Works; b) Such materials have been delivered to site, and are properly stored and protected against damage or deterioration to the satisfaction of the Engineer. The contractor shall store the bulk material in

secured  
advance is not  
for civil  
construction  
materials like  
cement, sand,  
aggregate, steel  
etc.,)

measurable stacks.;

c) The Contractor's records of the requirements, orders, receipt and use of materials are kept in a form approved by the Engineer and such records shall be available for inspection by the Engineer;

d) The contractor has submitted with his monthly statement the estimated value of the materials on site together with such documents as may be required by the Engineer for the purpose of valuation of the materials and providing evidence of ownership and payment thereof;

e) Ownership of such materials shall be deemed to vest in the Employer for which the Contractor has submitted an Indemnity Bond in an acceptable format; and

f) The quantity of materials are not excessive and shall be used within a reasonable time as determined by the Engineer.

(The advance payment will be paid to the Contractor no later than 15 days after fulfillment of the above conditions).

Repayment of advance payment for mobilization and equipment:

[51]

The advance shall be repaid with percentage deductions from the interim payments certified by the Engineer under the Contract. Deductions shall commence in the next Interim Payment Certificate following that in which the total of all such payments to the Contractor has reached not less than 15 percent of the Contract Price or two months from the date of payment of first installment of advance, whichever period concludes earlier, and shall be made at the rate of 15 percent of the amounts of all Interim Payment Certificates until such time as the advance has been repaid, always provided that the advance shall be completely repaid prior to the expiry of the original time for completion.

The Securities shall be for the following minimum amounts equivalent as a percentage of the Contract Price:

[52]

Performance Security for 5 per cent of contract price.

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

The date by which operating and maintenance manuals are required is within 28 days of issue of certificate of completion of whole or section of the work, as the case may be. [58]

The date by which "as-built" drawings (in appropriate scale) in 5 sets including soft copies are required is within 28 days of issue of certificate of completion of whole or section of the work, as the case may be.

[58]

The amount to be withheld for failing to supply "as built" drawings and/or operating and maintenance manuals \*by the date required is Rs.20, 00,000/-

[58]

The following events shall also be fundamental breach of contract: [59.2]

1. The Contractor has contravened Sub-clause 7 of GCC read with SCC and Clause 9.0 of GCC
2. The contractor does not adhere to the agreed construction program and agreed environmental management plan (Clause 27 of GCC) and also fails to take satisfactory remedial action as per agreements reached in the management meetings (Clause 31) for a period of 60 days.
2. 3. The contractor fails to carry out the instructions of Engineer within a reasonable time determined by the Engineer in accordance with GCC Clause 16.1 and 23.1.

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

## **SECTION 5: TECHNICAL SPECIFICATIONS**

Please refer to Volume II of the bid document

## **SECTION 6: DRAWINGS**

### **Drawings**

#### **Index**

1. Index plan
2. FMB Sketch of STP site –plan 1
3. FMB Sketch of STP site –plan 2
4. SPOT levels of STP site with Raw sewage entry point and treated effluent disposal point
5. Drawing for cross section of Road

## 1. Appendix – I

**Performance Guarantee for Various Parameters of Effluent for Various Units are given below as stipulated in Para 2.1 of of Volume II (O&M)**

1. Treated final effluent characteristics **shall not exceed** the following values.

BOD <sub>5</sub> at 20 <sup>0</sup> C	20 mg/L
Suspended solid	30 mg/L
pH	5.5 to 9
COD	250 mg/l
Faecal coliform	200 MPN/100 mL.
Oil & Grease	5 mg/L

2. Grit chamber: Grit removal of all particles of size 0.15 mm & above shall be removed 100%.

## 2.GUARANTEE

We guarantee the following

- a) Final effluent quality & unit wise performance parameters as specified in Appendix I.
- b) Performance of all the equipments and system as per specification.

Date

**WITNESS :**

Signature

Name

Occupation

Address



## **SECTION 7: ACTIVITY SCHEDULE**

## **1 General**

The price schedule given here is broadly for the following works:

- Civil Works
- Electrical & Mechanical Works
- Performance Trial Run (6 months )
- Operation, maintenance & monitoring Works. (5 Years)

Each item in the price Schedule of Activities shall be individually priced in ink and the same shall be added up to the Bid Cost. No column in the price Schedule shall be left blank. The price quoted by the Bidder must allow for all works as per the detailed specifications and for all contractual obligations whether separately specified or not.

The rates and prices in the price Schedule shall, except in cases separately provided for, be deemed to cover all the contractual obligations under this contract.

## **2 Civil Works**

The Civil works shall include all the works indicated in the Scope of Work and Technical Specifications given in Volume I & II. Any additional item if required from process point of view and for better performance of the plant shall be considered while quoting offer.

All items under Civil works are inclusive of all excavation in any type of strata at required depth, including dewatering of Sub-soil Water for Concreting and other works, refilling the sides of excavation after construction of structure, disposing of surplus soil etc. complete as detailed in Volume I & II and as directed by the Engineer in Charge.

All items of Piping works for STP shall be inclusive of excavation in any type of strata, including supply, laying, jointing and testing of all pipelines, specials, valves, all types of labour, construction of sewer appurtenances and valve chambers, pipe support pedestals complete in all respects as detailed in Volume I & II and as directed by engineer-in-charge.

## **3 Electrical, Mechanical and Instrumentation works**

The scope of work under the contract shall include all the work indicated in the Scope of Work and Technical Specifications given in Volume I & II.

## **4 Performance Run, Operation, Maintenance & Monitoring Works**

The scope of work under the contract shall include all the work as specified in the Scope of Work and Technical Specifications given in Volume I & II.

## **5 Cost Break Up**

As the bid is a lump sum price, total cost of works has been split into units and the percentage cost of each unit is stipulated (see Table 1 below) to facilitate the unit wise payments. Cost of an individual unit shall be worked out on the basis of the stipulated percentage and agreed cost of the work. The percent value stipulated for the unit is for completion of the entire work related to the unit as per detailed specifications and requirements mentioned in the bid document and overall requirement for successful commissioning and operation of the plant in accordance with applicable requirements. In case any addition or deletion in these unit items takes place after designs are approved for the unit, the actual cost for the purpose of payment will be worked out on the basis of quantities as per the approved drawings and prevailing schedule of rates in being adopted by the employer. If the work of a unit is deleted by the employer from the scope of contract before approval of the detailed drawings, the cost of such deleted unit will be

decided on the basis of the stipulated percentages in Table.1 to be furnished by the bidder.

It shall be explicitly noted by the bidders that the tables given below shall be referred only for facilitating the payments to the contractor and shall not be any way referred to, for defining and restricting the scope of work under the contract.

**TABLE – 1: Activity Schedule**

<b>Sl. No</b>	<b>Unit and Stage of Construction</b>	<b>% Of finalized cost</b>
I	<b>Process and Hydraulic Design and Detailed Engineering</b>	
a)	Submission and acceptance of detailed designs, drawings and estimates.	
b)	Hydraulic process design and layout of the plant.	
c)	Structural design and construction drawing for primary units.	
d)	Structural design and construction drawing for secondary units.	
e)	Structural design and construction drawing for sludge handling, treatment arrangements unit and auxiliary units.	
II.	Submission and acceptance of detailed Environmental Assessment Report.	
III.	Construction of the following I components of the plant	
1	Receiving Chamber	
	Civil	
2	Screen Chamber	
A	Civil	
B	Mechanical including Screens	
3	Grit Chamber and Parshall Flume	
A	Civil	
B	Mechanical including Grit Mechanism with all associated accessories	
4	Distribution Box and Bypass arrangement	
	Civil	
5	Secondary Treatment units( Each unit to be specified by the bidder for civil , Mechanical & electrical works	
6	Chlorination Tank / Chlorination House	
A	Civil	
B	Mechanical including Chlorinator with all accessories	
7	Sludge Sump and Pump House	

A	Civil	
B	Mechanical including	
	Sludge Sump Blowers and Air Grid	
	Centrifuge Feed Pumps	
8	Centrifuge House	
A	Civil	
B	Mechanical including	
	Dewatering Polymer Dosing System	
	Centrifuge	
9	Administrative Building including Furniture and Laboratory Equipments	
	Civil	
10	Internal Roads, Pathways, Pavements, Storm water	
	Civil	
11	Misc. Civil works like, Compound Wall, Entry Gate,	
	Civil	
12	Site Clearance, Disposal/ Plot Development – Landscaping etc.	
	Civil	
13	Electrical Works including ( Bidder to specify various units)	
14	Others if any	

## 1- Chemicals

The bidder should list the chemical consumption & the approximate (+/-10%) delivered rate of the chemicals at the project site to be used by them for the STP.

This information is to be used for evaluating the bids.

Chemical / Utilities	Units	Delivered Rate in Rs. / Unit	Daily Consumption	Total cost for design capacity	Total cost per mld
Gas Chlorine	Kg/day/mld				
Dewatering Polyelectrolyte	Kg/day/mld				

Cost of chemical for design capacity =

Cost of chemical per mld =

## 2-Electric Load List

1 S N o	2 Drive For	3 Total Nos	4 Nos Operatin g	5 Nos Standb y	6 Operatin g Hours / day	7 Drive Ratin g KW	8 Operatin g Power kWh/day	9 Guaran -teed Consum -ed Power KWh/da y	10 Guaran -teed Consum ed Power per mld KWh/day
1.	Screening								
2.	De- gritting								
3.	Aeration								
4.	Sludge Pumping								
5.	Sludge Treatmen t								
6									
7									
8									
9	Others etc								

### For sewage Treatment

Total connected Power, kW \_\_\_\_\_

Total operating power, kw \_\_\_\_\_

Total Consumed Power KWh/day /35.00 mld \_\_\_\_\_

Total Consumed Power KWh/day /mld \_\_\_\_\_

Note: (i) Since the flow of sewage will be minimum in the initial period, the bidder is requested to furnish the power consumption per mld

(ii) If an arithmetical error is found in Power consumption calculation, the same will be corrected in accordance with ITB Clause 27.

The contractor shall submit the running bills to the engineer in charge at the rate of one (1) RA bill per month.

Being a lump sum contract, the payments through RA Bills will be made to the contractor on the basis of stage wise break-up of payment. The stage wise payment of different units is specified in Table 2.0 and Table 3.0. A part of work will become eligible for payment as per the percentage to be furnished by the bidder in Table 2 only on completion of particular stage of work. Intermediate payments on prorata basis or as per actual measurements shall not be made.

**Table-2: PAYMENT SCHEDULE FOR CIVIL WORKS**

S. No.	Unit and Stage of Construction	% of Cost of Unit
I	<b>Process and Hydraulic Design and Detailed Engineering</b>	
a)	Submission and acceptance of detailed designs, drawings and estimates.	
b)	Hydraulic process design and layout of the plant.	
c)	Structural design and construction drawing for primary units.	
d)	Structural design and construction drawing for secondary units.	
e)	Structural design and construction drawing for sludge handling, treatment arrangements unit and auxillary units.	
II.	Submission and acceptance of detailed Environmental Assessment Report.	
III.	Construction of the following I components of the plant	

<b>1</b>	<b>Receiving Chamber</b>	
	Approval of Design and Drawings	
	Excavation	
	Entire Completion of Civil Works	
	Successful Hydraulic Testing and Commissioning	
	Consistent Performance of the Plant	
<b>2</b>	<b>Screen Chamber</b>	
	Approval of Design and Drawings	
	Excavation	
	Concreting of Raft	
	Concreting of Walls (1/2 height)	
	Concreting of Walls (full height)	
	Entire Completion of Civil Works	
	Successful Hydraulic Testing and Commissioning	
	Consistent Performance of the Plant	
<b>3</b>	<b>Grit Chamber and Parshall Flume</b>	
	Approval of Design and Drawings	
	Excavation	
	Concreting of Raft	
	Concreting of Walls (1/2 height)	
	Concreting of Walls (full height)	
	Entire Completion of Civil Works	
	Successful Hydraulic Testing and Commissioning	
	Consistent Performance of the Plant	
<b>4</b>	<b>Distribution Box and Bypass arrangement</b>	
<b>5</b>	<b>Secondary Treatment units</b>	
	Approval of Design and Drawings	
	Excavation	
	Concreting of Foundation	
	Concreting of Walls (1/2 height)	
	Concreting of Walls (full height)	
	Entire Completion of Civil Works	
	Successful Hydraulic Testing and Commissioning	
	Consistent Performance of the Plant	
<b>6</b>	<b>Chlorination Tank</b>	
	Approval of Design and Drawings	
	Excavation	
	Concreting of Foundation	
	Concreting of Walls (1/2 height)	
	Concreting of Walls (full height)	
	Entire Completion of Civil Works	
	Successful Hydraulic Testing and Commissioning	
	Consistent Performance of the Plant	
<b>7</b>	<b>Sludge Sump and Pump House</b>	
	Approval of Design and Drawings	
	Excavation	
	Concreting of Foundation	
	Concreting of Walls (1/2 height)	
	Concreting of Walls (full height)	
	Entire Completion of Civil Works	
	Successful Hydraulic Testing and Commissioning	
	Consistent Performance of the Plant	



<b>8</b>	<b>Centrifuge House</b>	
	Approval of Design and Drawings	
	Excavation	
	RCC Framed Structure	
	Entire Completion of Civil Works	
<b>9</b>	<b>Administrative Building including Furniture and Laboratory Equipments</b>	
	Approval of Design and Drawings	
	Excavation	
	RCC Framed Structure	
	BBM and Plastering	
	Entire Completion of Civil Works	
<b>10</b>	<b>Internal Roads, Pathways, Pavements, Storm water drainage</b>	
	Approval of Design and Drawings	
	Preparation of Road Structure	
	Laying of Storm Water drains	
	Construction of Pavements	
	Entire Completion of Works	
<b>11</b>	<b>Misc. Civil works like Compound wall/, Entry Gate,</b>	
	Approval of Design and Drawings	
	Entire Completion of Works	
<b>12</b>	<b>Site Clearance, Disposal/ Plot Development – Landscaping etc.</b>	
	Approval of Design and Drawings	
	Entire Completion of Works	
<b>13</b>	<b>Electrical Works including ( Bidder to specify various units)</b>	
<b>14.</b>	<b>Others if any</b>	

Table-3

**OPERATION AND MAINTENANCE COST SUMMARY  
OF FIXED AND VARIABLE PAYMENTS  
ABSTRACT**

Sl. No.	O&M Period	O&M Cost (In Rs.)		
		Fixed (A)	Variable (B)	Total (A+B)
1	1 <sup>st</sup> year			
2	2 <sup>nd</sup> year			
3	3 <sup>rd</sup> year			
4	4th year			
5	5th year			
	<b>Grand Total</b>			

**(A) Fixed Cost**

Sl. No.	O&M Period	*Manpower (In Rs.)	Maintenance works including Civil, Mechanical & Electrical	Maintenance of Office etc. (In Rs.)	All repairs including spares & Replacement Oil & Grease	Total Cost (In Rs.)
1	2	3	4	5	6	7=3+4+5+6
1	1 <sup>st</sup> year					
2	2 <sup>nd</sup> year					
3	3 <sup>rd</sup> year					
4	4th year					
5	5th year					

\* Furnish category wise break up.

**(B) Variable Costs**

Sl. No.	O&M Period	Chemicals and other consumables cost (In Rs.)		
		Unit Cost	Estimated Flow	Annual Cost
		Rs./Per MLD	(MLD)	Rs. Lakhs /Year
1	2	3	4	5 = (3*4*365)/10 <sup>5</sup>
1	1st year		7.00	
2	2nd year		15.00	
3	3rd year		22.00	
4	4th year		29.00	
5	5th year		35.00	

**Note:**

1. The land that will be required for STP, Roads and drains, and other buildings/facilities will be indicated by the bidder for both the Intermediate Phase design flow of 35 MLD and the ultimate flow of 45 MLD. The drawings shall be provided with required designs, as per clause 4.9, Para 2.1 of Volume-

II. The proportionate cost of land at Rs 5400 per sq.m to be utilized for construction of STP which includes the various components of the STP, roads, drains and green belt all around will be added in the bid price and the lowest evaluated substantially responsive bidder will be awarded the contract.

The bidder has to provide the details of requirement of land as follows.

Land required for construction of STP for the intermediate capacity of 35 MLD .....m<sup>2</sup>

Land required for augmenting the capacity of STP to the ultimate capacity of 45 MLD .....  
m<sup>2</sup>

2. The flow measurement is based on the ultrasonic flow transmitter provided in the raw sewage pumping mains and the payment will be made accordingly

3 In the initial years, the sewage flow into the STP is likely to be less than the design flow. Hence the performance of STP in terms of chemical and power consumption can not be assessed for the design capacity, In such case , at the end of trial run period the shall assess the power consumption and chemical consumption for the designed capacity on the basis of guaranteed power and chemical consumption /mld given by the bidder. If there is any variation between the actual consumption and the guaranteed consumption, the difference in cost of power and chemical consumption shall be calculated for a period of 5 years and a recovery shall be effected for the amount from the final bill for capital works. The details of chemical consumption and power consumption shall be furnished in the format given below:

A- Chemicals

Chemical / Utilities	Units	Delivered Rate in Rs. / Unit	Daily Consumption	Total cost for design capacity	Total cost per mld
Gas Chlorine	Kg/day/ mld				
Dewatering Polyelectrolyte	Kg/day/ mld				

Cost of chemical for design capacity =

Cost of chemical per mld =

**B - Electric Load List**

1 S No	2 Drive For	3 Total Nos	4 Nos Operating	5 Nos Standby	6 Operating Hours / day	7 Drive Rating KW	8 Operating Power kWh/day	9 Guaran -teed Consumed -ed Power KWh/day	10 Guaran -teed Consumed Power per mld KWh/day
6.	Screening								
7.	De- gritting								
8.	Aeration								
9.	Sludge Pumping								
10.	Sludge Treatment								
6									
7									
8									
9	Others etc								

**For sewage Treatment**

Total connected Power, kW \_\_\_\_\_

Total operating power, kW \_\_\_\_\_

Total Consumed Power KWh/day / **35.00 mld** \_\_\_\_\_

Total Consumed Power KWh/day /mld \_\_\_\_\_

Note: (i) Since the flow of sewage will be minimum in the initial period, the bidder is requested to furnish the power consumption per mld  
(ii) If an arithmetical error is found in Power consumption calculation, the same will be corrected in accordance with ITB Clause 27.

4. (a) For capital works, the payment will be made to the contractor on the basis of stage wise breakup of payments of different units as per Table 2

(b) For Trial Run, the payment will be made on monthly basis, a prorated basis.

(c) For O&M works, the payment (fixed & variable payments) will be made to the contractor on monthly basis based on "Abstract of O&M Cost". The payment towards variable cost shall be worked out as per actual quantity of sewage treated, based on the flow measured through ultrasonic flow meter.

## A. PRICE SCHEDULE FOR CONSTRUCTION

Sl. No.	Description of Activity (with brief specification and reference to Book of specification)	Rate	
		In figures (in Rs.)	In words
I	<b>Capital cost:</b>		
a.	Submission and acceptance of detailed designs, drawings and estimates.		
b.	Hydraulic process design and layout of the plant.		
c.	Structural design and construction drawing for primary units.		
d.	Structural design and construction drawing for secondary units.		
e.	Structural design and construction drawing for sludge handling, treatment arrangements unit and auxiliary units.		
II	Submission and acceptance of detailed Environmental Assessment Report.		
III	Construction of the following components of the plant		
1.	Receiving Chamber		
2..	Screening units		
3.	De-gritting units		
4.	Distribution box & Bye-pass arrangement		
5.	Secondary Units		
6	Chlorination Tank		
7.	Sludge Sum p and Pump house		
8.	Centrifuge House		
9.	Administrative Building including Furniture and Laboratory Equipments		
10.	Internal Roads, Pathways, Pavements, Storm water drainage		
11.	Misc. Civil works like Compound Wall/, Entry Gate,		

		Rate	
12.	Site Clearance, Disposal/ Plot Development – Landscaping etc.		
13.	Electrical Works including ( Bidder to specify various units)		

**B. PRICE SCHEDULE FOR PERFORMANCE TRIAL RUN (6 MONTHS)**

Sl.No	Trail run and performance period	O & M Cost in Rs.		
		Fixed (A)	Variable (B)	Total (A+B)
1	For 6 Months			

### C. PRICE SCHEDULE FOR O&M

Sl.No.	Description of activity (with brief specification and ref. to Book of specification)	Rate		Amount (in Rs.)
		In Words	In figures ( in Rs.)	
1	O&M cost for operation and maintenance of the plant for five years			
	Fixed cost (Man power, maintenance of all Civil Structures and entire plant House Keeping, all repairs including spares & Replacement, Oil & Grease Cost)			
	i) First year			
	ii) Second year			
	iii) Third Year			
	iv) Fourth Year			
	v) Fifty year			
2	Variable cost (excluding TNEB Power charges, Diesel cost for DG set and Chlorine Dosage costs) covering consumables, Chemicals and cost for safe disposal of grit and sludge.			
	i) First year			
	ii) Second year			
	iii) Third Year			
	iv) Fourth Year			
	v) Fifty year			
	Total Bid price(in figures (in words)			

- (1) Item for which no rate or price has been entered in will not be paid for by the employer when executed and shall be deemed covered by the other rates and prices in the **Activity Schedule** (refer: ITB Clause 13.2 and GCC Clause 43.3).
- (2) Unit rates and prices shall be quoted by the bidder in Indian rupee [ITB Clause 14.1].
- (3) Where there is a discrepancy between the rate in figures and words, the rates in words will govern. [ITB Clause 27.1]



## **SECTION 8: FORMS OF SECURITIES**

## **Forms of Securities**

Acceptable forms of securities are annexed. Bidders should not complete the Performance and Advance Payment Security forms at this time. Only the successful Bidder will be required to provide Performance and Advance Payment Securities in accordance with one of the forms, or in a similar form acceptable to the Employer.

**Annex A:** Bid Security (Bank Guarantee)

**Annex B:** Performance Bank Guarantee

**Annex C:** Bank Guarantee for Advance Payment

**Annex D:** Performance Bank Guarantee for O&M

**BID SECURITY (BANK GUARANTEE)**

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

KNOW ALL PEOPLE by these presents that We \_\_\_\_\_ [name of bank] of \_\_\_\_\_ [name of country] having our registered office at \_\_\_\_\_ (hereinafter called "the Bank") are bound unto \_\_\_\_\_ [name of Employer] (hereinafter called "the Employer") in the sum of \_\_\_\_\_<sup>1</sup> for which payment well and truly to be made to the said Employer the Bank binds itself, his successors and assigns by these presents.

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

THE CONDITIONS of this obligation are:

(1) If after Bid opening the Bidder withdraws his bid during the period of Bid validity specified in the Form of Bid;

or

(2) 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, if required; or

(b) fails or refuses to furnish the Performance Security, in accordance with the Instruction to Bidders; or

(c) does not accept the correction of the Bid Price pursuant to Clause 27;

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

This Guarantee will remain in force up to and including the date \_\_\_\_\_<sup>2</sup> days after the deadline for submission of Bids as such deadline is stated in the Instructions to Bidders or as it may be extended by the Employer, notice of which extension(s) to the Bank is hereby waived. Any demand in respect of this guarantee should reach the Bank not later than the above date.

DATE \_\_\_\_\_ SIGNATURE OF THE BANK \_\_\_\_\_

WITNESS \_\_\_\_\_ SEAL \_\_\_\_\_

\_\_\_\_\_  
[Signature, name, and address]

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

2 45 days after the end of the validity period of the Bid. Date should be inserted by the Employer before the Bidding documents are issued.

**Annex B**  
**PERFORMANCE BANK GUARANTEE**

To: \_\_\_\_\_ *[name of Employer]*  
\_\_\_\_\_ *[address of Employer]*

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

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with his obligations in accordance with the Contract;

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee;

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Contractor, up to a total of \_\_\_\_\_ *[amount of guarantee]*  
<sup>1</sup> \_\_\_\_\_ *[in words]*, such sum being payable in the types and proportions of currencies in which the Contract Price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of \_\_\_\_\_ *[amount of guarantee]*<sup>1</sup> as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

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

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

This guarantee shall be valid until 28 days from the date of expiry of the Defects Liability Period.

Signature and seal of the guarantor \_\_\_\_\_  
Name of Bank \_\_\_\_\_  
Address \_\_\_\_\_  
Date \_\_\_\_\_

\_\_\_\_\_

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

**BANK GUARANTEE FOR ADVANCE PAYMENT**

To: \_\_\_\_\_ [name of Employer]  
\_\_\_\_\_ [address of Employer]  
\_\_\_\_\_ [name of Contract]

Gentlemen:

In accordance with the provisions of the Conditions of Contract, sub clause 51.1 ("Advance Payment") of the above-mentioned Contract, \_\_\_\_\_ [name and address of Contractor] (hereinafter called "the Contractor") shall deposit with \_\_\_\_\_ [name of Employer] a bank guarantee to guarantee his proper and faithful performance under the said Clause of the Contract in an amount of \_\_\_\_\_ [amount of guarantee] <sup>1</sup> \_\_\_\_\_ [in words].

We, the \_\_\_\_\_ [bank or financial institution], as instructed by the Contractor, agree unconditionally and irrevocably to guarantee as primary obligator and not as Surety merely, the payment to \_\_\_\_\_ [name of Employer] on his first demand without whatsoever right of objection on our part and without his first claim to the Contractor, in the amount not exceeding \_\_\_\_\_ [amount of guarantee]<sup>1</sup> \_\_\_\_\_ [in words].

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

This guarantee shall remain valid and in full effect from the date of the advance payment under the Contract until \_\_\_\_\_ [name of Employer] receives full repayment of the same amount from the Contractor.

Yours truly,

Signature and seal: \_\_\_\_\_  
Name of Bank/Financial Institution: \_\_\_\_\_  
Address: \_\_\_\_\_  
Date: \_\_\_\_\_

\_\_\_\_\_

1 An amount shall be inserted by the bank representing the amount of the Advance Payment, and denominated in Indian Rupees.

**PERFORMANCE BANK GUARANTEE FOR O&M**

(To be stamped in accordance with Stamp Act if any, of the Country of the Issuing Bank)

Bank Guarantee No.: .....Date:.....

To.....(Name of the Purchaser)

Whereas..... (Name of the Purchaser) hereinafter called "the Contractor" has undertaken, in pursuance of contract No..... dated..... 20... To carry out..... (Description of Goods and Services) hereinafter called "the Contract".

AND WHEREAS it has been stipulated by you in the said contract that the Contractor shall furnish you with a Bank Guarantee by a recognized Bank for the sum specified therein as security for compliance with the Supplier's performance obligations under the contract for Annual Maintenance and Repairs of the entire system including cost of spares after warranty period for next five years.

AND WHEREAS we have agreed to give the Contractor a Guarantee.

THEREFORE WE hereby affirm that we are Guarantors and responsible to you on behalf of the Contractor, up to a total of Rs..... (Amount of guarantee in words and figures) being 2.5% of the total cost of equipment and we undertake to pay you, upon your first written demand declaring the Contractor to be in default under the contract and without cavil or argument, any sum or sums within the limit of Rs. .... (Amount of guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

This guarantee is valid until ..... day of ..... 20.....

Signature and Seal of Guarantors

.....  
.....  
Date: ..... 20...

**NOTE:**

- 1. SUPPLIERS SHOULD ENSURE THAT SEAL AND CODE No. OF THE SIGNATORY IS PUT BY THE BANKERS, BEFORE SUBMISSION OF THE BANK GUARANTEES.**