

APMDP
Andhra Pradesh Municipal Development Project

IFB No.4/APMDP/VZM/E/TO/2015-16

BIDDING DOCUMENTS
FOR
PROCUREMENT OF GOODS

COMPREHENSIVE WATER SUPPLY SERVICE
IMPROVEMENT IN
VIZIANAGARAM MUNICIPALITY

Supply and delivery of MS pipes at Various locations
for Culverts, Drain and Road Crossing

September – 2015

VIZIANAGARAM MUNICIPALITY

MUNICIPAL COUNCIL VIZIANAGARAM
Andhra Pradesh Municipal Development Project (APMDP)

National Competitive Bidding
for *Supply and delivery of MS pipes at Various locations for Culverts, Drain and Road*
Crossing

Time Schedule for the bids:

Bid Reference	:	IFB No.4/APMDP/VZM/E/TO/2015-16/ Dated:03-09-2015
Date of commencement of downloading of bid document	:	09-09-2015 at 11:00 am onwards
Last date for seeking clarification if any.	:	09-10-2015 Upto 11:00 am
Pre-bid meeting	:	18-09-2015 at 11:00 am
Last date for down loading of bid document from the E-procurement platform: http://eprocure.gov.in	:	09-10-2015 Upto 5:00 pm
Last date and time for bid submission/uploading of bid in E-procurement platform	:	09-10-2015 Upto 5:00 pm
Time and date of opening of bids	:	14-10-2015 at 11.00 am
Place of opening of bids and address for communication	:	Office of Commissioner, Vizianagaram Municipality, Vizianagaram-535001 Andhra Pradesh. Tel No: 08922 – 224793 Email : commvzm@yahoo.com

Note: (1) In the event of the specified date of opening of bids being declared a holiday for the Purchaser, the bids shall be opened on the next working day at the same time and venue.

(2) Completed bids shall be uploaded on the e-procurement platform by the Bidders using their user ID and addressed to the Additional Director in the manner described under Instructions to Bidders Section II of Bid Documents on or before the stipulated last date & time.

SECTION I: INVITATION FOR BIDS (IFB)

SECTION I.
INVITATION FOR TENDERS (IFT)

IFBNo.: 4/APMDP/VZM/E/TO/2015-16/

Dt.03-09-2015

1. The Government of India has received a credit from International Development Association (IDA) in various currencies towards the cost of the Project, **Andhra Pradesh Municipal Development Project(APMDP)** and it is intended that part of the proceeds of the credit will be applied to eligible payments under the contract for which that Invitation of Bids is issued.
2. The Commissioner, Vizianagaram Municipality, Vizianagaram-535001, Andhra Pradesh. (Purchaser) now invites Bids under e-procurement system from eligible bidders, for the supply of the Goods/Materials listed below:

**Supply and delivery of MS pipes at Various locations for Culverts,
Drain and Road Crossing**

3. The eligible Bidders may submit bids for any or all of the equipment / goods / materials given above. Bidders are advised to note the eligible criteria as given in ITB Clause 4 & 5 and qualification criteria specified in Section III to qualify for award of the contracts. The Bidders are required to submit bids consisting of documents/information as specified in clause 11 of ITB.

The bid document is available online and bids are to be submitted online through the Govt. of India Central Public e-Procurement Portal <http://eprocure.gov.in> only. Bids submitted in any other manner will not be accepted. Bidders are required to obtain Digital signature from designated firms (available on e-proc. Portal and then register with the Government of Andhra Pradesh / India e-procurement platform and submit bids by using their user ID and Digital Signature.

4. Bidders must provide Bid Security as specified in the bid document.
5. Bids along with necessary enclosures must be uploaded to the web site <http://eprocure.gov.in> as per bid schedule mentioned in page __ and bids will be opened at the specified venue on the stipulated date and time, in the presence of the bidders or their authorized representatives 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 opened on the next working day at the same time and venue.
6. Other details can be seen in the bid documents.
7. The period of completion is 6 months.

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1. PART 1 – BIDDING PROCEDURES

SECTION I - INSTRUCTIONS TO BIDDERS [ITB]

Section I. Instructions to Bidders

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Section I. Instructions to Bidders

A. General

- 1. Scope of Bid**
 - 1.1 The Purchaser **indicated in the Bidding Data Sheet (BDS)**, issues these Bidding Documents for the supply of Goods and Related Services incidental thereto as specified in Section VI, Schedule of Requirements. The name and identification number of this National Competitive Bidding (NCB) procurement are **specified in the BDS**. The name, identification, and number of lots are **provided in the BDS**.
 - 1.2 Throughout these Bidding Documents:
 - (a) the term “in writing” means communicated in written form (e.g. by mail, e-mail, fax, telex) with proof of receipt;
 - (b) if the context so requires, “singular” means “plural” and vice versa; and
 - (c) “day” means calendar day.
- 2. Source of Funds**
 - 2.1 The Government of India (hereinafter called “Borrower”) **specified in the BDS** has applied for or received financing (hereinafter called “funds”) from the International Development Association (hereinafter called “the Bank”) toward the cost of the project **named in the BDS**. The Borrower intends to apply a portion of the funds to eligible payments under the contract for which these Bidding Documents are issued.
 - 2.2 Payments by the Bank will be made only at the request of the Borrower and upon approval by the Bank in accordance with the terms and conditions of the financing agreement between the Borrower and the Bank (hereinafter called the Loan Agreement), and will be subject in all respects to the terms and conditions of that Loan Agreement. 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 decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations. No party other than the Borrower shall derive any rights from the Loan Agreement or have any claim to the funds.
- 3. Fraud and Corruption**
 - 3.1 It is the Bank’s policy to require that Borrowers (including beneficiaries of Bank loans), as well as bidders, suppliers, and contractors and their subcontractors under Bank-financed

contracts, observe the highest standard of ethics during the procurement and execution of such contracts.¹ In pursuance of this policy, the Bank:

- (a) defines, for the purposes of this provision, the terms set forth below as follows:
 - (i) “corrupt practice”² 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”³ 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”⁴ is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
 - (iv) “coercive practice”⁵ 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;
 - (v) “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

¹ *In this context, 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.*

² *“another party” refers to a public official acting in 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.*

³ *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.*

⁴ *“parties” refers to participants in the procurement process (including public officials) attempting to establish bid prices at artificial, non competitive levels.*

⁵ *a “party” refers to a participant in the procurement process or contract execution.*

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 3.1 (e) below.

- (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.

3.2 Furthermore, Bidders shall be aware of the provision stated in Sub-Clause 35.1 (a) (iii) of the General Conditions of Contract.

- 4. Eligible Bidders**
- 4.1 A Bidder, and all parties constituting the Bidder, may have the nationality of any country, subject to the restrictions specified in Section V, Eligible Countries. A Bidder shall be deemed to have the nationality of a country if the Bidder is a citizen or is constituted, incorporated, or registered and operates in conformity with the provisions of the laws of that country. This criterion shall also apply to the determination of the nationality of proposed subcontractors or suppliers for any part of the

Contract including Related Services.

- 4.2 A Bidder shall not have a conflict of interest. All bidders found to have conflict of interest shall be disqualified. Bidders may be considered to have a conflict of interest with one or more parties in this bidding process, if they:
- (a) are or have been associated in the past, with a firm or any of its affiliates which have been engaged by the Purchaser to provide consulting services for the preparation of the design, specifications, and other documents to be used for the procurement of the goods to be purchased under these Bidding Documents ; or
 - (b) submit more than one bid in this bidding process, except for alternative offers permitted under ITB Clause 13. However, this does not limit the participation of subcontractors in more than one bid;
- 4.3 A Bidder that is under a declaration of ineligibility by the Bank in accordance with ITB Clause 3, at the date of contract award, shall be disqualified. The list of debarred firms is available at the electronic address specified in the **BDS**.
- 4.4 A firm that has been determined to be ineligible by the Bank in relation to the Bank Guidelines On Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants shall not be eligible to be awarded a contract.
- 4.5 Government-owned enterprises in the Borrower's Country shall be eligible only if they can establish that they (i) are legally and financially autonomous, (ii) operate under commercial law, and (iii) are not a dependent agency of the Purchaser or Borrower or Sub-Borrower.
- 4.6 Bidders shall provide such evidence of their continued eligibility satisfactory to the Purchaser, as the Purchaser shall reasonably request.

5. Eligible Goods and Related Services

- 5.1 All the Goods and Related Services to be supplied under the Contract and financed by the Bank may have their origin in any country in accordance with Section V, Eligible Countries.
- 5.2 For purposes of this Clause, the term "goods" includes commodities, raw material, machinery, equipment / goods / materials, and industrial plants; and "related services" includes services such as insurance, installation, training, and initial

maintenance.

- 5.3 The term “origin” means the country where the goods have been mined, grown, cultivated, produced, manufactured or processed; or, through manufacture, processing, or assembly, another commercially recognized article results that differs substantially in its basic characteristics from its components.

B. Contents of Bidding Documents

6. Sections of Bidding Documents

- 6.1 The Bidding Documents consist of Parts 1, 2, and 3, which include all the Sections indicated below, and should be read in conjunction with any Addendum issued in accordance with ITB Clause 8.

PART 1 Bidding Procedures

- Section I. Instructions to Bidders (ITB)
- Section II. Bidding Data Sheet (BDS)
- Section III. Evaluation and Qualification Criteria
- Section IV. Bidding Forms
- Section V. Eligible Countries

PART 2 Supply Requirements

- Section VI. Schedule of Requirements

PART 3 Contract

- Section VII. General Conditions of Contract (GCC)
- Section VIII. Special Conditions of Contract (SCC)
- Section IX. Contract Forms

- 6.2 The Invitation for Bids issued by the Purchaser is not part of the Bidding Documents.
- 6.3 The Purchaser is not responsible for the completeness of the Bidding Documents and their addendum, if they were not obtained directly from the Purchaser.
- 6.4 The Bidder is expected to examine all instructions, forms, terms, and specifications in the Bidding Documents. Failure to furnish all information or documentation required by the Bidding Documents may result in the rejection of the bid.

7. Clarification of Bidding Documents 7.1 A prospective Bidder requiring any clarification of the Bidding Documents shall notify on line the authority inviting the bid. The authority inviting the bid will respond to any request(s) for clarification received earlier than 10 days prior to the deadline for submission of bids. Description of clarification sought and the response of the authority inviting the bid will be uploaded for information of the other bidders without identifying the source of request for clarification. Should the Purchaser deem it necessary to amend the Bidding Documents as a result of a clarification, it shall do so following the procedure under ITB Clause 8 and ITB Sub-Clause 24.2.

8. Amendment of Bidding Documents 8.1 At any time prior to the deadline for submission of bids, the Purchaser may amend the Bidding Documents by issuing addendum. The addendum will appear on the web page of the website <http://eprocure.gov.in> under “Latest Corrigendum” and email notification will be automatically sent to those bidders who have moved this tender to their “My Tenders” area. Any other system functionality will be **as specified in the BDS**.

8.2 Any addendum issued shall be part of the Bidding Documents and shall be notified as Addendum / Corrigendum in the e-procurement portal which shall be binding in all prospective bidders.

8.3 To give prospective Bidders reasonable time in which to take an addendum into account in preparing their bids, the Purchaser may, at its discretion, extend the deadline for the submission of bids, pursuant to ITB Sub-Clause 24.2. This shall be notified in the e-procurement portal.

C. Preparation of Bids

9. Cost of Bidding 9.1 The Bidder shall bear all costs associated with the preparation and submission of its bid, and the Purchaser shall not be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

10. Language of Bid 10.1 The Bid, as well as all correspondence and documents relating to the bid exchanged by the Bidder and the Purchaser, shall be written in English language. Supporting documents and printed literature that are part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages into English language, in which case, for purposes of interpretation of the Bid, such translation shall govern.

11. Documents 11.1 The Bid shall comprise the following, the scanned copies of

Comprising the Bid

which shall be uploaded on the e-procurement platform.

- (a) Bid Form and the applicable Price Schedules, in accordance with ITB Clauses 12, 14, and 15;
- (b) Tender fee (if applicable) and Bid Security deposit details in accordance with ITB Clause 21, in the form as given in Section IV;
- (c) written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with ITB Clause 22;
- (d) documentary evidence in accordance with ITB Clause 16 establishing the Bidder's eligibility to bid;
- (e) documentary evidence in accordance with ITB Clause 17, that the Goods and Related Services to be supplied by the Bidder are of eligible origin;
- (f) documentary evidence in accordance with ITB Clauses 18 and 30, that the Goods and Related Services conform to the Bidding Documents;
- (g) documentary evidence in accordance with ITB Clause 19 establishing the Bidder's qualifications to perform the contract if its bid is accepted; and
- (h) Manufacturers authorization form in the prescribed Form as given in Section IV;.
- (i) any other document **required in the BDS.**

11.2 The following documents shall be submitted by post/courier to the Purchaser for verification and scrutiny within five days after the: last date of bid submission:

- (a) Original Power of Attorney;
- (b) Original Bid security instruments such as Letter of Credit/Bank Guarantee/Demand Draft/ Banker's (cashier's) Cheque;
- (c) Original affidavit vouching for the correctness of the information furnished and documents uploaded;

The Letter of Credit/Bank Guarantee/Demand Draft/Banker's (Cashier's) cheque etc would be checked for their genuineness, adequacy with respect to amount, validity and acceptability. The bids of only those bidders who have produced the originals as above for verification and review and found acceptable and those

who have paid the stipulated bid processing fee and adequate bid security either by cash or acceptable instruments would be opened at the appointed time to be notified on the e-procurement portal.

11.3 In case of discrepancy between the uploaded documents and the originals the original shall prevail.

In case of such a discrepancy between the uploaded document and the submitted original document, the original shall prevail

- 12. Bid Submission Form and Price Schedules**
- 12.1 The Bidder shall complete the Bid Submission Form using the form furnished in Section IV, Bidding Forms. This form must be completed without any alterations to its format, and no substitutes shall be accepted. All blank spaces shall be filled in with the information requested.
- 13. Alternative Bids**
- 13.1 Unless otherwise **specified in the BDS**, alternative bids shall not be considered.
- 14. Bid Prices and Discounts**
- 14.1 The prices and discounts quoted by the Bidder in the Bid Submission Form and in the Price Schedules shall conform to the requirements specified below.
- 14.2 All lots and items must be listed and priced separately in the Price Schedules.
- 14.3 The price to be quoted in the Bid Submission Form shall be the total price of the bid, excluding any discounts offered.
- 14.4 The Bidder shall quote any unconditional discounts and indicate the method for their application in the Bid Submission Form.
- 14.5 The terms EXW and other similar terms shall be governed by the rules prescribed in the current edition of Incoterms, published by The International Chamber of Commerce, as specified in the **BDS**.
- 14.6 Prices shall be quoted as specified in the Price Schedule included in Section IV, Bidding Forms. The dis-aggregation of price components is required solely for the purpose of facilitating the comparison of bids by the Purchaser. This shall not in any way limit the Purchaser's right to contract on any of the terms offered. In quoting prices, the Bidder shall be free to use transportation through carriers registered in any eligible country, in accordance with Section V Eligible Countries. Similarly, the Bidder may obtain insurance services from any eligible country in accordance with Section V Eligible Countries. Prices shall be

entered in the following manner:

- (a) **For Goods:**
 - (i) the price of the Goods quoted EXW (ex works, ex factory, ex warehouse, ex showroom, or off-the-shelf, as applicable), including all duties (customs, excise etc.) and sales and other taxes already paid or payable on the components and raw material used in the manufacture or assembly of the Goods;
 - (ii) any VAT, sales tax and other taxes which will be payable on the Goods if the contract is awarded to the Bidder; and
 - (iii) the price for inland transportation, insurance, and other local services required to convey the Goods to their final destination (Project Site) specified in the **BDS**.
- (b) **for the Related Services**, other than inland transportation and other services required to convey the Goods to their final destination, whenever such Related Services are specified in the Schedule of Requirements:
 - (i) the price of each item comprising the Related Services (inclusive of any applicable taxes).
- (c) bidders may like to ascertain availability of excise duty exemption benefits, available for contracts financed under World Bank Credits/ Loans. 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 Purchaser will not compensate the bidder.

Where the bidder has quoted taking into account such benefits, he must give all information required for issue of necessary Certificates in terms of the Central Excise Notification -108/95 along with his bid in form at S. No. 8 of Section VI. Where the Purchaser issues such Certificates, Excise Duty will not be reimbursed separately.

- 14.7 Prices quoted by the Bidder shall be fixed during the Bidder's performance of the Contract and not subject to variation on any account, unless otherwise specified in the **BDS**. A Bid submitted with an adjustable price quotation shall be treated as non responsive and shall be rejected, pursuant to ITB Clause 30. However, if in accordance with the **BDS**, prices quoted by the Bidder shall be subject to adjustment during the performance of the Contract, a bid submitted with a fixed price quotation shall

not be rejected, but the price adjustment shall be treated as zero.

14.8 If so indicated in ITB Sub-Clause 1.1, bids are being invited for individual contracts (lots) or for any combination of contracts (packages). Prices quoted shall correspond to 100 % of the items specified for each lot and to 100% of the quantities specified for each item of a lot. Bidders wishing to offer any price reduction (discount) for the award of more than one Contract shall specify the applicable price reduction in accordance with ITB Sub-Clause 14.4 provided the bids for all lots are submitted and opened at the same time.

15. Currencies of Bid

15.1 The Bidder shall quote in Indian Rupees only.

16. Documents Establishing the Eligibility of the Bidder

16.1 To establish their eligibility in accordance with ITB Clause 4, Bidders shall complete the Bid Submission Form, included in Section IV, Bidding Forms.

17. Documents Establishing the Eligibility of the Goods and Related Services

17.1 To establish the eligibility of the Goods and Related Services in accordance with ITB Clause 5, Bidders shall complete the country of origin declarations in the Price Schedule Forms, included in Section IV, Bidding Forms.

18. Documents Establishing the Conformity of the Goods and Related Services

18.1 To establish the conformity of the Goods and Related Services to the Bidding Documents, the Bidder shall furnish as part of its Bid the documentary evidence that the Goods conform to the technical specifications and standards specified in Section VI, Schedule of Requirements.

18.2 The documentary evidence may be in the form of literature, drawings or data, and shall consist of a detailed item by item description of the essential technical and performance characteristics of the Goods and Related Services, demonstrating substantial responsiveness of the Goods and Related Services to the technical specification, and if applicable, a statement of deviations and exceptions to the provisions of the Schedule of Requirements.

18.3 The Bidder shall also furnish a list giving full particulars, including available sources and current prices of spare parts, special tools, etc., necessary for the proper and continuing functioning of the Goods during the period **specified in the BDS** following commencement of the use of the goods by the Purchaser.

18.4 Standards for workmanship, process, material, and equipment / goods / materials, as well as references to brand names or catalogue numbers specified by the Purchaser in the Schedule of Requirements, are intended to be descriptive only and not restrictive. The Bidder may offer other standards of quality, brand names, and/or catalogue numbers, provided that it demonstrates, to the Purchaser's satisfaction, that the substitutions ensure substantial equivalence or are superior to those specified in the Schedule of Requirements.

**19. Documents
Establishing the
Qualifications
of the Bidder**

19.1 The documentary evidence of the Bidder's qualifications to perform the contract if its bid is accepted shall establish to the Purchaser's satisfaction:

(a) (i) that, if **required in the BDS**, a Bidder that does not manufacture or produce the Goods it offers to supply shall submit the Manufacturer's Authorization using the form included in Section IV, Bidding Forms to demonstrate that it has been duly authorized by the manufacturer or producer of the Goods to supply these Goods in the Purchaser's Country;

(ii) Supplies for any particular item in each schedule of the bid should be from one manufacturer only. Bids from agents offering supplies from different manufacturer's for the same item of the schedule in the bid will be treated as non-responsive.

(b) that the Bidder meets each of the qualification criterion specified in Section III, Evaluation and Qualification Criteria.

(c) Bids from Joint Ventures are not acceptable

**20. Period of
Validity of Bids**

20.1 Bids shall remain valid for the period **specified in the BDS** after the bid submission deadline date prescribed by the Purchaser. A bid valid for a shorter period shall be rejected by the Purchaser as non responsive.

20.2 In exceptional circumstances, prior to the expiration of the bid validity period, the Purchaser may request bidders to extend the period of validity of their bids. The request and the responses shall be made in writing. If a Bid Security is requested in accordance with ITB Clause 21, it shall also be extended for a corresponding period. A Bidder may refuse the request without forfeiting its Bid Security. A Bidder granting the request shall not be required or permitted to modify its bid, except as provided

in ITB Sub-Clause 20.3.

20.3 In the case of fixed price contracts, if the award is delayed by a period exceeding fifty-six (56) days beyond the expiry of the initial bid validity, the Contract price shall be adjusted as by the factor [*value of factor stated in BDS*] for each week or part of week that has elapsed from the expiration of the initial bid validity to the date of notification of award to the successful bidder. Bid evaluation shall be based on the Bid Price without taking into consideration the above correction.

21. Bid Security

21.1 The Bidder shall furnish as part of its bid, the requisite tender fee (if applicable) and a Bid Security, if required, as **specified in the BDS.**

21.2 The requisite tender fee has to be paid in the method as **specified in the BDS.**

- The Bid Security shall be in the amount **specified in the BDS** and shall be denominated in Indian Rupees and shall be in any one of the following forms :

- Demand Draft
- Banker's Cheque
- Bank Guarantee

21.3 The Bid Security shall be in the amount specified in the BDS and denominated in the currency of the Purchaser's Country or a freely convertible currency, and shall at the bidder's option, be in the form of either a certified check, demand draft, letter of credit, or a bank guarantee from a Nationalised/Scheduled Bank in India

21.4 be substantially in accordance with one of the forms of Bid Security included in Section IV, Bidding Forms, or other form approved by the Purchaser prior to bid submission

21.5 be payable promptly upon written demand by the Purchaser in case the conditions listed in ITB Clause 21.5 are invoked

21.6 be submitted in its original form; copies will not be accepted

21.3 remain valid for a period of 45 days beyond the validity period of the bids, as extended, if applicable, in accordance with ITB Clause 20.2, 21.7 If a Bid Security is required in accordance with ITB Sub-Clause 21.1, any bid not accompanied by a substantially

responsive Bid Security in accordance with ITB Sub-Clause 21.1, shall be rejected by the Purchaser as non-responsive. **If an acceptable Bid Security is not received, the bid shall be rejected by the Purchaser as non-responsive. .**

21.8 The Bid Security of unsuccessful Bidders shall be returned as promptly as possible upon the successful Bidder's furnishing of the Performance Security pursuant to ITB Clause 44.

21.9 The Bid Security may be forfeited:

- (a) if a Bidder
 - (i) withdraws its bid during the period of bid validity specified by the Bidder on the Bid Form, except as provided in ITB Sub-Clause 20.2;
- (b) if the successful Bidder fails to:
 - (i) sign the Contract in accordance with ITB Clause 43;
 - (ii) furnish a Performance Security in accordance with ITB Clause 44.

21.10 If a bid security is **not required in the BDS**, and

- (a) if a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Letter of Bid Form, except as provided in ITB 20.2, or
- (b) if the successful Bidder fails to: sign the Contract in accordance with ITB 43; or furnish a performance security in accordance with ITB 44;

the Borrower may, **if provided for in the BDS**, declare the Bidder disqualified to be awarded a contract by the Purchaser for a period of time **as stated in the BDS**.

22. Format and Signing of Bid

22.1 The digital signature shall be obtained by the bidder from the designated companies as given in the e-procurement portal and then get registered on the e-procurement portal. The bidder shall upload the bid along with all the requisite documents through e-procurement platform by using the digital signature. Any other system functionality shall be **as specified in the BDS**.

22.2 Any interlineations, erasures, or overwriting shall be valid only if

they are signed or initialed by the person signing the Bid.

D. Submission and Opening of Bids

23. Submission, Sealing and Marking of Bids

23.1 The bidders shall upload the bid through e-procurement platform, specified in the BDS. No other mode of submission is permitted.

Bid Form and other documents as detailed in Clause ITB Clause 11 shall be addressed to Purchaser before uploading.:

Only the originals of Power of Attorney, the bid security (if it is in the form of Bank Guarantee/DD/CC) and the Original affidavit vouching for the correctness of the information furnished and documents uploaded shall be delivered by post/courier to the address mentioned in BDS, within the time period , specified in BDS.

23.2 The bidder is solely responsible to ensure submission of the requisite documents within the stipulated period and the Purchaser will not be responsible for postal/courier delays.

(a) The envelope containing the original documents shall bear the Project Name, Invitation of Bids (IFB) title and number. bear the specific identification of this bidding process indicated in ITB 1.1 and any additional identification marks as **specified in the BDS**; and and bear a warning not to open before the time and date for bid opening, in accordance with ITB Sub-Clause 27.1.

23.3 Deleted

23.4 Telex, Cable or Facsimile bids will be rejected as non-responsive. Bids submitted by any other means other than through e-procurement portal of <http://eprocure.gov.in> shall be rejected.

24. Deadline for Submission / Uploading of Bids

24.1 Bids must be submitted by the Bidders no later than the date and time **Specified in the BDS** through the e-procurement platform. The e-procurement platform will not accept the bids after the stipulated date and time (as per the time of the e-procurement platform).

24.2 The Purchaser may, at its discretion, extend the deadline for the submission of bids by amending the Bidding Documents in accordance with ITB Clause 8, in which case all rights and obligations of the Purchaser and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended. The amendment/notification shall be notified in the e-

procurement platform.

25. Late Bids

25.1 Bids cannot be uploaded by the Bidders after the deadline for submission / uploading of bids (as per the e-procurement server time) prescribed by the Purchaser pursuant to ITB Clause 24..

26. Withdrawal, Substitution, and Modification of Bids

26.1 Bidders may cancel/modify their bids on line before the deadline for submission of bids.

26.2 For modification of bids, the bidder need not make any additional payment towards the cost of bidding process. For bid modification and consequential re-submission, the bidder is required to cancel his bid submitted earlier (only the financial bid is cancelled. All the uploaded documents would be there). The last modified bid submitted by the bidder within the bid submission time shall be considered as the bid. For this purpose, modification/withdrawal by other means will not be accepted.. In the e-procurement system, the modification of bid is allowed any number of times. The bidders may withdraw his bid by uploading their request before the deadline for submission of bids, however, **if the bid is withdrawn, the re-submission of the bid is not allowed.**

26.3 No bid may be modified/ withdrawn online after the deadline for submission of bids.

26.4 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 20 above or as extended pursuant to Clause 20 is not allowed in the e-procurement system. If a bidder does the same through any other medium, then it may result in the forfeiture of the bid security pursuant to Clause 21.11

27. Bid Opening

27.1 The Purchaser will open all bids uploaded through e-procurement platform in the presence of the bidders representations who chose to attend **at the stipulated place, date and time as given in BDS. The opening of bids** could also be viewed by participating bidders online on the e-procurement system, in the bidder's dashboard. 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.

The Bidders representatives who are present shall produce authorization letter and shall sign a register evidencing their attendance.

27.2 The Bidders names, the sufficiency or otherwise of the bid

security, the bid prices, discounts and alternative offers and such other details as the Purchaser, at its discretion, may consider appropriate will be announced at the opening. No bids shall be rejected at the bid opening. Any Bid price, which is not declared and recorded, will not be taken into account in Bid Evaluation.

- 27.3 The Purchaser shall prepare a record of the Bid opening that shall include, as a minimum: the name of the Bidder; the Bid Price per lot if applicable, including any discounts, and alternative offers if they were permitted; and the presence or absence of a Bid Security, if one was required. The Bidders' representatives who are present shall be requested to sign the attendance sheet. A copy of the record shall be posted online.

E. Evaluation and Comparison of Bids

- 28. Confidentiality**
- 28.1 Information relating to the examination, evaluation, comparison, and post qualification of bids, and recommendation of contract award, shall not be disclosed to bidders or any other persons not officially concerned with such process until publication of the Contract Award.
- 28.2 Any effort by a Bidder to influence the Purchaser in the examination, evaluation, comparison, and post qualification of the bids or contract award decisions may result in the rejection of its Bid.
- 28.3 Notwithstanding ITB Sub-Clause 28.2, from the time of bid opening to the time of Contract Award, if any Bidder wishes to contact the Purchaser on any matter related to the bidding process, it should do so in writing.
- 29. Clarification of Bids**
- 29.1 To assist in the examination, evaluation, comparison and post-qualification of the bids, the Purchaser may, at its discretion, ask any Bidder for a clarification of its Bid. Any clarification submitted by a Bidder in respect to its Bid and that changes the substance of the Bidder price of the bid shall not be considered. The Purchaser's request for clarification and the response shall be in writing. No change in the prices or substance of the Bid shall be sought, offered, or permitted.
- 30. Responsiveness of Bids**
- 30.1 The Purchaser's determination of a bid's responsiveness is to be based on the contents of the bid itself.
- 30.2 A substantially responsive Bid is one that conforms to all the terms, conditions, and specifications of the Bidding Documents without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that:

- (a) affects in any substantial way the scope, quality, or performance of the Goods and Related Services specified in the Contract; or
 - (b) limits in any substantial way, inconsistent with the Bidding Documents, the Purchaser's rights or the Bidder's obligations under the Contract; or
 - (c) if rectified would unfairly affect the competitive position of other bidders presenting substantially responsive bids.
- 30.3 Bids from Agents, without proper authorization from the manufacturer as per Section IV, shall be treated as non-responsive.
- 30.4 If a bid is not substantially responsive to the Bidding Documents, it shall be rejected by the Purchaser and may not subsequently be made responsive by the Bidder by correction of the material deviation, reservation, or omission.

31. Nonconformities, Errors, and Omissions

- 31.1 Provided that a Bid is substantially responsive, the Purchaser may waive any non-conformities or omissions in the Bid that do not constitute a material deviation.
- 31.2 Provided that a bid is substantially responsive, the Purchaser may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities or omissions in the bid related to documentation requirements. Such omission shall not be related to any aspect of the price of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.
- 31.3 Deleted

32. Preliminary Examination of Bids

- 32.1 The Purchaser shall examine the bids to confirm that all documents and technical documentation requested in ITB Clause 11 have been provided, and to determine the completeness of each document submitted.
- 32.2 The Purchaser shall confirm that the following documents and information have been provided in the Bid. If any of these documents or information is missing, the offer shall be rejected and the bid security may be forfeited.
- (a) Bid Submission Form, in accordance with ITB Sub-Clause 12.1;

- (b) Price Schedules, in accordance with ITB Sub-Clause 12.2;
 - (c) Bid Security in accordance with ITB Clause 21.
- 33. Examination of Terms and Conditions; Technical Evaluation**
- 33.1 The Purchaser shall examine the bid to confirm that the Bidder has accepted all terms and conditions specified in GCC and the SCC. without material deviations or reservation. Deviations from or objections or reservations to critical provisions such as those concerning Performance Security (GCC Clause 18). Warranty (GCC Clause 28), Force Majeure (Clause 32), Limitation of liability (GCC Clause 30), Governing law (GCC Clause 9) and Taxes & Duties (GCC Clause 17) will be deemed to be a material deviation. The Purchaser's determination of a bid's responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence.
 - 33.2 The Purchaser shall evaluate the technical aspects of the Bid submitted in accordance with ITB Clause 18, to confirm that all requirements specified in Section VI, Schedule of Requirements of the Bidding Documents have been met without any material deviation or reservation.
 - 33.3 If, after the examination of the terms and conditions and the technical evaluation, the Purchaser determines that the Bid is not substantially responsive in accordance with ITB Clause 30, it shall reject the Bid.
- 34. Conversion to Single Currency** Not used
- 35. Domestic Preference** Not used
- 36. Evaluation of Bids**
- 36.1 The Purchaser shall evaluate each bid that has been determined, up to this stage of the evaluation, to be substantially responsive . No bid will be considered if the complete requirement as given in the Schedule of Requirement (Section VI) is not included in the Bid. The discounts will be taken into account in the evaluation of the bid so as to determine the bid offering the lowest evaluated cost for the Purchaser in deciding the award.
 - 36.2 To evaluate a Bid, the Purchaser shall only use all the factors, methodologies and criteria defined in ITB Clause 36. No other criteria or methodology shall be permitted.
 - 36.3 To evaluate a Bid, the Purchaser shall consider the following:
 - (a) evaluation will be done for Items or Lots, as **specified in the**

BDS; and the Bid Price as quoted in accordance with clause 14;

- (b) price adjustment due to discounts offered in accordance with ITB Sub-Clause 14.4;
- (c) adjustments due to the application of the evaluation criteria **specified in the BDS** from amongst those set out in Section III, Evaluation and Qualification Criteria;

36.4 The Purchaser's evaluation of a bid will exclude and not take into account:

- (a) In the case of Goods manufactured in India or goods of foreign origin already located in India, vat, sales and other similar taxes, which will be payable on the goods if a contract is awarded to the Bidder;
- (b) any allowance for price adjustment during the period of execution of the contract, if provided in the bid.

36.5 The Purchaser's evaluation of a bid may require the consideration of other factors, in addition to the Bid Price quoted in accordance with ITB Clause 14. These factors may be related to the characteristics, performance, and terms and conditions of purchase of the Goods and Related Services. The effect of the factors selected, if any, shall be expressed in monetary terms to facilitate comparison of bids, unless otherwise specified in Section III, Evaluation and Qualification Criteria. The factors, methodologies and criteria to be used shall be as specified in ITB 36.

36.6 If so **specified in the BDS**, these Bidding Documents shall allow Bidders to quote separate prices for one or more lots, and shall allow the Purchaser to award one or multiple lots to more than one Bidder. The methodology of evaluation to determine the lowest-evaluated lot combinations, is specified in Section III, Evaluation and Qualification Criteria.

37. Comparison of Bids

37.1 The Purchaser shall compare all substantially responsive bids to determine the lowest-evaluated bid, in accordance with ITB Clause 36.

38. Post qualification of the Bidder

38.1 The Purchaser shall determine to its satisfaction whether the Bidder that is selected as having submitted the lowest evaluated and substantially responsive bid is qualified to perform the Contract satisfactorily.

- 38.2 The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB Clause 19.
- 38.3 An affirmative determination shall be a prerequisite for award of the Contract to the Bidder. A negative determination shall result in disqualification of the bid, in which event the Purchaser shall proceed to the next lowest evaluated bid to make a similar determination of that Bidder's capabilities to perform satisfactorily.
- 39. Purchaser's Right to Accept Any Bid, and to Reject Any or All Bids** 39.1 The Purchaser reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to contract award, without thereby incurring any liability to Bidders.

F. Award of Contract

- 40. Award Criteria** 40.1 The Purchaser shall award the Contract to the Bidder whose offer has been determined to be the lowest evaluated bid and is substantially responsive to the Bidding Documents, provided further that the Bidder is determined to be qualified to perform the Contract satisfactorily.
- 41. Purchaser's Right to Vary Quantities at Time of Award** 41.1 At the time the Contract is awarded, the Purchaser reserves the right to increase or decrease the quantity of Goods and Related Services originally specified in Section VI, Schedule of Requirements, provided this does not exceed the percentages **specified in the BDS**, and without any change in the unit prices or other terms and conditions of the bid and the Bidding Documents.
- 42. Notification of Award** 42.1 Prior to the expiration of the period of bid validity, the Purchaser shall notify the successful Bidder, in writing, that its Bid has been accepted.
- 42.2 Until a formal Contract is prepared and executed, the notification of award shall constitute a binding Contract.
- Publication of Award** 42.3 The Purchaser shall publish in a National website[GOI web site- <http://eprocure.gov.in>] the results identifying the bid and lot numbers and the following information: (i) name of each Bidder who submitted a Bid; (ii) bid prices as read out at bid opening; (iii) name and evaluated prices of each Bid that was evaluated; (iv) name of bidders whose bids were rejected and the reasons

**Recourse to
unsuccessful
Bidders**

for their rejection; and (v) name of the winning Bidder, and the price it offered, as well as the duration and summary scope of the contract awarded. After publication of the award, unsuccessful bidders may request in writing to the Purchaser for a debriefing seeking explanations on the grounds on which their bids were not selected. The Purchaser shall promptly respond in writing to any unsuccessful Bidder who, after Publication of contract award, requests a debriefing.

42.4 Upon the successful Bidder's furnishing of the performance security and signing the Contract Form pursuant to ITB Clause 44, the Purchaser will promptly notify each unsuccessful Bidder and will discharge its bid security, pursuant to ITB Clause 21.4.

**43. Signing of
Contract**

43.1 Promptly after notification, the Purchaser shall send the successful Bidder the Agreement and the Special Conditions of Contract.

43.2 Within twenty-one (21) days of receipt of the Agreement, the successful Bidder shall sign, date, and return it to the Purchaser.

**44. Performance
Security**

44.1 Within twenty one (21) days of the receipt of notification of award from the Purchaser, the successful Bidder, if required, shall furnish the Performance Security in accordance with the GCC, using for that purpose the Performance Security Form included in Section IX Contract forms, or another Form acceptable to the Purchaser. The Purchaser shall promptly notify the name of the winning Bidder to each unsuccessful Bidder and discharge the Bid Securities of the unsuccessful bidders pursuant to ITB Sub-Clause 21.4.

44.2 Failure of the successful Bidder to submit the above-mentioned Performance Security or sign the Contract shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security. In that event the Purchaser may award the Contract to the next lowest evaluated Bidder, whose offer is substantially responsive and is determined by the Purchaser to be qualified to perform the Contract satisfactorily.

SECTION II - BIDDING DATA SHEET

The following specific data for the goods to be procured shall complement, supplement, or amend the provisions in the Instructions to Bidders (ITB). Whenever there is a conflict, the provisions herein shall prevail over those in ITB.

ITB Clause Reference	A. General
ITB 1.1	The Purchaser is: Commissioner, Vizianagaram Municipality
ITB 1.1	The name and identification number of the IFB No:4/ APMDP/VZM /E/ TO /2015-16/ Dt.03.09.2015.
ITB 2.1	The Borrower is Government of India (GOI)
ITB 2.1	The name of the Project is: Andhra Pradesh Municipal Development Project
ITB 4.3	A list of firms debarred from participating in World Bank projects is available at http://www.worldbank.org/debarr
B. Contents of Bidding Documents	
ITB 7.1	For <u>Clarification of bid purposes</u> only, the Purchaser's address is: Attention: The Commissioner, Address: <i>Near Clock Tower, Municipal Office .</i> City: <i>Vizianagaram</i> ZIP Code: <i>535001</i> Country: <i>India</i> Telephone: <i>(08922) 224793</i> Facsimile number: <i>(08922) 224793</i> Electronic mail address: <i>commvzm@yahoo.com</i>
C. Preparation of Bids	
ITB 11.1(i)	The Bidder shall submit the following additional documents in its bid: 1. Certification of incorporation of the bidder and manufacturer 2. The bidder shall clearly confirm that all facilities exist with him (or

	<p>manufacturer, as applicable) in his factory for inspection and testing and these can be accessed by the Purchaser or his representative for inspection.</p> <ol style="list-style-type: none"> 3. Technical schedules of goods as required by technical specifications. 4. Descriptive Documents, drawings, notes and references of operating and assembly of mechanical parts 5. a detailed description of the Goods essential technical and performance characteristics: 6. A clause-by-clause commentary on the Purchaser's technical specifications demonstrating substantial responsiveness of the Goods and Services to those specifications or a statement of deviations and exceptions to the provisions of the Technical Specifications. 7. For purposes of the commentary to be furnished pursuant to Paragraph 6 above, the Bidder shall note that standards for workmanship, material and goods, and references to brand names or catalogue numbers designated by the Purchaser in its Technical Specifications are intended to be descriptive only and not restrictive. The Bidder may substitute alternative standards, brand names and/or catalogue numbers in its bid, provided that it demonstrates to the Purchaser's satisfaction that the substitutions ensure substantial equivalence to those designated in the Technical Specifications 8. The documentary evidence of the goods and services eligibility shall consist of a statement in the Price Schedule on the country of origin of the goods and services offered which shall be confirmed by a certificate of origin at the time of shipment 9. Non-manufacturer bidders will submit the manufacturer's authorization Form as per Proforma in Section IV. 10. The following details shall also be provided by Indian Bidders: <ol style="list-style-type: none"> a. Name, address, PAN and ward/circle where they are being assessed of the Directors of the Bidding Company. b. Company's PAN and Income Tax clearance certificate and ward/circle where it is being assessed, c. Registration details of the company under VAT, local and Central Sales Tax, and other laws as may be applicable and also Sales tax/VAT clearance certificate <ul style="list-style-type: none"> - The bidders from outside India shall provide the corresponding details of Income Tax registration, Social Security Number, details regarding Registration under Value Added Tax or sale of goods (as may be applicable) etc 11. The bidder shall disclose instance of previous past performance that may
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	have resulted into adverse actions taken against the bidder during the last five years.
ITB 13.1	Alternative Bids shall not be considered.
ITB 14.5	The Incoterms edition is Incoterm 2000.
ITB 14.6 (a) (iii)	“Final destination (Project Site)”: Vide Annexure –I in Schedule of Requirement in Section VI.
ITB 14.7	The prices quoted by the Bidder shall not be adjustable.
ITB 18.3	Period of time the Goods are expected to be functioning (for the purpose of spare parts): 7 years
ITB 19.1 (a)	Manufacturer’s authorization is: <i>required as per proforma in Section IV.</i>
ITB 20.1	The bid validity period shall be 90 days after the bid submission deadline.
ITB 20.3	The factor will be 5.5% per annum
ITB 21.1	Bid Security is required.
ITB 21.2	The amount of the Bid Security shall be: INR 0.056 Millions
ITB 22.1	<p>The bidding under this contract is electronic bid submission through website http://eprocure.gov.in Detailed guidelines for viewing bids and submission of online bids are given on the website. The Invitation for Bids under this work is published on this website. Any citizen or prospective bidder can logon to this website and view the Invitation for Bids and can view the details of works for which bids are invited. The perspective bidder can submit bids on line; however, the bidder is required to have enrolment/registration in the website and should have valid Digital Signature Certificate (DSC), for signing and encryption issued by the same Certifying Authority, in the form of smart card/e-token. The DSC can be obtained from any authorised certifying agencies. The bidder should register in the web site http://eprocure.gov.in using the relevant option available. Then the Digital Signature registration has to be done with the e-token, after logging into the site. After this, the bidder can login the site through the secured login by entering the password of the e-token & the user id/ password chosen during registration.</p> <p>After getting the bid schedules, the Bidder should go through them carefully and then submit the documents as asked, otherwise, the bid will</p>

	<p>be rejected.</p> <p>The completed bid comprising of documents, should be uploaded on the website given above through e-tendering along with scanned copies of requisite certificates as are mentioned in different sections in the bidding document and scanned copy of bid security in case it is provided in the form of BG.</p>
ITB 23.1	<p>All the documents are required to be signed digitally by the bidder. After electronic on line bid submission, the system generates a unique bid identification number which is time stamped. This shall be treated as acknowledgement of bid submission.</p>
	<p>D. Submission and Opening of Bids</p>
ITB 27.1	<p>The bid opening shall take place at:</p> <p>Address: <i>Municipal Commissioner, Near Clock Tower, Municipal Office .</i> City: <i>Vizianagaram</i> ZIP Code: <i>535001</i> Country: <i>India</i> Telephone: <i>(08922) 224793</i> Facsimile number: <i>(08922) 224793</i> Electronic mail address: <i>commvzm@yahoo.com</i></p> <p>Date: 09-10-2015 and <i>14-10-2015</i> Time: 5.00 PM. and <i>11.00 A.M. hours</i></p>

	E. Evaluation and Comparison of Bids
ITB 36.3(a)	<i>Evaluation will be done for all the items in the price schedule as a single lot.</i>
ITB 36.3(c)	Deleted
ITB 36.6	<i>Evaluation will be done for all the items in the price schedule as a single lot.</i>
	F. Award of Contract
ITB 41.1	<p>The maximum percentage by which quantities may be increased is: <i>15%</i></p> <p>The maximum percentage by which quantities may be decreased is: <i>15%</i></p>

SECTION III. EVALUATION AND QUALIFICATION CRITERIA

Contents

1. Evaluation Criteria (ITB 36.3 {c})
2. Multiple Contracts (ITB 36.6)
3. Post qualification Requirements (ITB 38.2)

1. Evaluation Criteria (ITB 36.3 (c))

Not applicable

2. Multiple Contracts (ITB 36.6)

Nil

3. Post qualification Requirements (ITB 38.2)

After determining the lowest-evaluated bid in accordance with ITB Sub-Clause 37.1, the Purchaser shall carry out the post qualification of the Bidder in accordance with ITB Clause 38, using only the requirements specified. Requirements not included in the text below shall not be used in the evaluation of the Bidder's qualifications.

A) Manufacturer Bidders

(a) Financial Capability

The Bidder shall furnish documentary evidence that it meets the following financial requirement(s):

The bidders, who are also the manufacturers, should have annual sales turnover of Rs.22.40 Millions in at least two financial years during the past 5 financial years.

(b) Experience and Technical Capacity

The Bidder shall furnish documentary evidence to demonstrate that it meets the following experience requirement(s):

(i) The bidder must have manufactured and supplied satisfactorily similar equipment/goods/materials of the type specified in the Schedule of Requirements to the extent of at least 80% of the total quantity indicated in the schedule under "Section – VI, Schedule of Requirements" in any one of the last five financial years (Prior to the year of bid opening) and should be in use satisfactorily with no adverse report for at least two years preceding the date of bid opening.

(ii) The bidder should furnish the information on past supplies and satisfactory performance in the Proforma given under Section-VI.

(iii) Bidders shall invariably furnish documentary evidence (End User's certificate) in support of the satisfactory operation of the goods as specified above.

(iv) The bidder shall furnish data to support that he has the financial and production capacity to perform the contract and complete the supplies within the stipulated delivery period.

(v) Further, bidder should be in continuous business of manufacturing / supplying and after sale services of products similar to that specified in the 'Schedule of requirement' during the last 5 years prior to bid opening year.

(vi) The documentary evidence of the Bidder's eligibility to bid shall establish to the Purchaser's satisfaction that the Bidder, at the time of submission of its bid, is from an eligible country as defined under ITB Clause 4.

(vii) The legal status, place of registration and principal place of business of the company or firm or partnership, etc.;

(viii) Details of experience and past performance of the bidder on equipment / goods / materials offered and on those of similar nature within the past five years (Prior to the year of bid opening) and details of current contracts in hand and other commitments (suggested Proforma given in Section VI).

(ix) The Bidder should furnish a brief write-up, backed with adequate data, explaining his available capacity and experience (both technical and commercial) for the manufacture and supply of the required equipment / goods / materials within the specified time of completion after the meeting all their current commitments.

(x) The bidder should clearly confirm that all the facilities exist in his factory for inspection and testing and these will be made available to the purchaser or his representative for inspection.

(xi) Reports on financial standing of the bidder such as profit and loss statements, balance sheets and auditors report for the past three years, bankers certificate, etc.

B) Non- Manufacturer Bidders

In the case of a Bidder offering to supply Goods under the Contract that the Bidder does not manufacture or otherwise produce, the Bidder should be duly authorized by the manufacturer of the Goods who meets the criteria under (A) above (all supporting documents/information as asked above for manufacturer shall be submitted with the bid) and

- a) The manufacturer furnishes a legally enforceable authorization in the prescribed Form [Section IV] assuring full guarantee and warranty obligations as per GCC and SCC for the goods offered; and

The bidder, as authorized by the manufacturers, has supplied and provided after sales service to the extent of at least 30% of the quantities indicated against each item specified in the Schedule of Requirements in any one of the last three (3) years (Prior to the year of bid opening), which must be in satisfactory operation at least for one year on the date of bid opening.

- b) The bidders should have annual sales turnover of Rs.22.40 Millions in at least two financial years during the past 5 financial years.

Notwithstanding anything stated above, the purchaser reserves the right to assess the bidder's capabilities and capacity to execute the contract satisfactorily before deciding on award

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/or record of poor performance such as, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc.

Note:

1) The above post qualification requirements are to be met by the bidder (in case of manufacturer bidders) and the bidder and the manufacturer respectively (in case of non manufacturer bidders) and qualification of group/sister/parent companies will not be considered for meeting the above requirement.

2) For the purpose of furnishing documentary evidence to meet the post qualification criteria, the bidder should furnish the following:

- (i) The supply made to public sector/Government units in India, the bidder should submit an affidavit confirming that the performance statement given is correct.**
- (ii) In case of supplies to private sector units, the bidder should submit an affidavit confirming that the performance statement is correct along with copy of purchase order, copy of invoices, proof of payment received from Purchasers, documentary evidence (end user certificate) in support of satisfactory completion of orders.**

SECTION IV – BIDDING FORMS

Table of Forms

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Price and Completion Schedule - Related Services	47
Bid Security (Bank Guarantee)	49
Manufacturer’s Authorization.....	50

BIDDER INFORMATION FORM

[The Bidder shall fill in this Form in accordance with the instructions indicated below. No alterations to its format shall be permitted and no substitutions shall be accepted.]

Date: *[insert date (as day, month and year) of Bid Submission]*
IFB No:4/APMDP/VZM/E/TO/2015-16

Page _____ of _____ pages

1. Bidder's Legal Name <i>[insert Bidder's legal name]</i>
2. Bidder's actual or intended Country of Registration: <i>[insert actual or intended Country of Registration]</i>
3. Bidder's Year of Registration: <i>[insert Bidder's year of registration]</i>
4. Bidder's Legal Address in Country of Registration: <i>[insert Bidder's legal address in country of registration]</i>
5. Bidder's Authorized Representative Information Name: <i>[insert Authorized Representative's name]</i> Address: <i>[insert Authorized Representative's Address]</i> Telephone/Fax numbers: <i>[insert Authorized Representative's telephone/fax numbers]</i> Email Address: <i>[insert Authorized Representative's email address]</i>
6. Attached are copies of original documents of: <i>[check the box(es) of the attached original documents]</i> <input type="checkbox"/> Articles of Incorporation or Registration of firm named in 1, above, in accordance with ITB Sub-Clauses 4.1 and 4.2. <input type="checkbox"/> In case of government owned entity from the Purchaser's country, documents establishing legal and financial autonomy and compliance with commercial law and not dependent agency of borrower or sub-borrower or purchaser, in accordance with ITB Sub-Clause 4.5.

Note: To be completed and submitted /uploaded as a part of the bid.

BID FORM

[The Bidder shall fill in this Form in accordance with the instructions indicated No alterations to its format shall be permitted and no substitutions shall be accepted.]

Date: *[insert date (as day, month and year) of Bid Submission]*
Invitation for Bid No.: ***[IFB No:4/APMDP/VZM/E/TO/2015-16]***
Alternative No.: *[insert identification No if this is a Bid for an alternative]*

To: The Commissioner, Vizianagaram Municipality, Vizianagaram-535001, Andhra Pradesh.

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Bidding Documents, including Addenda No.: *[insert the number and issuing date of each Addenda]*;
- (b) We offer to supply in conformity with the Bidding Documents and in accordance with the Delivery Schedules specified in the Schedule of Requirements the following Goods and Related Services *[insert a brief description of the Goods and Related Services]*;
- (c) The total price of our Bid, excluding any discounts offered in item (d) below, is: *[insert the total bid price in words and figures, indicating the various amounts and the respective currencies]*;
- (d) The discounts offered and the methodology for their application are:

Discounts. If our bid is accepted, the following discounts shall apply.*[Specify in detail each discount offered and the specific item of the Schedule of Requirements to which it applies.]*

Methodology of Application of the Discounts. The discounts shall be applied using the following method: *[Specify in detail the method that shall be used to apply the discounts]*;

- (e) Our bid shall be valid for the period of time specified in ITB Sub-Clause 20.1, from the date fixed for the bid submission deadline in accordance with ITB Sub-Clause 24.1, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (f) If our bid is accepted, we commit to obtain a performance security in accordance with ITB Clause 44 and GCC Clause 17 for the due performance of the Contract;
- (g) We, including any subcontractors or suppliers for any part of the contract, have nationality from eligible countries
- (h) We have no conflict of interest in accordance with ITB Sub-Clause 4.3;

- (i) Our firm, its affiliates or subsidiaries—including any subcontractors or suppliers for any part of the contract—has not been declared ineligible by the Bank, under the Purchaser’s country laws or official regulations, in accordance with ITB Sub-Clause 4.6;
- (j) The following commissions, gratuities, or fees have been paid or are to be paid with respect to the bidding process or execution of the Contract: *[insert complete name of each Recipient, its full address, the reason for which each commission or gratuity was paid and the amount and currency of each such commission or gratuity]*

Name of Recipient	Address	Reason	Amount
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

(If none has been paid or is to be paid, indicate “none.”)

- (k) We understand that this bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed.
- (l) We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.
- (m) We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in bribery.
- (n) We 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.”

Signed: *[insert signature of person whose name and capacity are shown]*
 In the capacity of *[insert legal capacity of person signing the Bid Submission Form]*

Name: *[insert complete name of person signing the Bid Submission Form]*

Duly authorized to sign the bid for and on behalf of: *[insert complete name of Bidder]*

Dated on _____ day of _____, _____ *[insert date of signing]*

Note: To be completed and submitted /uploaded as a part of the bid.

Price Schedule Forms

*[The Bidder shall fill in these Price Schedule Forms in accordance with the instructions indicated. The list of line items in column 1 of the **Price Schedules** shall coincide with the List of Goods and Related Services specified by the Purchaser in the Schedule of Requirements.]*

PRICE SCHEDULE

Date: _____
IFB No:4/APMDP/VZM/E/TO/2015-16
 Alternative No: _____
 Page N^o _____ of _____

1	2	3	4	5	6	7	8	9
Line Item No	Description of Goods	Country of origin	Quantity and physical unit - Kgs	Unit price EXW [including excise duty if any]	Total EXW price per line item [including Excise Duty if any] (Col. 4x5)	Price per line item for inland transportation, insurance and other services required to convey the Goods to their final destination	Sales, vat, and other taxes payable per item if Contract is awarded (in accordance with ITB 14.6(a)(ii))	Total Price per line item (Col. 6+7)
1	Supply and delivery of 8.0 mm thick MS pipes & specials at various loactions in the Town for Culvert, Drain & Road Crossings conforming to IS 2062-1992 grade B, manufactured as per IS-3589-2001 including fabrication of MS pipes, cost of mild steel plate, epoxy paint and other required materials inclusive of all taxes and duties, loading , unloading and conveyance charges to various locations including all incidental and operational charges etc., complete and as directed by the Engineer in-charge for the following diameter of pipes							
1.1	150 mm 8.0 mm thick M.S.Pipes – 1483 Mts		46195					
1.2	200 mm 8.0 mm thick M.S.Pipes- 127.50 Mts		5228					
1.3	250 mm 8.0 mm thick M.S.Pipes- 45 Mts		2290					
1.4	300 mm 8.0 mm thick M.S.Pipes- 45 Mts		2733					
1.5	350 mm 8.0 mm thick M.S.Pipes- 105 Mts		7412					

Name of Bidder [insert complete name of Bidder] Signature of Bidder [signature of person signing the Bid] Date [insert date]

Note: To be completed and submitted /uploaded as a part of the bid

Price and Completion Schedule - Related Services

Item No.1

Date: _____
IFB No:4/APMDP/VZM/E/TO/2015-16
 Alternative No: _____
 Page N° _____ of _____

1	2	3	4	5	6	7
Service N°	Description of Services (excludes inland transportation and other services required in India to convey the goods to their final destination)	Country of Origin	Delivery Date at place of Final destination	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)
1.	<i>NIL</i>			...		
Total Bid Price						

Name of Bidder [insert complete name of Bidder] Signature of Bidder [signature of person signing the Bid] Date [insert date]

Note: To be completed and submitted /uploaded as a part of the bid.

BID SECURITY FORM

From: (Bidder)

.....
.....
.....

To:

The Commissioner,
Vizianagaram Municipality,
Vizianagaram-535001,
Andhra Pradesh.

Sir,

1. We have deposited Bid security of Rs..... (Rupees
..... only)
- (a) Through debit to our credit card No..... issued by valid
up to.....:
 - (b) Direct debit to our current/savings Account No. in Bank
.....Branch on.....;
 - (c) Over the counter payment to central pooling account of Government of Andhra
Pradesh, the details of which are as follows:
 - (i) Axis Bank (Name of the branch)
 - (ii) Method of remittance and its details

OR

- (d) We have deposited Bid Security for an amount of Rs..... in the form of a
certified cheque, demand draft, letter of credit or a bank guarantee from a
Nationalized/Scheduled Bank in India the details of which are as follows:
 - (i) BG/CC/DD Number and date:
 - (ii) Name & Branch of issuing Bank

We agree that the Bid Security deposited by us as detailed above, may be forfeited by the
Purchaser in accordance to ITB Clause 21.11

Signature and Name of Bidder

Date:

Note: To be completed and submitted / uploaded as a part of the Bid.

Bid Security (Bank Guarantee)

[The Bank shall fill in this Bank Guarantee Form in accordance with the instructions indicated.]

[Bank's Name, and Address of Issuing Branch or Office]

Beneficiary: Commissioner, Vizianagaram Municipality, Vizianagaram-535001, Andhra Pradesh.

Date: _____

BID GUARANTEE No.: _____

We have been informed that *[name of the Bidder]* (hereinafter called "the Bidder") has submitted to you its bid dated (hereinafter called "the Bid") for the execution of *[name of contract]* under Invitation for Bids No. *[IFB number]* ("the IFB").

Furthermore, we understand that, according to your conditions, bids must be supported by a bid guarantee.

At the request of the Bidder, we *[name of Bank]* hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of *[amount in figures] ([amount in words])* upon receipt by us of your first demand in writing accompanied by a written statement stating that the Bidder is in breach of its obligation(s) under the bid conditions, because the Bidder:

- (a) has withdrawn its Bid during the period of bid validity specified by the Bidder in the Form of Bid; or
- (b) having been notified of the acceptance of its Bid by the Purchaser during the period of bid validity, (i) fails or refuses to execute the Contract Form; or (ii) fails or refuses to furnish the performance security, if required, in accordance with the Instructions to Bidders.

This guarantee will expire: (a) if the Bidder is the successful bidder, upon our receipt of copies of the contract signed by the Bidder and the performance security issued to you upon the instruction of the Bidder; or (b) if the Bidder is not the successful bidder, upon the earlier of (i) our receipt of a copy of your notification to the Bidder of the name of the successful bidder; or (ii) twenty-eight days after the expiration of the Bidder's Bid.

Consequently, any demand for payment under this guarantee must be received by us at the office on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 458.

[signature(s)]

Note: To be completed and submitted / uploaded as a part of the Bid.

MANUFACTURER'S AUTHORIZATION

[The Bidder shall require the Manufacturer to fill in this Form in accordance with the instructions indicated. This letter of authorization should be on the letterhead of the Manufacturer and should be signed by a person with the proper authority to sign documents that are legally binding on the Manufacturer shall include it in its bid.]

7

Date: *[insert date (as day, month and year) of Bid Submission]*
IFB No:4/APMDP/VZM/E/TO/2015-16

To: Commissioner, Vizianagaram Municipality, Vizianagaram-535001, Andhra Pradesh.

WHEREAS

We *[insert complete name of Manufacturer]*, who are official manufacturers of *[insert type of goods manufactured]*, having factories at *[insert full address of Manufacturer's factories]*, do hereby authorize *[insert complete name of Bidder]* to submit a bid the purpose of which is to provide the following Goods, manufactured by us *[insert name and or brief description of the Goods]*, and to subsequently negotiate and sign the Contract against the above IFB.

We hereby extend our full guarantee and warranty in accordance with Clause 28 of the General Conditions of Contract, with respect to the Goods offered by the above firm against this IFB.

Signed: *[insert signature(s) of authorized representative(s) of the Manufacturer]*

Name: *[insert complete name(s) of authorized representative(s) of the Manufacturer]*

Title: *[insert title]*

Duly authorized to sign this Authorization on behalf of: *[insert complete name of Bidder]*

Dated on _____ day of _____, _____ *[insert date of signing]*

Note: Specify items for which Manufacturer's authorization is required.

Note: To be completed and submitted / uploaded as a part of the bid.

SECTION V. – ELIGIBLE COUNTRIES

Public Information Center

Eligibility for the Provision of Goods, Works and Services in Bank-Financed Procurement

1. In accordance with Para 1.8 of the Guidelines: Procurement under IBRD Loans and IDA Credits, dated May 2004, the Bank permits firms and individuals from all countries to offer goods, works and services for Bank-financed projects. As an exception, firms of a Country or goods manufactured in a Country may be excluded if:

Para 1.8 (a) (i): as a matter of law or official regulation, the Borrower's Country prohibits commercial relations with that Country, provided that the Bank is satisfied that such exclusion does not preclude effective competition for the supply of the Goods or Works required, or

Para 1.8 (a) (ii): by an Act of Compliance with a Decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, the Borrower's Country prohibits any import of goods from that Country or any payments to persons or entities in that Country.

2. For the information of borrowers and bidders, at the present time firms, goods and services from the following countries are excluded from this bidding:⁶

(a) With reference to paragraph 1.8 (a) (i) of the Guidelines:

(b) With reference to paragraph 1.8 (a) (ii) of the Guidelines:

⁶ Any questions regarding this list should be addressed to the Director, Procurement Policy and Services Group, Operational Core Services Network, The World Bank

PART 2 - SUPPLY REQUIREMENTS

SECTION VI – SCHEDULE OF REQUIREMENTS

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1. LIST OF GOODS AND DELIVERY SCHEDULE

Line Item No.	Description of Goods	Quantity in Kgs	Final (Site) Destination as specified in BDS	Delivery (as per Incoterms) Date	
				Delivery period	Bid Security in Indian Rupees
1	Supply and delivery of 8.0 mm thick MS pipes & specials at various loactions in the Town for Culvert, Drain & Road Crossings conforming to IS 2062-1992 grade B, manufactured as per IS-3589-2001 including fabrication of MS pipes, cost of mild steel plate, epoxy paint and other required materials inclusive of all taxes and duties, loading , unloading and conveyance charges to various locations including all incidental and operational charges etc., complete and as directed by the Engineer in-charge for the following diameter of pipes		Office of the Commissioner, Vizianagaram Muniicpality	Within ____ days after signing of the contract.	Rs.0.056 Millions
1.1	150 mm 8.0 mm thick M.S.Pipes – 1483 Mts	46195			
1.2	200 mm 8.0 mm thick M.S.Pipes- 127.50 Mts	5228			
1.3	250 mm 8.0 mm thick M.S.Pipes- 45 Mts	2290			
1.4	300 mm 8.0 mm thick M.S.Pipes- 45 Mts	2733			
1.5	350 mm 8.0 mm thick M.S.Pipes- 105 Mts	7412			

Note: This form is for the information of the bidder and is not to be Submitted / uploaded as a part of the bid.

2. List of Related Services [ITB Clause 14.6(b)] and Completion Schedule

[To be furnished separately for each item]

Service	Description of Service	Description of Item	Physical Unit	Place where Services shall be performed	Final Completion Date(s) of Services
		NIL		Office of the Commissioner, Viziangaram Municipality	

Note: This form is for the information of the bidder and is not to be Submitted / uploaded as a part of the bid.

3. Technical Specifications

MS PIPE LINE WORK

3.1 General

This part of the specification covers the manufacturing, supply, delivery, lowering, laying, jointing, internal coating, outer coating, testing and commissioning mild steel pipes.

3.2 Applicable standards:

The following specifications, standards and codes are applicable for the fabrication of the pipe stock and fittings. All standards referred to shall be the latest editions, including all applicable amendments and revisions. Other authoritative standards that ensure substantial equivalence to the codes listed below will be acceptable.

1. IS 10221 Code of practice for coating and Wrapping of Underground Mild steel pipes
2. IS 4533 – Submerged Arc welding of mild steel and low alloy steels
3. IS 3613 – Acceptance tests for wire flux combinations for submerged arc welding.
4. AWS A 5-17 – Specification for bare mild steel electrodes and fluxes for submerged arc welding.
5. IS 816 – Code of practice for use of metal arc welding for general construction in mild steel.
6. IS 4353 – Submerged arc welding of mild steel and low alloy steels recommendations.
7. IS 817 – Code of practice for training and testing of metal arc welders.
8. IS 1182 – Recommend practice for Radiographic examination of fusion weld Butt joints in steel plant.
9. IS 3658 – Code of practice for liquid penetration flaw detection.
10. ASTM E 94 – Guide for Radio Graphic Testing.
11. ASTM E 165 – Test method for Liquid Penetrate Examination.
12. IS 3600 – Method of testing fusion welded joints and weld metal in steel (Parts 1 to 9)
13. IS 4853 – Recommended practice for Radiographic inspection of fusion welded butt joints in steel pipes.
14. IS 3589 – Seamless or electrically welded steel pipes for water, gas and sewage (168-3 to 2032 outside diameter)
15. IS 2598 – Safety Code for industrial radiographic practice.
16. IS 2062 – Steel for general structural purposes grade FE 410
17. IS 814, IS 3613, SI 6419 and IS 7280 – Welding consumables – such as electrodes, filler rods and wires.
18. IS 1785, IS 432 – Steel for Reinforcement (Parts I & II)
19. IS 2825 – Code for unfired pressure vessels.

3.3 Technical Specification:

The MS pipes shall be of spirally welded, manufactured conforming to IS 3589 and IS 5504 -1997 with 12 mm thick mild steel HR coils conforming to IS 10748 grade 3

3.4 Pressure rating: At factory and field test pressures shall be as indicated in BOQ

3.5 Length of pipe:

Pipes shall be supplied in 1.0 mt to 10 m lengths.

3.6 Pipe Ends:

Pipe ends shall be beveled and end faces shall be at right angle to pipe axis. Beveling shall be done as per standards suitable for but-welding joints.

3.7 Internal lining:

Pipes shall be lined internally with cement mortar coat as per IS 3589-2001. Hazen William coefficient of friction "C" should not be less than 140. Inlining and out coating shall be made with epoxy paint.

3.8 Pipe fittings:

Pipe fittings shall be manufactured in accordance with IS 7322 and lined internally.

3.9 Welding Procedure:

The welding procedure shall be as follows:

Submerged arc welding in accordance with IS 4353 (SAW)

For submerged arc welding, alloying is not permitted via the flux.

3.10 Welding Electrodes and Consumables:

All welding electrodes/consumables shall comply with IS 814, IS 3613, IS 6419 and IS 7280. The electrode/consumable chemistry shall meet the requirements of the base material, and shall be selected such that the deposited weld metal exhibits mechanical properties equal to or in excess of the base material.

All welding electrodes/consumables shall, as a minimum, be stored and used in accordance with the manufacturer's recommendations.

3.11 Non-destructive Examination (NDE):

All NDE shall be performed by qualified personnel to recognized National or International Standard (E.g. PCN, ASNI Level 11 etc.)

A document listing the relevant NDE procedures, methods and technique for the item, shall be submitted to us for review. Any subsequent revision to the document shall be approved by the Purchaser.

Purchaser have right to review certification of NDE personnel at you works.

3.12 Pipe Marking:

All pipes shall be marked with unique serial number. The number shall be hard stamped in letters or numbers not less than 15 mm high on the external face 200 mm from the pipe end and clearly stenciled in Red or White paint in letters or numbers not less than 200 mm high on the internal and external face of the pipe close to the pipe end.

1. Diameter and length of pipe
2. Date of Manufacture
3. Manufacture's name
4. Identification mark/number as certified by our representative stationed at suppliers premises.

3.13 Quality Assurance Plan (QAP):

The Bidder shall submit

- (i) Detailed QAP covering WPS, Welder qualifications, incoming materials, manufacturing processes, inspection and testing of final product, handling etc.
- (ii) Details of inspection and testing facilities available at your factory, which should meet all the desired parameters to carry out specified inspection and tests.

In case the bidder propose to carry out any testing outside your premises, or third party agencies the same should be specified in the QAP giving the details of agency where you propose to carry out the tests. The frequency of testing of "C" value shall be decided later in consultation with Purchaser.

3.14 Test Procedures:

1. Testing of Raw Materials as per applicable standards
2. Testing of consumables as per applicable standards
3. Testing of final product such as DP test, radiographic, hydro test, etc. as per applicable standards.

In Process inspection and testing of final product:

3.15 Materials:

Material test reports certifying compliance with relevant standards for each batch/delivery for the following items:

1. HR coils
2. Welding consumables

3.16 Final Product:

Following testing will be carried out in the presence of Purchasers representative, who will have right to select samples for testing where 100% testing is not involved.

1. Hydraulic pressure tests on each pipe as per IS 3589 Clause 13.

2. Dye penetration test on 10% random, selection of weld length of each pipe.
3. Radiographic examination on 1% random, selection of weld length of each pipe.

The pipes failing in above tests shall be rejected.

In the event of rejections or while inspecting re-worked pipes our representative will have right to demand higher sample sizes in point (2) and (3) mentioned above.

The cost for all inspection and tests is included in the price.

Record of inspection and testing shall be permanently available with you for any future reference.

Inspection and Testing at site:

Inspection on Delivery:

All pipes together with their associated documentation will be inspected by employer at the point of delivery at site for transit damages and physical measurements.

In case of rejection, the supplier shall rectify/replace the pipes within 7 (seven) days at his cost.

Inspection and Testing during execution:

The pipeline will be tested for the test pressures indicated above. Any manufacturing defects observed during this pressure test, should be rectified within 7 days either by repairs or replacement.

Minimum earth cover over pipeline shall be 1.2 m except where the pipeline crosses the CD works above ground. In case natural ground level is below the pipe bottom, concrete pedestal supports shall be provided.

3.17 Quality Assurance

During the whole process of manufacturing, department's representative shall be present to supervise the Quality Assurance process and witness the test performed.

3.18 Fabrication of MS Specials & Fittings

3.18.1 General

Unless and otherwise mentioned in the para below, the dimensions of all MS specials and fittings (bends, tees, scour tee, reducers, enlargers, etc.) shall in general confirm to the principals of IS: 7322, using MS plate/sheet conforming to IS:2062. The thickness shall be adequate to sustain field test pressure but shall not be less than the thickness of the pipe at that point.

The Contractor shall submit the detailed drawing for each special to be used in the pipeline. On approval of the same by the Engineer-in-Charge, the Contractor will take up the manufacturing. All specials shall be manufactured and coated at the manufacturer's premises. In exceptional circumstances when welding in trench is unavoidable as advised by the Engineer-in-Charge, a flanged opening shall be provided for access inside the special for welding. The Contractor has to ensure the

timely manufacturing of the MS specials so that they can be laid in synchronization with the pipe laying. The joints of adjacent pipe stretches have to be made with gap-pieces approved by the Engineer-in-Charge. On completion of the manufacturing, the material shall be inspected by the Engineer-in-Charge or his representative at the manufacturer works. On approval of the latter, the coating and lining for the special will be done by the Contractor as per the specifications for coatings given in this chapter.

Tolerance for steel fittings shall conform to the requirements of IS: 7322

3.18.2 Flanged Branches

Flanged branches shall be fabricated in accordance with the general specification and to the Engineering- Charge's requirement.

Flanged branches for air and scour valves shall be welded into pipe in the required position. The branch for an air valve shall be vertical and at right angle to the longitudinal axis of pipe. The invert of the branch for a scour valve shall be horizontal and at right angles to the axis of pipe and shall align with the invert of the barrel of the main pipe.

All the flanges shall be machined to standard thickness, square to the axis of the pipe.

Dimension of the flanges, welding details and welding procedure shall be as specified below.

3.18.3 Bends

Bends to provide change of alignment in pipe laying shall be manufactured to suit the site conditions. Bends of more than 45° shall not be provided. Bends shall be manufactured from tested pipes by angle cutting of the barrel or by such other standard procedure and re-welding. Bends shall be lined internally and coated externally as specified for the pipes.

- a) Bends shall be fabricated taking into account the vertical and horizontal angles for each case.
- b) The bends shall have welded joints and the upstream and downstream ends of each bend shall have a straight piece of variable lengths as required.
- c) Bends shall be designed with deflection angle between two segments as per provisions of IS: 7322 (amended up to date).
- d) When the point of intersection of a horizontal angle coincides with that of a vertical angle, or when these points can be made to coincide, a single combined or compound bend shall be used.
- e) Details of thrust collars anchor bolts, holding down straps, saddle plates should be furnished together with full specifications in Contractor's fabrication drawing.

3.18.4 Tapers

Tapers shall be manufactured out of steel plates and lined internally and coated externally. The tapers shall be suitable for connections to the sluice valves or flanged tailpiece on one side and to MS pipe on the other side. Stiffener rings shall be provided if required to afford rigidity to pipe. They shall be manufactured generally in accordance with IS: 7322.

3.18.5 MS flanges

Welding neck flanges conforming to BS 6392 for nominal pressure rating 1.6 N/mm² must be used in accordance to the design pressure at the place of installations. Nominal Size of flange shall be in conformity to the equipment / goods / materials or pipe appurtenance with which they are to be used.

The flange drilling shall conform to IS 1538 for flanges up to 1500 mm ID.

Flanges shall be provided at the end of pipes or special where sluice valves, blank flanges, tapers, etc. have to be introduced. The Contractor shall assemble the flanges in the exact position by marginal cutting, if necessary, so as to get the desired position of the sluice valves, etc. either vertical or horizontal and shall then fully weld the flanges from both sides in such a way that no part of the welding protrudes beyond the face of the flanges. In case the welding protrudes beyond the flanges and if the Engineer-in-Charge orders that such protrusions shall be removed, the Contractor shall file or chip them off. If required and when ordered by the Engineer-in-Charge, the Contractor shall provide and weld gusset stiffeners, as directed on site.

3.18.6 Blind Flanges

Blank flanges shall be provided at all ends left unattended for the temporary closure of work and also for commissioning a section of the pipeline or for testing the pipeline laid. For temporary closures, non-pressure blank flanges consisting of mild steel plates, tack welded at the pipe ends may be used. For pipes subjected to pressures, the blank flanges or domes suitably designed as per Engineer-in-Charge's requirements shall be provided. The thickness of the blank flanges shall be as defined in IS 6392 for the nominal size and design pressure at the place of installation, the flange drilling for all flanges up to 1500 mm ID shall conform to the provisions of IS 1538

3.19 Stiffener Rings

The Contractor shall provide stiffener rings wherever required as per approved design calculations. The Contractor shall weld the same to the pipes with one circumferential run on each side.

3.20 Straps

In general the use of straps shall not be made. Whenever, it's uses is unavoidable, approval of Engineer-in-Charge shall be taken. Wherever pipe laying work is done from two faces and/or has to be done in broken stretches due to any difficulty met with at site, the final connection has to be made by introducing straps to cover gaps upto 30 cm length. Straps shall also be provided as per the procedure of fixing expansion joints by the method described. Such straps shall be fabricated in the field by cutting pipes, slitting them longitudinally and slipping them over the ends to be connected in the form of a collar. The collar shall be in two halves and shall have its inside diameter equal to the outside diameter

of the pipe to be connected. A minimum lap of 8 cm on either ends of the pipe shall be kept and fillet welds shall be run both internally and externally for circumferential joint. The longitudinal joints of the collar shall be butt-welded.

All fillet welds shall have a throat thickness of not less than 0.7 times the width of welding.

3.21 Dismantling Joint:

All valves, Bulk water meters or any other online valves etc. shall be installed between flanges with a flexible MS dismantling joint at one side. The joint must allow dismantling of the valve, meters etc. without causing stress to the joints of the attached pipes. The minimum clearance of the dismantling joint shall be five (5) cm. The pressure class of the dismantling joint shall be the same as that of the pipe. Drawings of the dismantling joint shall be submitted to the Engineer-in-Charge for approval. The Nuts and Bolts of the joint shall be galvanized. The joints shall be painted/coated as per specification given for exposed pipes.

3.22 Inspection and Tests on Pipe and Fittings/Specials

The pipe shall be tested as per provision of Clause in specification.

Each special or fittings shall be subjected to tests as per IS: 7322 before inner and outer coating. The hydraulic test pressure shall be as per IS: 3589 for specials. Dye penetration test as prescribed in IS:7322 is acceptable in lieu of hydraulic test for all specials.

The workmanship and marking on pipes must be conforming to clause in specification. All works and material under specification will be rigidly inspected during all phases of manufacture and testing and such inspection shall not relieve the Contractor of his responsibility to furnish material and perform work in accordance with these specifications.

The Engineer-in-Charge or the authorized inspection agency shall have free access to those parts of the plants that are concerned with the furnishing of materials of the performance of work under this specification. The bidder shall furnish the Engineer-in-Charge reasonable facilities and space without charge for inspection, testing and obtaining of any information he desires in respect of the quality of material used and the progress and manner of the work.

Sampling of pipes shall be taken as per IS 4711-1974.

Contractor shall provide and operate suitable equipment / goods / materials capable of conducting the specified hydraulic test pressure to the inside surfaces of the pipe and of sustaining the pressure for the required period.

3.23 Laying & Jointing Work of Mild Steel Pipeline & Fittings/ Specials

3.23.1 Standard

The Laying, jointing and testing of MS pipeline shall confirm to IS: 5822.

3.23.2 General

Unless specified otherwise, the pipeline shall be buried with minimum cover of 1..2 meters at top, as shown on drawings. No material shall be erected unless it has been previously passed by the Engineer. Erection of fabricated shells shall be carried out by the Contractor who shall equip himself, at his cost, with all necessary tools, machinery, labour etc. required for the purpose.

3.23.3 Welding

Except for routine welding of joints, no other work shall be done in the absence of Contractor's engineer, either during the day time or at night. Chipping shall not be kept in arrears for more than 15 joints.

Saddle pieces shall be fixed in position after checking bolts holes, by means of templates. These works shall be done together with the pipe laying work, if pipeline is to be laid above ground in unavoidable circumstances.

3.23.4 Temperature

The components of the pipeline such as base plates, top plates and pedestals have been so designed that the centers of the plates and pedestals shall coincide at the Mean Temperature (30o).

For this reason, all works such as fixing flanges, base plate etc. in true alignment and in correct position and track welding pipes shall be done at the mean temperature.

For ascertaining the temperature, the Contractor shall provide mercury cups and fix them to the pipe shell from outside and shall also provide thermometers of the required type and range. No extra payment shall be made for this.

3.24 Earth Work

(a) General

The Contractor shall furnish all tools, plant, instruments, qualified supervisory personnel, labour, materials, any temporary works, consumables, any and everything necessary, whether or not such items are specifically stated herein for completion of the work in accordance with the Employer's Requirements.

The Contractor shall survey the site before excavation and set out all lines and establish levels for various works such as grading, basement, foundations, plinth filling, roads, drains, cable trenches, pipelines etc. Such survey shall be carried out by taking accurate cross sections of the area perpendicular to established reference/grid lines at 8m intervals or nearer, if necessary, based on ground profile and thereafter properly recorded.

The excavation shall be carried out to correct lines and levels. This shall also include, where required, proper shoring to maintain excavations and also the furnishing, erecting and maintaining of substantial

barricades around excavated areas and warning lamps at night.

Excavated material shall be dumped in regular heaps, bunds, riprap with regular slopes within the lead specified and leveling the same so as to provide natural drainage. Rock/soil excavated shall be stacked properly as approved by the Engineer in Charge. As a rule, all softer material shall be laid along the center of heaps, the harder and more weather resisting materials forming the casing on the sides and the top. Rock shall be stacked separately.

Topsoil shall be stock piled separately for later re-use.

(b) Clearing

The area to be excavated/filled shall be cleared of fences, trees, plants, logs, stumps, bush, vegetation, rubbish, slush, etc. and other objectionable matter. If any roots or stumps of trees are encountered during excavation, they shall also be removed. The material so removed shall be disposed off as approved by the Engineer in Charge. Where earth-fill is intended, the area shall be stripped of all loose/soft patches, top soil containing objectionable matter/ materials before fill commences.

(c) Excavation

Excavation shall be taken out to such widths, lengths, depths and profiles as are shown on the approved L-section or such other lines and grades as may be agreed with the Engineer in Charge. Rough excavation shall be carried out to a depth of 150mm above the final level. The balance shall be excavated with special care.

Soft pockets shall be removed below the final level and extra excavation filled up with lean concrete as approved by the Engineer in Charge. The final excavation should be carried out just prior to laying the blinding course. To facilitate the permanent works the Contractor may excavate, and also backfill later, outside the lines shown on the drawings provided by the Contractor as agreed with the Engineer in Charge. Should any excavation be taken below the specified elevations, the Contractor shall fill it up with concrete of the same class as in the foundation resting thereon, upto the required elevation at no cost to the Employer.

All excavations shall be to the minimum dimensions required for safety and ease of working. Prior approval of the Engineer in Charge shall be obtained by the Contractor in each individual case, for the method proposed for the excavation, including dimensions, side slopes, dewatering, disposal, etc. This approval shall not in any way relieve the Contractor of his responsibility for any consequent loss or damage. The excavation must be carried out in the most expeditious and efficient manner. Side slopes shall be as steep as will stand safely for the actual soil conditions encountered. Every precaution shall be taken to prevent slips. Should slips occur, the slipped material shall be removed and the slope dressed to a modified stable slope.

(d) Excavation for laying pipe along the road

While laying the pipeline below ground along the road side, the contractor shall observe the

following:

- (i) The contractor shall not be allowed to take earth from the burrow pits if excavation required to take additional earth results in side slopes steeper than 1:1 in clay dominating soil and 1:1.5 in case of silty sand or sandy soils.
- (ii) If invert of pipe is kept above the existing burrow pit level or part of pipe is above it, the minimum side slopes of 1:1 in clay dominating soil and 1:1.5 in case of silty sand or sandy soils shall be provided on the side towards the burrow pit area so as to provide required cover. The side slopes shall be properly compacted upto 95% of Procter density.
- (iii) If earth is taken for providing required cover to pipe from the burrow pits, the burrow pits shall be so graded upto the nearest drain, that no impounding of water is possible in burrow pit area.
- (iv) If the pipeline is laid just near the road section, as far as practical minimum cover of 0.9 meter shall be ensured. Whenever this requirement of cover cannot be ensured, concrete casing of deigned thickness as per considerations given for design in this chapter shall be provided.
- (v) For pipeline to be laid in deep trenches (depth exceeding 3 meters), the pipe shall be laid in trench on pedestals and shall not be backfilled. The pipeline in this shall will be provided as those specifications that of pipeline to be laid above ground. The top of the trench shall be covered with Pre-Cast Ferro cement cover of class AA loading. The covers shall be placed on the masonry walls, build from a suitable level to ensure safety.

(e) Excavation by the Use of Explosives

Unless otherwise stated herein, I.S. Specification “IS:4081: Safety Code for Blasting and related Drilling Operations” shall be followed. As far as possible all blasting shall be completed prior to commencement of construction. At all stages of excavation, precautions shall be taken to preserve the rock below and beyond the lines specified for the excavation, in the soundest possible condition. The quantity and strength of explosives used, shall be such as will neither damage nor crack the rock outside the limits of excavation. All precautions, as directed by Engineer in Charge, shall be taken during the blasting operations and care shall be taken that no damage is caused to adjoining buildings or structures as a result of blasting operations. In case of damage to permanent or temporary structures,

Contractor shall repair the same to the satisfaction of Engineer in Charge at his cost. As excavation approaches its final lines and levels, the depth of the charge holes and amount of explosives used shall be progressively and suitably reduced.

The contractor shall obtain a valid Blasting License from the authorities concerned. No explosive shall be brought near the work in excess of quantity required for a particular amount of firing to be done; and surplus left after filling the holes shall be removed to the magazine. The magazine shall be built as a way as possible from the area to be blasted. Engineer in Charge's prior approval shall be taken for the location proposed for the magazine.

In no case shall blasting be allowed closer than 30 metres to any structure or to locations where concrete has just been placed. In the latter case the concrete must be at least 7 days old.

For blasting operations, the following points shall be observed.

- i) Contractor shall employ a competent and experienced supervisor and licensed blaster in-charge of each set of operation, who shall be held personally responsible to ensure that all safety regulations are carried out.
- ii) Before any blasting is carried out, Contractor shall intimate Engineer in Charge and obtain his approval in writing for resorting to such operations. He shall intimate the hours of firing charges, the nature of explosive to be used and the precautions taken for ensuring safety.
- iii) Contractor shall ensure that all workmen and the personnel at site are excluded from an area within 200 m radius from the firing point, at least 15 minutes before firing time by sounding warning whistle. The area shall also be given a warning by sounding a distinguishing whistle.
- iv) The blasting of rock near any existing buildings, equipment / goods / materials or any other property shall be done under cover and Contractor has to make all such necessary muffling arrangements. Covering may preferably be done by MS plates with adequate dead weight over them. Blasting shall be done with small charges only and where directed by Engineer in Charge, a trench shall have to be cut by chiseling prior to the blasting operation, separating the area under blasting from the existing structures.
- v) The firing shall be supervised by a Supervisor and not more than 6 (six) holes at a time shall be set off successively. If the blasts do not tally with the number fired, the misfired holes shall be carefully located after half an hour and when located, shall be exploded by drilling a fresh hole along the misfired hole (but not nearer than 600 mm from it) and by exploding a new charge.
- vi) A wooden tamping rod with a flat end shall be used to push cartridges home and metal rod or hammer shall not be permitted. The charges shall be placed firmly into place and not rammed or pounded. After a hole is filled to the required depth, the balance of the hole shall be filled with stemming which may consist of sand or stone dust or similar inert material.

- vii) Contractor shall preferably detonate the explosives electrically.
- viii) The explosives shall be exploded by means of a primer which shall be fired by detonating a fuse instantaneous detonator (F.I.D) or other approved cables. The detonators with F.I.D. shall be connected by special nippers.
- ix) In dry weather and normal dry excavation, ordinary low explosive gunpowder may be used. In damp rock, high explosive like gelatine with detonator and fuse wire may be used. Underwater or for excavation in rock with substantial accumulated seepage electric detonation shall be used.
- x) Holes for charging explosives shall be drilled with pneumatic drills, the drilling pattern being so planned that rock pieces after blasting will be suitable for handling without secondary blasting.
- xi) When excavation has almost reached the desired level, hand trimming shall have to be done for dressing the surface to the desired level.

Any rock excavation beyond an over break limit of 75 mm shall be filled up as instructed by Engineer in Charge, with concrete of strength not less than M10. Stopping in rock excavation shall be done by hand trimming.
- xii) Contractor shall be responsible for any accident to workmen, public or Employer's property due to blasting operations. Contractor shall also be responsible for strict observance of rules, laid by Inspector of explosives, or any other Authority duly constituted under the State and / or Union Government as applicable at the place of excavation.

(f) Stripping Loose Rock

All loose boulders, detached rocks partially and other loose material which might move therewith not directly in the excavation but so close to the area to be excavated as to be liable, in the opinion of Engineer in Charge, to fall or otherwise endanger the workmen, equipment / goods / materials, or the work shall be stripped off and removed from the area of the excavation. The method used shall be such as not to render unstable or unsafe the portion which was originally sound and safe.

Any material not requiring removal in order to complete the permanent works, but which, in the opinion of Engineer in Charge, is likely to become loose or unstable later, shall also be promptly and satisfactorily removed.

(g) Dewatering

The Contractor shall ensure that the excavation and the structures are free from water during construction and shall take all necessary precautions and measures to exclude ground/rain water so as to enable the works to be carried out in reasonably dry conditions in accordance with the construction

programme. Sumps made for dewatering must be kept clear of the excavations/trenches required for further work. The method of pumping shall be approved by Engineer in Charge, but in any case, the pumping arrangement shall be such that there shall be no movement of subsoil or blowing in due to differential head of water during pumping. Pumping arrangements shall be adequate to ensure no delays in construction. The dewatering shall be continued for at least (7) seven days after the last pour of the concrete. The Contractor shall, however, ensure that no damage to the structure results on stopping of dewatering.

The Contractor shall study the sub-soil conditions carefully and shall conduct any tests necessary at the site with the approval of the Engineer in Charge to test the permeability and drainage conditions of the sub-soil for excavation, concreting etc., below ground level.

The scheme for dewatering and disposal of water shall be approved by the Engineer in Charge. The Contractor shall suitably divert the water obtained from dewatering from such areas of site where a build up of water in the opinion of the Engineer in Charge obstructs the progress of the work, leads to insanitary conditions by stagnation, retards the speed of construction and is detrimental to the safety of men, materials, structures and equipment / goods / materials.

When there is a continuous inflow of water and the quantum of water to be handled is considered in the opinion of Engineer in Charge, to be large, a well point system- single stage or multistage, shall be adopted. The Contractor shall submit to the Engineer in Charge, details of his well point system including the stages, the spacing, number and diameter of well points, headers etc., and the number, capacity and location of pumps for approval.

(h) Rain Water Drainage

Grading in the vicinity of excavation shall be such as to exclude rain/ surface water draining into excavated areas. Excavation shall be kept clean of rain and such water as the Contractor may be using for his work by suitably pumping out the same. The scheme for pumping and discharge of such water shall be approved by the Engineer in Charge.

3.25 Handling of pipes and specials

a). Carting & Handling

Pipes and fittings/specials shall be transported from the factory to the work sites and stacked at places along the alignment of the pipeline as directed by Engineer-in-Charge. Contractor shall be responsible for the safety of pipes and fittings/specials in transit, loading/unloading. Every care shall be exercised in handling pipes and fittings/specials to avoid damage. While unloading, the pipes and fittings/specials shall not be thrown down from the truck on to hard surfaces. They should be unloaded on timber skids with steadying ropes or by any other means. Padding shall be provided between coated pipes, fittings/specials and timber skids to avoid damage to the coating. As far as possible pipes shall be unloaded on one side of the trench only. The pipe shall be checked for any visible damage (such as

broken edges, cracking or spalling of pipe) while unloading and shall be sorted out for reclamation.

Any pipe which shows sufficient damage to preclude it from being used shall be discarded. Dragging of pipes and fittings/specials along concrete and similar pavement with hard surfaces shall be prohibited.

(b) Storage

Coated pipes and specials that are to be stored on supports shall bear on the uncoated ends only. If bearing on coating is employed the supports shall be not less than 20cm (8 inches) wide and so arranged to prevent damage to the coating.

Storage if required shall be done on firm level and clean ground and wedges shall be provided at the bottom layer to keep the stack stable. The stack shall be in pyramid shape or the pipes laid lengthwise or crosswise in alternate layers. Fittings/specials shall be stacked under cover and separated from pipes.

(c) Bench mark

Permanent bench marks, at least four in every Kilometre shall be fixed before any work is started by the Contractor in any section. These benchmarks shall be fixed away from the field of work so as not to be disturbed during the execution and shall be securely fixed in concrete.

(d) Fencing, Watching and Lightening

The posts of the fencing shall be of timber, securely fixed in the ground not more than 2.5 m. apart. They shall not be less than 10 cm in dia. or not less than 1.25 m above the surface of ground. There shall be two rails, one near the top of the posts and the other about 0.5 m above the ground and each shall be of 5 cm to 10 cm in dia. and sufficiently long to run from post to post which they shall be bound with strong ropes. The method, of projecting rails beyond the posts and tying together where they meet will not be allowed on any account. All along the edges of the excavated trenches, a bund of earth about one metre high shall be formed where so required by the Engineer-in-Charge for further protection. Proper provision shall be made for lighting at night and watchman shall be kept to see that this is properly done and maintained. In addition to the normal lighting arrangements, the contractors shall provide wherever such work is in progress, battery operated blinking light (6 volts) in the beginning and end of a trench with a view to provide suitable indication to the vehicular traffic. The contractor shall provide and display special boards printed with fluorescent paints indicating the progress of the work along the road. The contractor shall be held responsible for payment of all claims for compensation as a result of accident or injury to any person or property due to improper fencing, inadequate lighting or non-provision of red flags. The contractors shall at their own cost provide all notice boards before opening of roads as directed by the Engineer-in-Charge. Arrangements shall be made by the contractors to direct traffic whenever work in through fare is in progress.

3.26 Pipe Laying above ground

Before commencing the work the bidder shall submit the working drawing of every km of pipeline laying as per the approved L-section of the pipeline for the section concerned. He shall also study the details of the type of saddles/ concrete pedestals to be provided before the actual work of casting is taken in hand.

Before execution the contractor shall submit detailed designs and drawings and all supports such as portal frames, saddles, ring girders etc for approval of the department.

Pipe laying above ground shall generally start from the fixidity points on either side, the expansion joints being provided in the last. Fixing points are at all anchor blocks. Where such blocks are not required for long lengths, fixidity shall be achieved by fixing the pipeline to the special type of R.C.C. or steel saddles/ concrete pedestals as specified above. The distance between successive fixidity points shall not exceed 300 m.

Anchor blocks shall be constructed before commencing the pipe laying work in any section. The construction of the blocks shall be carried out in 3 stages in the first stage the lower part upto 150 mm below the invert of the pipeline including concrete chairs to support it shall be constructed; in the second stage the pipeline on this part of the block shall be laid; and lastly, the remaining block around and over the pipeline shall be constructed.

The fixidity saddles/ concrete pedestals and ordinary saddles/ concrete pedestals shall be cast-at least 3 weeks before the pipeline is laid on them. After all saddles/ concrete pedestals between successive fixity points have been cast, a line plan showing the actual position thereof shall be prepared, after taking levels and measuring distances. In case of any errors in casting the pedestals, corrections shall be applied. The pipe laying work shall then start from the fixidity points and shall proceed towards the expansion joints. The method of jointing the pipes and erecting them on previously cast R.C.C. saddles/ concrete pedestals shall be determined by the Contractor depending upon the type of plant equipment / goods / materials and personnel available with them.

The pipe strakes shall be assembled in position on the saddles/ concrete pedestals either by the cranes, portable gantries, shear legs or any other equipment / goods / materials approved by the Engineer-in-Charge. Normally, not more than two pipes shall be aligned, tacked and kept in position on temporary supports. The Contractor shall not proceed with further work, until the circumferential joints of these pipes are fully welded. During assembly, the pipeline shall be supported on wooden sleepers and wedges, with the free end of the pipeline held in position by slings to avoid deflection due to temperature variations during the day. In general, the assembly of pipe stretches and one run of welding shall be done during the day time while full welding including the external gouging and sealing runs shall be done after 5 p.m. or so. The Contractor shall maintain the continuity of the work by adding at least two more pipes on the second day in a similar manner, after full welding of the previous joints is completed during the night. While this new work is being done, the Contractor shall proceed with the

work of providing permanent supports for the pipeline assembled and welded previously.

3.27 Fixing Expansion Joint

The work of laying pipeline in aboveground, laying starts from the fixity points and proceeds towards the expansion joints. It shall be continued until the gap between the pipe ends is less than the lengths of the expansion joint plus pipe stroke length. At mean temperature the exact gap between pipes shall be measured. Free ends of pipes shall be brought in a correct line and level; lateral movement, if any, shall be corrected. Then the gap between the free ends shall be made equal to the exact length of the expansion joint by cutting one of the pipe ends. Choice of the end to be cut must be made from the point of view of bringing the expansion joint to a central position.

At mean temperature this expansion joint shall be inserted inside the gap and both ends shall be tack welded to the pipe ends, after pulling the expansion joint.

Welding of these two joints of the expansion joints shall be started only after it is ascertained by taking observations that the expansion joint is functioning properly.

3.28 Protection against scouring of foundation:

a) Providing pitching:

Wherever the pipeline pedestal or portal foundation are located near a nallaha or are across a nallaha, the bidder shall provide a cut-off wall upto the scour depth all around the footing/ foundation at a distance of 2 times the depth of foundations below the existing ground level. The portion between the cut-off wall and the foundation shall be filled with compacted soil and 30cm thick stone pitching shall be done with weight of stone not less than 40kg. The minimum section of cut-off wall shall be of 0.3m in width and minimum 2m in depth. The cut-off wall shall be of RR masonry in cement mortar 1:4 laid on 1:3:6 Cement concrete mix minimum 15cm thickness.

b) Providing longitudinal walls and cross walls:

Wherever pipe is laid on pedestal across a nallah/drain or in revines with drain flowing across the pipe alignment, longitudinal check wall or curtain wall shall be provided on both side of the pipe foundations. The cut-off wall on the upstream side of nallaha/drain shall be taken at least upto 2m depth from the general ground level or upto the scour depth which ever is more. The downstream side of cut off wall shall be taken 2.5 m in depth. The area between two wall shall be filled with compacted soil and a gentle slope shall be provided for drainage of water in case of minor drain, but a flexible apron shall be provided for bigger nallaha. The minimum width of cut off walls shall be 0.3m. The wall shall be of RR stone masonry in cement mortar 1:4 and the exposed top face shall be provided 25mm cement coping in M-15 grade or grade as per IS 456 concrete. The base course shall be of 1:3:6 mix concrete of minimum 15cm thickness.

3.29 Pipe Laying Below Ground With Soil Cover

The earth work shall be carried out as specified here in.

Before excavating the trench the alignment of pipeline and L-section shall be approved by Engineer-in-Charge. The work of trench excavation should be commensurate with laying and jointing of the pipeline. It should not be dug in advance for a length greater than 3 days ahead of work of laying and jointing of pipeline unless otherwise directed by the Engineer-in-Charge. It is proposed to ensure the following:

- Safety precautions have to be incorporated in the work process
- Hindrances to the public have to be minimized
- The trench shall not be allowed to erode
- The trench must not be filled with water
- The trench must not be refilled before laying of the pipes
- The bed for the laying of the pipes has to be prepared according to the L-Section immediately before laying of the pipes.

3.30 Bedding for pipe line

i) Bedding

The MS pipeline shall generally be laid in ordinary sandy soil for which no extra bedding shall be provided. In such case, while doing the excavation, the bottom of the trench shall be prepared in a manner so as to match the curvature of the pipe as far as possible subtending an angle of about 120° at the centre of pipe. Wherever the bottom of the trench is of such a nature (i.e. decomposed rock/ hard soil/ boulder) which is likely in the opinion of the Engineer-in-Charge to cause damage to the pipe or coating or an unsuitable material is encountered which cannot support the pipe, the contractor shall excavate the trench to an additional depth below the required depth and shall refill to required level with suitable material such as loose soil/excavated earth, to be approved by the Engineer-in-Charge. The bedding thickness shall be not less than 20 cm under the barrel of the pipes. The complete pipe has to be covered and surrounded by the same material as used for bedding so that a total cover of 30cm above the barrel can be achieved. The excavated hard/dense soil can be refilled after bedding and covering of the pipe with the loose soil/ excavated earth. The bedding shall be compacted with a light hand rammer. Any reduction in thickness due to compaction shall be made up by adding earth during ramming. For the purpose of the bedding under this item only screened fine earth of grain size not larger than 2mm shall be used. The bedding material shall be clean, uncoated and free from clay lumps, injurious amounts of dust, soft particles, organic matter, loam or other deleterious substances.

During the work of providing bedding and laying the pipeline over it, loose material from the sides or edges of the trench shall be prevented from falling inside the trench, by providing shoring and taking other measures. Also where necessary, trench shall be kept dry by pumping out seepage water continuously.

ii) Concrete Bedding:

This type of bedding is as per the drawing appended with the tender document and is to be provided at locations shown in the drawings or as specified by the Engineer. A concrete bedding using M15 grade is to be adopted. The concrete work related to this specification is detailed in the specifications of concrete and allied works.

3.31 Lowering and Jointing

The pipe shall be lowered into the trenches by removing only one or two struts at a time. It shall be seen that no part of the shoring is disturbed or damaged and, if necessary, additional temporary struts may be fixed during the lowering operations. It shall also be necessary to see that the gunite coating of pipe is not damaged in any way during the lowering and assembling. After the pipe is lowered into the trench, it shall be laid in correct line and level by using the levelling instruments, sight rails, theodolite, etc. Care shall be taken to see that the longitudinal joints of two consecutive pipes at each circumferential joints are staggered by 90°. While assembling the pipes, the ends shall have to be brought close enough to leave a uniform gap not exceeding 4mm. If necessary, a marginal cut may be taken to ensure a close fit of the pipe faces. For this purpose, only experienced cutters who can make uniform and straight cuts, shall be permitted to cut the faces of the pipes. No extra payment shall be made for such marginal cutting. There shall be no lateral displacement between the pipe faces to be joined. If necessary, spiders from inside and tightening rings from outside shall be used to bring the two ends in perfect contact and alignment. It may also be necessary to use jacks for this purpose. In no case shall hammering or longitudinal slitting be permitted. When the pipe is properly assembled and checked for correct line and level, it shall be firmly supported on wooden beams and wedges and tack welded. Some portion of the trench may be refilled at this stage so as to prevent the pipeline from losing its alignment. The tack welded circumferential joints shall then be welded fully. Only experienced welders, who shall be tested from time to time shall be permitted to carry out the welding work.

On completion of the pipe jointing and external protection, the trench and the welding pits shall be cleaned. The welding pits shall be filled and compacted in 150mm layers with the bedding material.

Backfilling shall be carried out as detailed here under.

(a) Precautions against Floatation

When the pipeline laid underground or above ground in a long narrow cutting gets submerged in water collected in the trench of cutting it is subjected to an uplift pressure due to buoyancy and is likely to float if completely or partly empty. In the design of pipelines, provision is to be made to safeguard against floatation providing sufficient overburden or by providing sufficient dead weight by means of blocks, etc Pipe shall be provided against floatation by providing anchor blocks as indicated in Drawing in volume IV. Factor of safety for calculations for check against floating shall be taken as 1.5.

In the case of works extending over one or more monsoon seasons, however, special care and precautions are necessary during the progress of work on this account. The Contractor shall close

down pipe laying operations well in time for the monsoon. The work of providing blocks, refilling the earth to the required level, compacting the same, etc. shall always be done as soon as the pipeline in the cutting has been laid.

The Contractor shall see that the water shall not be allowed to accumulate in open trenches. Where work is in an incomplete stage, precautionary work, such as blank-flanging in the open ends of the pipeline and filling the pipeline with water etc. shall be taken up as directed by the Engineer.

Such works shall be to the Contractor's account and no separate payment shall be made for the same. The Contractor's rate for pipe laying shall be deemed to include such precautionary measures against floatation.

Protection of the pipeline against floatation during the Contract Period shall be the responsibility of the Contractor. Should any section of the pipeline float due to his negligence, etc. the entire cost of laying it again to the correct line and level shall be to his account.

(b) Expansion Bellows:

Expansion bellows shall be provided to take care for variation of temperature range from 2.8o C to 45.6o C for all pipe lengths laid above ground level and left uncovered. Each expansion bellow must be placed between two anchor blocks providing fixidity at two ends.

Expansion bellows burrow type shall be used confirming to EJMA / ASME specifications.

Expansion bellows adopted shall accommodate expansion and contraction movement of pipe by suitable displacement. Expansion bellows shall be provided at appropriate locations as per provision in IS: 5822-1994 and as shown in the approved L-section. The maximum distance between the expansion bellows shall be limited to 300 metres. These joints shall be equal to the internal diameter of the pipeline and shall be tested at 1.5 times the designed working pressure. Maximum movement of 15 cm's must be possible at each expansion bellow without any damages to pipe. Whenever the expansion bellows are provided in pipeline alignment, the same shall have a protective MS cover over the joint portion to avoid damage to pipe by any external blow.

3.32 Civil Works

All the civil works associated with the MS pipeline laying & Jointing work e.g. excavation, Embankments construction, construction of thrust/ anchor blocks, butterfly/ Air/ Scour valves chambers, RCC support structures etc. shall be carried out in accordance with provisions. Specification of material used, workmanship, testing and sampling of materials shall be in accordance to respective provisions laid down in the chapter on "Specifications for Civil Works" of bid document.

Documentation

Measurement and Logging:

- 1) Contractor shall prepare a special logbook containing all the relevant data of

individual pipe and pipe coating including heat number, diameter, length, wall thickness, defects, pipe number, lot/batch or materials used for each pipe. Sampling and testing at site test results at manufacturer's plant(s), tests conducted by independent agency, damages, repairs, rejects and any other information that Engineer-in-Charge considers to be relevant and required for all incoming bare pipes and Engineer-in-Charge approved outgoing coated pipes as applicable.

- 2) Contractor shall submit this information in the form of a report at the agreed intervals.

3.33 Testing At Work Site

3.33.1 Field Testing of Joints

- Ten percent of the field joints shall be tested radio graphically (Samples at random) as per IS: 4853, in case of failure 20% field joints shall be selected. In case of second failure, 100% field joints shall be radio graphed.
- Five percent of the field joints shall be tested ultrasonic test as per IS: 4260.

The welding of pipes in the field should comply with IS 816-1965 and electrode used should comply with IS 814-1967. Welded joints shall be tested in accordance with procedures laid down in IS 3600-1966 and one test specimen shall be taken from at least one field joint out of 10.

3.33.2 Field Hydraulic Test

After erection at site and after the concrete anchor/ thrust blocks have been constructed. The entire pipeline shall be subjected to a hydraulic test as follows, to the required test pressure as indicated in the bill of quantities.

When the field test pressure is less than 2/3 the works test pressures the period of test should be at least 24 hours. The test pressure shall be gradually raised at a rate of 0.1 N/mm² per minute.

If a drop in pressure occurs, the quantity of water added in order to re-establish the test pressure should be carefully measured. This should not exceed 0.1 liter/ mm of pipe diameter per km of pipeline per day for each 30 m head of pressure applied.

The contractor shall provide and maintain all requisite facilities, instruments, for the field testing of the material. All pipes, specials, valves and civil works shall be replaced by the contractor free of cost if damaged during testing. All pipes, specials, valves and Civil Works shall be replaced by the contractor free of cost if damaged during testing.

3.34 Flushing and Disinfection of Mains

The pipeline shall be disinfected before commissioning for use. After testing the main, it shall be flushed with water of sufficient velocity to remove all dirt and other foreign materials. When this process

has been completed, disinfection (using liquid chlorine, sodium or calcium hypochlorite) shall be done as per of IS: 5822.

3.35 Fill, Backfilling and Site Grading

Trenches shall be backfilled with approved selected excavated material only after the successful testing of the pipeline. The tamping around the pipe shall be done by hand or other hand operated mechanical means. The water content of the soil shall be as near the optimum moisture content as possible. Filling of the trench shall be carried out simultaneously on both sides of the pipe in such a manner that unequal pressure does not occur. Each layer shall be consolidated by watering, ramming, care being taken to avoid damage to the pipeline.

3.35.1 Fill Backfilling

(a) General

All fill material shall be subject to the Engineer in Charge's approval. If any material is rejected by Engineer in Charge, the Contractor shall remove the same forthwith from the site. Surplus fill material shall be deposited/disposed off as directed by Engineer in Charge after the fill work is completed.

No earth fill shall commence until surface water discharges and streams have been properly intercepted or otherwise dealt with to the approval of the Engineer in Charge.

(b) Material

To the extent available, selected surplus spoil from excavations shall be used as backfill. Backfill material shall be free from lumps, organic or other foreign material. All lumps of earth shall be broken or removed. Where excavated material is mostly rock, the boulders shall be broken into pieces not larger than 150 mm size, mixed with properly graded fine material consisting of murum or earth to fill the voids and the mixture used for filling.

If fill material is required to be imported, the Contractor shall make arrangements to bring such material from outside borrow pits. The material and source shall be subject to the prior approval of the Engineer in Charge. The approved borrow pit areas shall be cleared of all bushes, roots of trees, plants, rubbish, etc. Top soil containing foreign material shall be removed. The materials so removed shall be disposed of as directed by Engineer in Charge. The Contractor shall provide the necessary access roads to borrow areas and maintain the same if such roads do not exist.

(c) Backfilling

Where backfilling is required to be carried out with good local earth and it shall be clean, medium grained and free from impurities. The filled-in-earth shall be kept flooded with water for 24 hours to ensure maximum consolidation. The surface of the consolidated sand shall be dressed to required level or slope. Construction of floors or other structures on sand fill shall not be started until the Engineer in Charge has inspected and approved the fill.

(d) Refilling of trenches

On completion of the pipe laying operations in any section, for a length of about 100m and while further work is still in progress, refilling of trenches shall be started by the Contractor with a view of restricting the length of open trenches. Pipe laying shall closely follow the progress of Trench Excavation and the Contractor shall not permit unreasonably excessive lengths of trench excavation to remain open while awaiting testing of the pipeline. If the Engineer considers that the Contractor is not complying with any of the foregoing requirements, he may prohibit further trench excavation until he is satisfied with the progress of laying and testing of pipes and refilling of trenches. Only soft earth and murum of good quality free from stones boulders, roots, vegetation etc., shall be utilized after the lumps are broken for filling in around the pipes for at least 30 cm all around for pipes. Filling shall be done in layers not exceeding 150mm and compacted to 70 to 80% of max. dry density percent of the maximum dry density as per part VII of IS:2720. The excavated material nearest to the trench shall be used first. Care shall be taken during backfilling, not to injure or disturb the pipes, joints or coating. Filling shall be carried out simultaneously on both sides of the pipes so that unequal pressure does not occur. Walking or working on the completed pipeline unless the trench has been filled to height of at least 30cm over the top of the pipe except as may be necessary for tamping etc., during backfilling work. The remaining portion of the trench may be filled in with a mixture of hard and soft material free from boulders and clods of earth larger than 150mm in size if sufficient quantity of good earth and murum are not available. Filling in shall be done in layers not exceeding 225mm in thickness accompanied by adequate, ramming etc., so as to be compacted to 70 to 80% of the maximum dry density as per part VII of IS:2720. Water contents of the soil shall be as near the optimum moisture content as possible. The trench shall be refilled so as to build up to the original ground level, keeping due allowance for subsequent settlement likely to take place.

To prevent buckling of pipe shell of diameters 1200mm and above, pipes shall be strutted from inside while the work of refilling is in progress, for which no separate payment shall be made separately. Strutting shall be done by means of strong spiders having at least 6 arms which shall be sufficiently stiff to resist all deformation. Spiders shall be provided at a maximum interval of 2m.

The Engineer in Charge shall, at all times, have powers to decide which portion of the excavated materials shall be for filling and in which portion of the site and in what manner it shall be so used.

If any material remains as surplus it shall be disposed of as directed by the Engineer, which includes loading, unloading, transporting and spreading as directed within a distance of 15 km. If the Contractor fails to remove the earth from site within 7 days after the period specified in a written notice, the Engineer may arrange to carry out such work at the Contractor's risk and cost or may impose such fine for such omission as he may deem fit. Particular care shall be taken to keep the trench dry during the entire refilling operation.

If suitable material for refilling is not available for excavation the Contractor shall bring earth, murum of approved quality as directed by the Engineer. No mechanical plant other than approved compacting equipment / goods / materials shall run over or operate within the trench until backfilling has reached its final level or the approval of the Engineer has been obtained.

In case of excavation of trenches in rock, the filling upto a level 30 cm above the top of the pipe shall be done with fine materials such as earth, murum, etc. The filling up to the level of the centre line of the pipe shall be done by hand compaction in layers not exceeding 8 cm whereas the filling above the centre line of the pipe shall be done by hand compaction or approved means in layers not exceeding 15 cm. The filling from a level 30 cm above the top of the pipe to the top of the trench shall be done by hand or other approved mechanical methods with broken rock filling of size not exceeding 15 cm mixed with fine material as available to fill up the voids. Filling of the trenches shall be carried out simultaneously on both sides of the pipe to avoid unequal pressure on the pipe.

Subsidence in filling: Should any subsidence take place either in the filling of the trenches or near about it during the maintenance period of 12 months from the completion of the Contract Works, the Contractor shall make good the same at his own cost or the Engineer may without notice to the Contractor, make good the same in any way and with any material that he may think proper, at the expense of the Contractor. The Engineer may also, if he anticipates occurrence of any subsidence, employ persons to give him timely notice of the necessity of making good the same, and the expenses on this account shall be charged to the Contractor.

3.35.2 General Site Grading

Site grading shall be carried out as approved by the Engineer in Charge. Excavation shall be carried out as specified in the Employer's Requirements. Filling and compaction shall be carried out as specified elsewhere.

If no compaction is called for, the fill may be deposited to the full height in one operation and levelled. If the fill has to be compacted, it shall be placed in layers not exceeding 225 mm and levelled uniformly and compacted as indicated in Clause 0 before the next layer is deposited.

To ensure that the fill has been compacted as specified, field and laboratory tests shall be carried out by the Contractor.

Field compaction tests shall be carried out in each layer of filling until the fill to the entire height has been completed. This shall hold good for embankments as well. The fill will be considered as incomplete if the desired compaction has not been obtained.

The Contractor shall protect the earth fill from being washed away by rain or damaged in any other way. Should any slip occur, the Contractor shall remove the affected material and make good the slip.

If so specified, the rock as obtained from excavation may be used for filling and levelling to indicate grades without further breaking. In such an event, filling shall be done in layers not exceeding 50 cms

approximately. After rock filling to the approximate level, indicated above has been carried out, the void in the rocks shall be filled with finer materials such as earth, broken stone, etc. and the area flooded so that the finer materials fill up the voids. Care shall be taken to ensure that the finer fill material does not get washed out. Over the layer so filled, a 100 mm thick mixed layer of broken material and earth shall be laid and consolidation carried out by a 12 ton roller. No less than twelve passes of the roller shall be accepted before subsequent similar operations are taken up.

3.36 Clearing the Site

All surplus materials, and all tools and temporary structures shall be removed from the site as directed by Engineer-in-Charge and the construction site left clean to the satisfaction of Engineer-in-Charge.

3.37 Crossings

3.37.2 Road, Railway And Irrigation Canal Crossings:

At road, canal and railway crossings the work shall be performed to the specifications of local authorities or such public bodies as per the approval of Engineer in Charge(S) of roads, railways and canals to be crossed. The department shall apply for the required road crossing permissions and the contractor shall pursue the case with the authority for an early sanction. For maintaining the continuity of the laying, the contractor shall keep close liaison with the railway authorities for any early execution of crossing works. In the conduit/box-culvert constructed, the contractor shall lay the pipes and make necessary connections at the two ends of the pipe.

In case, however the minimum requirements of the governing agencies are less than those set out in the specifications given herein, then the requirements given in the specifications given for encased line shall be followed.

- a) At locations wherein the open cut methods are permitted, the Contractor shall pass the carrier pipe through the casing located in the trench after the approval of the engineer-in-charge in writing and care shall be exercised to avoid damage to pipe coating and wrapping during this operation. The Contractor shall produce a certificate in writing from concerned authorities for its satisfactory restoration and payment therefore. Wherever the crossing is permitted by open cut, the contractor shall provide necessary bye-pass arrangements as per the requirement of concerned authority and shall complete the job in minimum possible time. No extra payments shall be made for providing the bye-pass. The contractor shall adopt the methods such as tunneling or pipe pushing of culverts if the National Highway authorities do not permit open road cut, additional cost shall be paid in such cases.
- b) At all crossings the carrier pipe shall be laid straight without bends so that if necessary the pipe at a later date may be replaced without damaging the box culvert. The carrier pipe shall extend at least 2 meters beyond the end of box culvert at either end.
- c) At railway crossings the Contractor shall eliminate unnecessary bending of pipe to conform to

the contour of ground by gradually deepening the ditch at such approaches as directed by the engineer-in-charge. Where the installation of the casing has been made by open cut Contractor shall install suitable temporary bridge work ensuring the safety of the traffic aids and safeguards for protection of the public safety, or he shall provide suitable diversions as desired by the engineer-in-charge.

- d) The method of carrying out a cased crossing by boring for various crossings on this pipeline route shall be jointly inspected by the representative of the Department, NHAI and Contractor for each category of work prior to commencement of actual work.
- e) Pipeline under railway track and irrigation canal an applicable portion of the right-of-way shall be encased in accordance with the specification. This item of work shall include, necessary clearing and grading required therefore, trenching to the depths and widths required, welding of casing and carrier pipes, testing, lowering in, installation of vent assemblies, end seals, insulator and all other fittings that may be required, backfilling, clean up, complete restoration to the original condition and further strengthening and protective works as may be required. The work shall be carried out in accordance with the drawings and as directed by the engineer-in-charge. For various operations mentioned above, the specifications pertaining to these operations shall apply in addition to the specifications given herein.

The Contractor shall be permitted to use William Sons type Neoprene seals in place of concrete end seals for the crossings. The representative of the Contractor may also be associated to determine the quality of the material and its delivery schedule from the open market. However, the particular work shall not be delayed on account of non-availability of Neoprene end seals. In such case, concrete seals may be provided.

Environment Management Plan

Recommended Contract Clauses

A. Sources of Materials

- (i) Use quarry sites and sources permitted by government;
- (ii) Verify suitability of all material sources and obtain approval of project management and implementation authority;
- (iii) If additional quarries will be required after construction has started, obtain written approval from project authority; and;
- (i) (iv) Submit to Project Consultant on a monthly basis documentation of sources of materials.

B. Air Quality

- (i) (i) Consult with Project Consultant/ Project Authority on the designated areas for stockpiling of clay, soils, gravel, and other construction materials;
- (ii) Damp down exposed soil and any stockpiled on site by spraying with water when necessary during dry weather;
- (iii) Use tarpaulins to cover sand and other loose material when transported by trucks;
- (iv) Carrying out air quality monitoring as per EMP; and
- (v) Fit all heavy equipment / goods / materials and machinery with air pollution control devices which are operating correctly.

C. Surface Water Quality

- (i) Avoid stockpiling of earth fill especially during the monsoon season unless covered by tarpaulins or plastic sheets;
- (ii) Prioritize re-use of excess spoils and materials in the construction works. If spoils will be disposed, consult with Project Consultant/ Project Authority on designated disposal areas;
- (iii) Install temporary silt traps or sedimentation basins along the drainage leading to the water bodies;
- (iv) Place storage areas for fuels and lubricants away from any drainage leading to water bodies;
- (v) Dispose any wastes generated by construction activities in designated sites not in river; and
- (vi) Conduct surface quality inspection according to the Environmental Management Plan (EMP).

D. Noise Levels

- (i) Plan activities in consultation with Project Consultant/ Project Authority so that activities with the greatest potential to generate noise are conducted during periods of the day which will result in least disturbance;
- (ii) Require horns not be used unless it is necessary to warn other road users or animals of the vehicle's approach;
- (iii) Minimize noise from construction equipment / goods / materials by using vehicle silencers, fitting jackhammers with noise-reducing mufflers, and portable street barriers the sound impact to surrounding sensitive receptor;
- (iv) Measurement of noise level at construction site as per EMP, and
- (v) Maintain maximum sound levels not exceeding 80 decibels (dbA) when measured at a distance of 10 m or more from the vehicle/s.

E. Existing Infrastructure and Facilities

- (i) Obtain from Project Consultant the list of affected utilities and operators;
- (ii) Prepare a contingency plan to include actions to be done in case of unintentional interruption of services

F. Accessibility

- (i) Plan transportation routes so that heavy vehicles do not use narrow local roads, except in the immediate vicinity of delivery sites;
- (ii) Schedule transport and hauling activities during non-peak hours;
- (iii) Locate entry and exit points in areas where there is low potential for traffic congestion;
- (iv) Keep the site free from all unnecessary obstructions;
- (v) Drive vehicles in a considerate manner;
- (vi) Coordinate with Traffic Police/ concerned department for temporary road diversions and with for provision of traffic aids if transportation activities cannot be avoided during peak hours; and
- (vii) Notify affected sensitive receptors by providing sign boards informing nature and duration of construction works and contact numbers for concerns/complaints.

G. Landscape and Aesthetics

- (i) Prepare and implement Waste Management Plan;
- (ii) Recover used oil and lubricants and reuse or remove from the sites;
- (iii) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;
- (iv) Remove all wreckage, rubbish, or temporary which are no longer required; and
- (v) Request Project Consultant/ Project Authority to report in writing that the necessary environmental restoration work has been adequately performed before acceptance of work.

H. Socio-Economic – Income

- (i) Leave spaces for access between mounds of soil;
- (ii) Provide walkways and metal sheets where required to maintain access for people and vehicles;
- (iii) Increase workforce in front of critical areas such as institutions, place of worship, business establishment, hospitals, and schools;
- (iv) Consult businesses and institutions regarding operating hours and factoring this in work schedules; and
- (v) Provide sign boards for pedestrians to inform nature and duration of construction works and contact numbers for concerns/complaints.

I. Socio-Economic – Employment

- (i) Employ labour force, or to the maximum extent, local persons within the 2-km immediate area if manpower is available; and

- (ii) Secure construction materials from local market.

J. Occupational Health and Safety

- (i) Develop and implement site-specific Health and Safety (H and S) Plan which will include measures such as: (a) excluding public from the site; (b) ensuring all workers are provided with and use Personal Protective Equipment / goods / materials; (c) H and S Training for all site personnel; (d) documented procedures to be followed for all site activities; and (e) documentation of work-related accidents;
- (ii) Ensure that qualified first-aid can be provided at all times. Equipped first-aid stations shall be easily accessible throughout the site;
- (iii) Provide medical insurance coverage for workers;
- (iv) Secure all installations from unauthorized intrusion and accident risks;
- (v) Provide supplies of potable drinking water;
- (vi) Provide clean eating areas where workers are not exposed to hazardous or noxious substances;
- (vii) Provide H and S orientation training to all new workers to ensure that they are apprised of the basic site rules of work at the site, personal protective protection, and preventing injuring to fellow workers;
- (viii) Provide visitor orientation if visitors to the site can gain access to areas where hazardous conditions or substances may be present. Ensure also that visitor/s do not enter hazard areas unescorted;
- (ix) Ensure the visibility of workers through their use of high visibility vests when working in or walking through heavy equipment / goods / materials operating areas;
- (x) Use fall protection equipment / goods / materials when working at heights;
- (xi) Maintain work areas to minimize slipping and tripping hazards;
- (xii) For night work, provision of proper illumination for the work space, while controlling glare so as not to blind workers and passing motorists;
- (xiii) Ensure moving equipment / goods / materials is outfitted with audible back-up alarms;
- (xiv) Mark and provide sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment / goods / materials, and areas for storage and disposal. Signage shall be in accordance with international standards and be well known to, and easily understood by workers, visitors, and the general public as appropriate; and
- (xv) Disallow worker exposure to noise level greater than 85 dBA for a duration of more than 8 hours per day without hearing protection. The use of hearing protection shall be enforced actively.

K. Community Health and Safety

- (i) Plan routes to avoid times of peak-pedestrian activities.

- (ii) Liaise with Project Consultant/ Project Authority in identifying high-risk areas on route cards/maps.
- (iii) Maintain regularly the vehicles and use of manufacturer-approved parts to minimize potentially serious accidents caused by equipment / goods / materials malfunction or premature failure.
- (iv) Provide road signs and flag persons to warn of dangerous conditions.

L. Work Camps

- (i) Consult with Project Consultant/ Project Authority before locating project offices, sheds, and construction plants;
- (ii) Minimize removal of vegetation and disallow cutting of trees;
- (iii) Provide water and sanitation facilities for employees;
- (iv) Prohibit employees from poaching wildlife and cutting of trees for firewood;
- (v) Train employees in the storage and handling of materials which can potentially cause soil contamination;
- (vi) Recover used oil and lubricants and reuse or remove from the site;
- (vii) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;
- (viii) Remove all wreckage, rubbish, or temporary structures (such as buildings, shelters, and latrines) which are no longer required; and
- (ix) Request Project Consultant/ Project Authority to report in writing that the camp has been vacated and restored to pre-project conditions before acceptance of work.

M. Social and Cultural Resources

- (i) Strictly follow the protocol for chance finds of any historical remnants in any excavation work;
- (ii) Request Project Consultant/ Project Authority or any authorized person with field training to observe excavation;
- (iii) Stop work immediately to allow further investigation if any finds are suspected; and
- (iv) (iv) Inform Project Consultant/ Project Authority if a find is suspected, and take any action they require ensuring its removal or protection in situ.

Supplementary Information

General Information of the Town

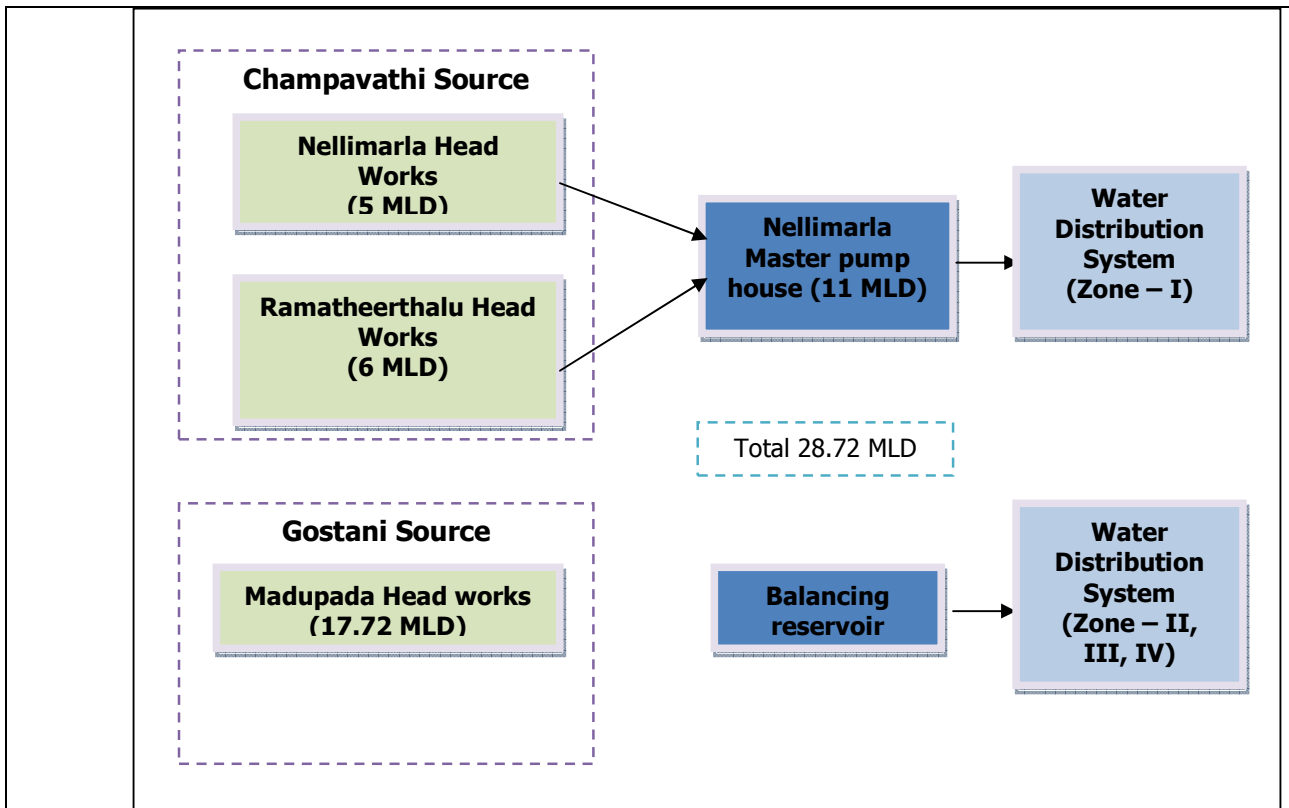
Vizianagaram town is the district headquarters of Vizianagaram district of Andhra Pradesh. Kolkata – Chennai railway line passes through the town dividing it into two distinct parts such that about 70% of population resides in the East while the balance 30% on the West of the railway line. The 2011 census population of the town is 2,00,177 and the area of the town fall under Vishakhapatnam Urban Development Authority which proposes Vizianagaram to be developed as a Satellite town. The general topography of the town is such that it slopes towards south with ground level varying from R.L. +75.000 in North to R.L. +42.000 in the South. The substrata consist of clay almost 1 to 2 meter depth followed by disintegrated weathered rock. The sub soil water level is around 8 meters below ground level. The area in North beyond Palkonda road does not have much habitation at present and slopes towards North and North-East.

History of the Town

Vizianagaram town is located in the northeastern part of Andhra Pradesh state close to the border of States of Orissa and Chhattisgarh. Vizianagaram town is headquarters of Vizianagaram district and NH 43 i.e. Rajapulova to Raipur road is passes through this. It is well connected by rail on the Bhubaneswar – Chennai route and is 394 km from Bhubaneswar – the capital of Orissa. It is located about 54 km away from harbor town Vishakhapatnam and is 35 kms away from the seacoast. The town is well developed and has all the facilities like Banks, Telephone, Power, Cyber Cafes etc.

Vizianagaram is Regional Trade and Commerce Centre of not only for the District but also for the entire hinterland Region. It caters to the needs of the people from Godavari to Mahanadi and up to Baster (M.P) in the trading items like mill made cloth, pulses, jute, Ground-nut etc., Vizianagaram being a nodal center of Transport (both road and Railways) it has trade links with important cities like Calcutta, Bombay, Bangalore, and many Small and Medium Towns in Orissa, Madhya Pradesh and Andhra Pradesh. Vizianagaram plays a dominant role in the field of trade and commerce in the region. Next to trade and Commerce in Vizianagaram town is Industrial estate which is located at V.T. Agraharam, south of the Town and Nellimerla at North developed in the recent past. The Nellimarla Jute Mill, Sarvaraya Textiles, A.P. Tanneries are the medium industries existing with number of Small scale industries located in the town.

Present water supply system for Vizianagaram Municipality is shown in the figure given below.



Present sources of drinking water for ULB :

(a) River Champavathi (Nellimarla and Ramathirthalu Head Works)

(i) Nellimarla Source

Infiltration Gallery in the River Champavathi at Nellimarla Head Works with installed capacity of 5 MLD. The water from these infiltration wells is conveyed with 300mm ϕ C.I pipe to the collection, which is further connected to 70 KL Suction Well by a gravity main of 450mm ϕ C.I. The water from the Suction well is conveyed to the 1500 KL sump at the Master Pump house through a 500 mm ϕ CI pumping main of length 2.8Km.

(ii) Ramathirthalu Source

There are six number of infiltration wells of 3 mts ϕ constructed at Ramathirthalu and with installed capacity of 6 MLD. Water from these infiltration wells is conveyed to 500 KL sump using submersible pumps. The water from this sump located at Ramatherthalu Head Works is conveyed to 1500 KL sump at Master Pump House near Nellimarla Railway Gate through a 300 mm ϕ DI pumping main of length 2.2 Km.

(b) River Gosthani (Madhupada Head Works)

There exists ten numbers of infiltration wells of 3 mts ϕ constructed in the bed of River

Gosthani on the downstream of Thatipudi Reservoir. Water from these infiltration wells is pumped to 450 KL Sump. The water from this sump is further pumped to the 1000 KL balancing reservoir located at Tadipudi through a 600 mm ϕ PSC main of length 3.5 Km. The water from this balancing reservoir is conveyed by gravity to the distribution reservoirs in the town i.e., at Cantonment, Kothaagraharam, Balajinagar & VT agrapharam.

(c) Ramathirtha Sagar (UIDSSMT Scheme)

This is an additional source of water to Vizianagaram town being implemented at present. Irrigation department is constructing Ramathirtha sagar project near Saripalli village, which is 10 Kms from the Vizianagaram. The government issued orders allocating 0.48 TMC (37 MLD) of water to Vizianagaram town vide Memo. No.24155/A1/2007-1 dated 21-11-2007. Subsequently under the UIDSSMT a proposal was made to draw the allocated raw water from the Ramathirha sagar Project and proposed a Water Treatment Plant (WTP) of 30 MLD at Kumili and to the supply clear water to the Town.

The proposed components of this scheme are.

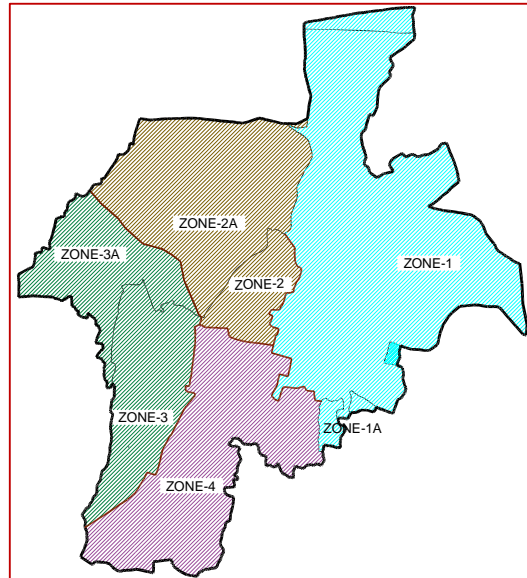
1. Construction of 4.0 mts Diameter Intakewell at Ramathertha sagar Reservoir Project
2. Providing 900 mm Φ DI connecting main from Intake well to Proposed Treatment plant
3. Construction of 28 MLD capacity Rapid Gravity WTP at Kumili Reservoir
4. Providing 900 mm Φ DI pipeline from WTP to Proposed 1500 KL sump.
5. Construction of 1500 KL sump near proposed WTP
6. Construction of Pump House at WTP
7. Supply delivery & Erection of 110 KW Centrifugal pumps 3 nos with 6540 lpm for a head of 80m at WTP.
8. Supply delivery and erection of 2X750 KVA Transformer near proposed WTP
9. Construction of 200 mts long foot bridge across the River Champavati for laying of pipeline
10. Supply, delivery, laying and jointing and testing of 700mm Φ DI K9 Clear water pumping main from proposed WTP to Kothapeta Junction.
11. Supply, delivery, laying and jointing and testing of 600mm Φ DI K9 Clear Water pumping main from Kothapeta Junction to ELSR's at Kotha agrapharam.
12. Supply, delivery, laying and jointing and testing of 500mm Φ DI K9 Clear Water pumping main from Kothapeta Junction to ELSR's at Kotha agrapharam.
13. Supply, delivery, laying and jointing and testing of 400mm Φ DI K9 Clear Water pumping main from Junction points to various reservoirs.
14. Supply, delivery, laying and jointing and testing of 300mm Φ DI K9 Clear Water pumping main from Balajinagar Junction to ELSR's at V.T. Agrapharam.
15. Construction of 500 KL ELSR at Kotha agrapharam
16. Constructoin of 1500 KL ELSR at Balaji nagar

17. Providing and Remodeling of Distribution Network

Existing Water Supply Distribution System

The extent of the ULB at present is 29.27 and it is divided into 38 political wards. Entire the ULB is divided into 4 water supply distribution zones based on the physical present in the town, railway track, location of reservoirs, population density etc. The figure here provides the extent coverage by each

There are 13 numbers of Elevated Service Reservoirs (ELSR) with their total storage as ML. Ground Level Service Reservoirs (GLSR) numbers with their total storage capacity as



Sq.Km.
area of
barriers
service
shown
zone.

12.55
are 2 in
1.5 ML.

Note : The technical specifications provided in the document for the items which are not required for this work shall be used in case of deviations.

Locations of stock yards:

1. Kothapeta ELSR compound.
2. Cantonment ELSR compound.
3. Public Health Office compound
4. VT Agraharam Reservoir Compound
5. Balajinagar Reservoir compound
6. Kothagraharam Reservoir

4. DRAWINGS

These Bidding Documents includes [*no*] drawings.

5. INSPECTIONS AND TESTS

The following inspections and tests ⁷ shall be performed:

1. Inspection and tests prior to shipment of Goods and at final acceptance are as follows:

(i) The inspection of the goods shall be carried out to check whether the goods are in conformity with the technical specifications attached to the purchase- order form and shall be in line with the inspection/test procedures laid down in the technical specifications and the General Conditions of contract. Following broad test procedure will generally be followed for inspection and testing of material. The supplier will dispatch the goods to the ultimate consignee after internal inspection testing along with the supplier's inspection report, manufacturer's warranty certificate. The purchaser will test the equipment / goods / materials if necessary after completion of the installation and commissioning at the site of the installation. For site preparation, the supplier should furnish all details to the purchaser sufficiently in advance so as to get the works completed before receipt of the equipment / goods / materials.

(ii) The acceptance test will be conducted by the purchaser/their consultant or any other person nominated by the purchaser, at its option. There shall not be any additional charges for carrying out acceptance tests. The supplier shall maintain necessary log in respect of the results of the tests to establish to the entire satisfaction of the purchaser, the successful completion of the test specified.

2. Manuals : Not applicable

3. Acceptance Certificates:

- On successful completion of acceptability test, receipt of deliverables etc, the acceptance certificate signed by the supplier and the representative of the purchaser will be issued. The date on which such certificate is signed shall be deemed to be the date of successful completion of the work.

⁷ To be reviewed and revised for each procurement depending on the equipment to be procured.

6. PROFORMA OF CERTIFICATE FOR ISSUE BY THE PURCHASER AFTER SUCCESSFUL INSTALLATION AND STARTUP OF THE SUPPLIED GOODS

[This is to be attached for supply, erection, supervision of erection and startup contracts only]

No.

Date:

M/s.

Sub: Certificate of startup of the supplied Goods

1. This is to certify that the plants / Equipment/Goods/Materials as detailed below has/have been received in good condition along with all the standard and special accessories (subject to remarks in Para No. 2) and a set of spares in accordance with the Contract/Specifications. The same has been installed and commissioned.

(a) Contract No. _____ dated _____

(b) Description of the Equipment / goods / materials

(c) Sl.No. _____

(d) Quantity _____

(e) Rail/Roadways Receipt No.
_____ dated _____

(f) Name of the consignee _____

(g) Date of startup and proving test _____

2. Details of accessories/spares not yet supplied and recoveries to be made on that account.

<u>S. No.</u>	<u>Description</u>	<u>Amount to be recovered</u>
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3. The proving test has been done to our entire satisfaction and operators have been trained to operate the plant.

4. The supplier has fulfilled his contractual obligations satisfactorily. *

or

The supplier has failed to fulfill his contractual obligations with regard to the following:

- (a)
 - (b)
 - (c)
 - (d)
5. The amount of recovery on account of non-supply of accessories and spares is given under Para No. 2.
6. The amount of recovery on account of failure of the supplier to meet his contractual obligations is as indicated in endorsement of the letter.

Signature _____

Name

Designation with Stamp

* Explanatory notes for filling up the certificates:

- (a) He has adhered to the time schedule specified in the contract in dispatching the documents/drawings pursuant to Technical Specifications.
- (b) He has supervised the startup of the plan in time i.e., within the period specified in the contract from the date of intimation by the Purchaser in respect of the installation of the plant.
- (c) Training of personnel has been done by the supplier as specified in the contract
- (d) In the event of documents/drawings having not been supplied or installation and startup of the plant have been delayed on account of the supplier, the extent of delay should always be mentioned.

Note: This form is for the information only. It is not to be filled and submitted / uploaded along with the bid.

7. PROFORMA FOR PERFORMANCE STATEMENT

[Please see ITB Clause 38.2 and Section III-
Evaluation and Qualification Criteria]

Proforma for Performance Statement (for a period of last three years)

Bid No. _____ Date of opening _____ Time _____ Hours

Name of the Firm _____

<u>Order placed by</u> <u>(full address of</u> <u>Purchaser)</u>	<u>Order No. and</u> <u>date</u>	<u>Description and quantity of</u> <u>ordered</u> <u>equipment/Goods/Materials</u>	<u>Value of order</u>	<u>Date of completion of delivery</u>		<u>Remarks</u> <u>indicating</u> <u>reasons for late</u> <u>delivery, if any</u>	<u>Has the</u> <u>equipment/Goods/Materials</u> <u>been satisfactorily</u> <u>functioning? (Attach a</u> <u>certificate from the</u> <u>Purchaser/Consignee)</u>
1	2	3	4	As per contract	Actual	7	8

Signature and seal of the Bidder _____

Note: This form is to be completed and submitted / uploaded along with the supporting document if any.

8. DECLARATION FOR CLAIMING EXCISE DUTY EXEMPTION

(Name of the Project)

Bid No.

Description of item to be supplied

(Information for issue of certificate for claiming exemption of Excise Duty (ED) in terms of Central excise notification No. 108/95)

(Bidder's Name and Address):

To
(Name Of
Purchaser)

.....

Dear Sir:

1. We confirm that we are solely responsible for obtaining deemed export benefits which we have considered in our bid and in case of failure to receive such benefits for reasons whatsoever, Purchaser will not compensate us.
2. We are furnishing below the information required by the Purchaser for issue of necessary certificate in terms of Central Excise notification no 108/95.
 - (i) Ex-factory price per unit on which ED is payable: *Rs. _____
 - (ii) No of Units to be supplied: _____

 - (iii) Total cost on which ED is payable (Rs.) _____

(The requirements listed above are as per current notifications. These may be modified, if necessary, in terms of the rules in force)

(Signature) _____
(Printed Name) _____
(Designation) _____
(Common Seal) _____

** Please attach details item-wise with cost, if there are more than one item. The figures indicated should tally with what is given in the price schedule.*

Note: This Forms needs to be completed and submitted / uploaded along with supporting document if any.

PART 3 – CONTRACT

SECTION VII – GENERAL CONDITIONS OF CONTRACT

Section VII. General Conditions of Contract

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Section VII. General Conditions of Contract

1. Definitions

The following words and expressions shall have the meanings hereby assigned to them:

- (a) “Bank” means the World Bank and refers to the International Bank for Reconstruction and Development (IBRD) or the International Development Association (IDA).
- (b) “Contract” means the Contract Agreement entered into between the Purchaser and the Supplier, together with the Contract Documents referred to therein, including all attachments, appendices, and all documents incorporated by reference therein.
- (c) “Contract Documents” means the documents listed in the Contract Agreement, including any amendments thereto.
- (d) “Contract Price” means the price payable to the Supplier as specified in the Contract Agreement, subject to such additions and adjustments thereto or deductions therefrom, as may be made pursuant to the Contract.
- (e) “Day” means calendar day.
- (f) “Completion” means the fulfillment of the Related Services by the Supplier in accordance with the terms and conditions set forth in the Contract.
- (g) “GCC” means the General Conditions of Contract.
- (h) “Goods” means all of the commodities, raw material, machinery and equipment / goods / materials, and/or other materials that the Supplier is required to supply to the Purchaser under the Contract.
- (i) “Purchaser’s Country” is India.
- (j) “Purchaser” means the entity purchasing the Goods and Related Services, as specified in the SCC.
- (k) “Related Services” means the services incidental to the supply of the goods, such as insurance, installation, start-up, training and initial maintenance and other such obligations of the Supplier under the Contract.

- (l) “SCC” means the Special Conditions of Contract.
- (m) “Subcontractor” means any natural person, private or government entity, or a combination of the above, to whom any part of the Goods to be supplied or execution of any part of the Related Services is subcontracted by the Supplier.
- (n) “Supplier” means the natural person, private or government entity, or a combination of the above, whose bid to perform the Contract has been accepted by the Purchaser and is named as such in the Contract Agreement.
- (o) “The Project Site,” where applicable, means the place named in the SCC.

2. Contract Documents

2.1 Subject to the order of precedence set forth in the Contract Agreement, all documents forming the Contract (and all parts thereof) are intended to be correlative, complementary, and mutually explanatory. The Contract Agreement shall be read as a whole.

3. Fraud and Corruption

3.1 If the Purchaser determines that the Supplier has engaged in corrupt, fraudulent, collusive, coercive or obstructive practices, in competing for or in executing the Contract, then the Purchaser may, after giving 14 days notice to the Supplier, terminate the Supplier's employment under the Contract and cancel the contract, and the provisions of Clause 35 shall apply as if such termination had been made under Sub-Clause 35.1.

(a) For the purposes of this Sub-Clause:

- (i) “corrupt practice”⁸ 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”⁹ 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”¹⁰ is an arrangement between two or more parties designed to achieve an improper purpose, including to influence

improperly the actions of another party;

(iv) “coercive practice”¹¹ 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;

(v) “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 11 [Inspections and Audits by the Bank].

3.2 Should any employee of the Supplier be determined to have engaged in corrupt, fraudulent, collusive, coercive, or obstructive practice during the purchase of the Goods, then that employee shall be removed.

4. Interpretation

4.1 If the context so requires it, singular means plural and vice versa.

4.2 Incoterms

(a) Unless inconsistent with any provision of the Contract, the meaning of any trade term and the rights and obligations of parties thereunder shall be as prescribed by Incoterms.

(b) The terms EXW and other similar terms, when used, shall be governed by the rules prescribed in the current edition of Incoterms specified in the SCC and published by the International Chamber of Commerce in Paris, France.

4.2 Entire Agreement

The Contract constitutes the entire agreement between the Purchaser and the Supplier and supersedes all communications, negotiations and agreements (whether written or oral) of the

parties with respect thereto made prior to the date of Contract.

4.3 Amendment

No amendment or other variation of the Contract shall be valid unless it is in writing, is dated, expressly refers to the Contract, and is signed by a duly authorized representative of each party thereto.

4.4 Nonwaiver

- (a) Subject to GCC Sub-Clause 4.5(b) below, no relaxation, forbearance, delay, or indulgence by either party in enforcing any of the terms and conditions of the Contract or the granting of time by either party to the other shall prejudice, affect, or restrict the rights of that party under the Contract, neither shall any waiver by either party of any breach of Contract operate as waiver of any subsequent or continuing breach of Contract.
- (b) Any waiver of a party's rights, powers, or remedies under the Contract must be in writing, dated, and signed by an authorized representative of the party granting such waiver, and must specify the right and the extent to which it is being waived.

4.5 Severability

If any provision or condition of the Contract is prohibited or rendered invalid or unenforceable, such prohibition, invalidity or unenforceability shall not affect the validity or enforceability of any other provisions and conditions of the Contract.

5. Language

- 5.1 The Contract as well as all correspondence and documents relating to the Contract exchanged by the Supplier and the Purchaser, shall be English. Supporting documents and printed literature that are part of the Contract may be in another language provided they are accompanied by an accurate translation of the relevant passages in English language, in which case, for purposes of interpretation of the Contract, this translation shall govern.
- 5.2 The Supplier shall bear all costs of translation to the governing language and all risks of the accuracy of such translation, for documents provided by the Supplier.

6. Deleted

7. Eligibility

- 7.1 The Supplier and its Subcontractors shall have the nationality of an eligible country. A Supplier or Subcontractor shall be deemed to have the nationality of a country if it is a citizen or constituted, incorporated, or registered, and operates in

conformity with the provisions of the laws of that country.

7.2 All Goods and Related Services to be supplied under the Contract and financed by the Bank shall have their origin in Eligible Countries. For the purpose of this Clause, origin means the country where the goods have been grown, mined, cultivated, produced, manufactured, or processed; or through manufacture, processing, or assembly, another commercially recognized article results that differs substantially in its basic characteristics from its components.

8. Notices

8.1 Any notice given by one party to the other pursuant to the Contract shall be in writing to the address specified in the **SCC**. The term “in writing” means communicated in written form with proof of receipt.

8.2 A notice shall be effective when delivered or on the notice’s effective date, whichever is later.

9. Governing Law

9.1 The Contract shall be governed by and interpreted in accordance with the laws of the Union of India.

10. Settlement of Disputes

10.1 The Purchaser and the Supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.

10.2 If, after twenty-eight (28) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the Purchaser or the Supplier may give notice to the other party of its intention to commence arbitration, as hereinafter provided, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given. Any dispute or difference in respect of which a notice of intention to commence arbitration has been given in accordance with this Clause shall be finally settled by arbitration. Arbitration may be commenced prior to or after delivery of the Goods under the Contract. Arbitration proceedings shall be conducted in accordance with the rules of procedure **specified in the SCC**.

10.3 Notwithstanding any reference to arbitration herein,

(a) the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree; and

(b) the Purchaser shall pay the Supplier any monies due the Supplier.

11. Inspections and Audit by the

11.1 The Supplier shall permit the Bank and/or persons appointed by the Bank to inspect the Supplier’s offices and/or the accounts and records of the Supplier and its sub-contractors relating to the

Bank	performance of the Contract, and to have such accounts and records audited by auditors appointed by the Bank if required by the Bank. The Supplier's attention is drawn to Clause 3, 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 11.1 constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility under the Procurement Guidelines).
12. Scope of Supply	12.1 The Goods and Related Services to be supplied shall be as specified in the Special Condition of Contract.
13. Delivery and Documents	13.1 Subject to GCC Sub-Clause 33.1, the Delivery of the Goods and Completion of the Related Services shall be in accordance with the Delivery and Completion Schedule specified in the Schedule of Requirements. The details of shipping and other documents to be furnished by the Supplier are specified in the SCC .
14. Supplier's Responsibilities	14.1 The Supplier shall supply all the Goods and Related Services included in the Scope of Supply in accordance with GCC Clause 12, and the Delivery and Completion Schedule, as per GCC Clause 13.
15. Contract Price	15.1 Prices charged by the Supplier for the Goods supplied and the Related Services performed under the Contract shall not vary from the prices quoted by the Supplier in its bid, with the exception of any price adjustments authorized in the SCC .
16. Terms of Payment	<p>16.1 The Contract Price, including any Advance Payments, if applicable, shall be paid as specified in the SCC.</p> <p>16.2 The Supplier's request for payment shall be made to the Purchaser in writing, accompanied by invoices describing, as appropriate, the Goods delivered and Related Services performed, and by the documents submitted pursuant to GCC Clause 13 and upon fulfillment of all other obligations stipulated in the Contract.</p> <p>16.3 Payments shall be made promptly by the Purchaser, but in no case later than sixty (60) days after submission of an invoice or request for payment by the Supplier, and after the Purchaser has accepted it.</p> <p>16.4 The payments shall be made in Indian Rupees to the Supplier under this Contract.</p> <p>16.5 In the event that the Purchaser fails to pay the Supplier any payment by its due date or within the period set forth in the SCC, the Purchaser shall pay to the Supplier interest on the amount of such delayed payment at the rate shown in the SCC, for the period of delay until payment has been made in full,</p>

whether before or after judgment or arbitrage award.

17. Taxes and Duties

The Supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted Goods to the Purchaser.

18. Performance Security

18.1 If required as specified in the SCC, the Supplier shall, within twenty-eight (28) days of the notification of contract award, provide a performance security for the performance of the Contract in the amount specified in the **SCC**.

18.2 The proceeds of the Performance Security shall be payable to the Purchaser as compensation for any loss resulting from the Supplier's failure to complete its obligations under the Contract.

18.3 As specified in the SCC, the Performance Security shall be denominated in the Indian Rupees, and shall be in one of the format stipulated by the Purchaser in the **SCC**, or in another format acceptable to the Purchaser.

18.4 The Performance Security shall be discharged by the Purchaser and returned to the Supplier not later than twenty-eight (28) days following the date of Completion of the Supplier's performance obligations under the Contract, including any warranty obligations, unless specified otherwise in the **SCC**.

19. Copyright

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

20. Confidential Information

20.1 The Purchaser and the Supplier 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 completion or termination of the Contract. Notwithstanding the above, the Supplier may furnish to its Subcontractor such documents, data, and other information it receives from the Purchaser to the extent required for the Subcontractor to perform its work under the Contract, in which event the Supplier shall obtain from such Subcontractor an undertaking of confidentiality similar to that imposed on the Supplier under GCC Clause 20.

- 20.2 The Purchaser shall not use such documents, data, and other information received from the Supplier for any purposes unrelated to the contract. Similarly, the Supplier shall not use such documents, data, and other information received from the Purchaser for any purpose other than the performance of the Contract.
- 20.3 The obligation of a party under GCC Sub-Clauses 20.1 and 20.2 above, however, shall not apply to information that:
- (a) the Purchaser or Supplier need to share with the Bank or other institutions participating in the financing of the Contract;
 - (b) now or hereafter enters the public domain through no fault of that party;
 - (c) 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; or
 - (d) otherwise lawfully becomes available to that party from a third party that has no obligation of confidentiality.
- 20.4 The above provisions of GCC Clause 20 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 Supply or any part thereof.
- 20.5 The provisions of GCC Clause 20 shall survive completion or termination, for whatever reason, of the Contract.

21. Subcontracting

- 21.1 The Supplier shall notify the Purchaser in writing of all subcontracts awarded under the Contract if not already specified in the bid. Such notification, in the original bid or later shall not relieve the Supplier from any of its obligations, duties, responsibilities, or liability under the Contract.
- 21.2 Subcontracts shall comply with the provisions of GCC Clauses 3 and 7.

22. Specifications and Standards

- 22.1 Technical Specifications and Drawings
- (a) The Goods and Related Services supplied under this Contract shall conform to the technical specifications and standards mentioned in Section VI, Schedule of Requirements and, when no applicable standard is mentioned, the standard shall be equivalent or superior to the official standards whose application is appropriate to the Goods' country of origin.
 - (b) The Supplier shall be entitled to disclaim responsibility for any design, data, drawing, specification or other document, or

any modification thereof provided or designed by or on behalf of the Purchaser, by giving a notice of such disclaimer to the Purchaser.

- (c) Wherever references are made in the Contract to codes and standards in accordance with which it shall be executed, the edition or the revised version of such codes and standards shall be those specified in the Schedule of Requirements. During Contract execution, any changes in any such codes and standards shall be applied only after approval by the Purchaser and shall be treated in accordance with GCC Clause 33.

23. Packing and Documents

- 23.1 The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the Contract. During transit, the packing shall be sufficient to withstand, without limitation, rough handling and exposure to extreme temperatures, salt and precipitation, and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the goods' final destination and the absence of heavy handling facilities at all points in transit.
- 23.2 The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract, including additional requirements, if any, specified in the **SCC**, and in any other instructions ordered by the Purchaser.

24. Insurance

- 24.1 Unless otherwise specified in the **SCC**, the Goods supplied under the Contract shall be fully insured—against loss or damage incidental to manufacture or acquisition, transportation, storage, and delivery, in accordance with the applicable Incoterms or in the manner specified in the **SCC**.

25. Transportation

- 25.1 Unless otherwise specified in the **SCC**, responsibility for arranging transportation of the Goods shall be in accordance with the specified Incoterms.

26. Inspections and Tests

- 26.1 The Supplier shall at its own expense and at no cost to the Purchaser carry out all such tests and/or inspections of the Goods and Related Services as are specified in the **SCC**.
- 26.2 The inspections and tests may be conducted on the premises of the Supplier or its Subcontractor, at point of delivery, and/or at the Goods' final destination, or in another place in the Purchaser's Country as specified in the **SCC**. Subject to GCC Sub-Clause 26.3, if conducted on the premises of the Supplier or its Subcontractor, all reasonable facilities and assistance, including access to drawings and production data, shall be

furnished to the inspectors at no charge to the Purchaser.

- 26.3 The Purchaser or its designated representative shall be entitled to attend the tests and/or inspections referred to in GCC Sub-Clause 26.2, provided that the Purchaser bear all of its own costs and expenses incurred in connection with such attendance including, but not limited to, all traveling and board and lodging expenses.
- 26.4 Whenever the Supplier is ready to carry out any such test and inspection, it shall give a reasonable advance notice, including the place and time, to the Purchaser. The Supplier shall obtain from any relevant third party or manufacturer any necessary permission or consent to enable the Purchaser or its designated representative to attend the test and/or inspection.
- 26.5 The Purchaser may require the Supplier to carry out any test and/or inspection not required by the Contract but deemed necessary to verify that the characteristics and performance of the Goods comply with the technical specifications codes and standards under the Contract, provided that the Supplier's reasonable costs and expenses incurred in the carrying out of such test and/or inspection shall be added to the Contract Price. Further, if such test and/or inspection impedes the progress of manufacturing and/or the Supplier's performance of its other obligations under the Contract, due allowance will be made in respect of the Delivery Dates and Completion Dates and the other obligations so affected.
- 26.6 The Supplier shall provide the Purchaser with a report of the results of any such test and/or inspection.
- 26.7 The Purchaser may reject any Goods or any part thereof that fail to pass any test and/or inspection or do not conform to the specifications. The Supplier shall either rectify or replace such rejected Goods or parts thereof or make alterations necessary to meet the specifications at no cost to the Purchaser, and shall repeat the test and/or inspection, at no cost to the Purchaser, upon giving a notice pursuant to GCC Sub-Clause 26.4.
- 26.8 The Supplier agrees that neither the execution of a test and/or inspection of the Goods or any part thereof, nor the attendance by the Purchaser or its representative, nor the issue of any report pursuant to GCC Sub-Clause 26.6, shall release the Supplier from any warranties or other obligations under the Contract.

27. Liquidated Damages

- 27.1 Except as provided under GCC Clause 32, if the Supplier fails to deliver any or all of the Goods by the Date(s) of delivery or perform the Related Services within the period specified in the Contract, the Purchaser may without prejudice to all its other

remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to the percentage specified in the **SCC** of the delivered price of the delayed Goods or unperformed Services for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of the percentage specified in those **SCC**. Once the maximum is reached, the Purchaser may terminate the Contract pursuant to GCC Clause 35.

28. Warranty

- 28.1 The Supplier warrants that all the Goods are new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided otherwise in the Contract.
- 28.2 Subject to GCC Sub-Clause 22.1(b), the Supplier further warrants that the Goods shall be free from defects arising from any act or omission of the Supplier or arising from design, materials, and workmanship, under normal use in the conditions prevailing in the country of final destination.
- 28.3 Unless otherwise specified in the **SCC**, the warranty shall remain valid for twelve (12) months after the Goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the **SCC**, or for eighteen (18) months after the date of shipment from the port or place of loading in the country of origin, whichever period concludes earlier.
- 28.4 The Purchaser shall give notice to the Supplier stating the nature of any such defects together with all available evidence thereof, promptly following the discovery thereof. The Purchaser shall afford all reasonable opportunity for the Supplier to inspect such defects.
- 28.5 Upon receipt of such notice, the Supplier shall, within the period specified in the **SCC**, expeditiously repair or replace the defective Goods or parts thereof, at no cost to the Purchaser.
- 28.6 If having been notified, the Supplier fails to remedy the defect within the period specified in the **SCC**, the Purchaser may proceed to take within a reasonable period such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Purchaser may have against the Supplier under the Contract.

29. Patent Indemnity

- 29.1 The Supplier shall, subject to the Purchaser's compliance with GCC Sub-Clause 29.2, indemnify and hold harmless the Purchaser and its employees and officers from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of any nature, including attorney's fees and expenses, which the Purchaser

may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright, or other intellectual property right registered or otherwise existing at the date of the Contract by reason of:

- (a) the installation of the Goods by the Supplier or the use of the Goods in the country where the Site is located; and
- (b) the sale in any country of the products produced by the Goods.

Such indemnity shall not cover any use of the Goods or any part thereof other than for the purpose indicated by or to be reasonably inferred from the Contract, neither any infringement resulting from the use of the Goods or any part thereof, or any products produced thereby in association or combination with any other equipment / goods / materials, plant, or materials not supplied by the Supplier, pursuant to the Contract.

29.2 If any proceedings are brought or any claim is made against the Purchaser arising out of the matters referred to in GCC Sub-Clause 29.1, the Purchaser shall promptly give the Supplier a notice thereof, and the Supplier may at its own expense and in the Purchaser's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim.

29.3 If the Supplier fails to notify the Purchaser within twenty-eight (28) days after receipt of such notice that it intends to conduct any such proceedings or claim, then the Purchaser shall be free to conduct the same on its own behalf.

29.4 The Purchaser shall, at the Supplier's request, afford all available assistance to the Supplier in conducting such proceedings or claim, and shall be reimbursed by the Supplier for all reasonable expenses incurred in so doing.

29.5 The Purchaser shall indemnify and hold harmless the Supplier and its employees, officers, and Subcontractors from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of any nature, including attorney's fees and expenses, which the Supplier may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright, or other intellectual property right registered or otherwise existing at the date of the Contract arising out of or in connection with any design, data, drawing, specification, or other documents or materials provided or

designed by or on behalf of the Purchaser.

30. Limitation of Liability

- 30.1 Except in cases of criminal negligence or willful misconduct,
- (a) the Supplier shall not be liable to the Purchaser, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the Supplier to pay liquidated damages to the Purchaser and
 - (b) the aggregate liability of the Supplier to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment / goods / materials, or to any obligation of the supplier to indemnify the purchaser with respect to patent infringement

31. Change in Laws and Regulations

- 31.1 Unless otherwise specified in the Contract, if after the date of 28 days prior to date of Bid submission, any law, regulation, ordinance, order or bylaw having the force of law is enacted, promulgated, abrogated, or changed in India, where the Site is located (which shall be deemed to include any change in interpretation or application by the competent authorities) that subsequently affects the Delivery Date and/or the Contract Price, then such Delivery Date and/or Contract Price shall be correspondingly increased or decreased, to the extent that the Supplier has thereby been affected in the performance of any of its obligations under the Contract. Notwithstanding the foregoing, such additional or reduced cost shall not be separately paid or credited if the same has already been accounted for in the price adjustment provisions where applicable, in accordance with GCC Clause 15.

32. Force Majeure

- 32.1 The Supplier shall not be liable for forfeiture of its Performance Security, liquidated damages, or termination for default if and to the extent that its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.
- 32.2 For purposes of this Clause, “Force Majeure” means an event or situation beyond the control of the Supplier that is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of the Supplier. Such events may include, but not be limited to, acts of the Purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.
- 32.3 If a Force Majeure situation arises, the Supplier shall promptly

notify the Purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

33. Change Orders and Contract Amendments

33.1 The Purchaser may at any time order the Supplier through notice in accordance GCC Clause 8, to make changes within the general scope of the Contract in any one or more of the following:

- (a) drawings, designs, or specifications, where Goods to be furnished under the Contract are to be specifically manufactured for the Purchaser;
- (b) the method of shipment or packing;
- (c) the place of delivery; and
- (d) the Related Services to be provided by the Supplier.

33.2 If any such change causes an increase or decrease in the cost of, or the time required for, the Supplier's performance of any provisions under the Contract, an equitable adjustment shall be made in the Contract Price or in the Delivery/Completion Schedule, or both, and the Contract shall accordingly be amended. Any claims by the Supplier for adjustment under this Clause must be asserted within twenty-eight (28) days from the date of the Supplier's receipt of the Purchaser's change order.

33.3 Prices to be charged by the Supplier for any Related Services that might be needed but which were not included in the Contract shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the Supplier for similar services.

33.4 Subject to the above, no variation in or modification of the terms of the Contract shall be made except by written amendment signed by the parties.

34. Extensions of Time

34.1 If at any time during performance of the Contract, the Supplier or its subcontractors should encounter conditions impeding timely delivery of the Goods or completion of Related Services pursuant to GCC Clause 13, the Supplier shall promptly notify the Purchaser in writing of the delay, its likely duration, and its cause. As soon as practicable after receipt of the Supplier's

notice, the Purchaser shall evaluate the situation and may at its discretion extend the Supplier's time for performance, in which case the extension shall be ratified by the parties by amendment of the Contract.

34.2 Except in case of Force Majeure, as provided under GCC Clause 32, a delay by the Supplier in the performance of its Delivery and Completion obligations shall render the Supplier liable to the imposition of liquidated damages pursuant to GCC Clause 26, unless an extension of time is agreed upon, pursuant to GCC Sub-Clause 34.1.

35. Termination

35.1 Termination for Default

- (a) The Purchaser, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the Supplier, may terminate the Contract in whole or in part:
- (i) if the Supplier fails to deliver any or all of the Goods within the period specified in the Contract, or within any extension thereof granted by the Purchaser pursuant to GCC Clause 34;
 - (ii) if the Supplier fails to perform any other obligation under the Contract; or
 - (iii) if the Supplier, in the judgment of the Purchaser has engaged in fraud and corruption, as defined in GCC Clause 3, in competing for or in executing the Contract.

(b) In the event the Purchaser terminates the Contract in whole or in part, pursuant to GCC Clause 35.1(a), the Purchaser may procure, upon such terms and in such manner as it deems appropriate, Goods or Related Services similar to those undelivered or not performed, and the Supplier shall be liable to the Purchaser for any additional costs for such similar Goods or Related Services. However, the Supplier shall continue performance of the Contract to the extent not terminated.

35.2 Termination for Insolvency.

- (a) The Purchaser may at any time terminate the Contract by giving notice to the Supplier if the Supplier becomes bankrupt or otherwise insolvent. In such event, termination will be without compensation to the Supplier, provided that such termination will not prejudice or affect any right of action or remedy that has accrued or will accrue thereafter to the Purchaser

35.3 Termination for Convenience.

- (a) The Purchaser, by notice sent to the Supplier, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Purchaser's convenience, the extent to which performance of the Supplier under the Contract is terminated, and the date upon which such termination becomes effective.
- (b) The Goods that are complete and ready for shipment within twenty-eight (28) days after the Supplier's receipt of notice of termination shall be accepted by the Purchaser at the Contract terms and prices. For the remaining Goods, the Purchaser may elect:
 - (i) to have any portion completed and delivered at the Contract terms and prices; and/or
 - (ii) to cancel the remainder and pay to the Supplier an agreed amount for partially completed Goods and Related Services and for materials and parts previously procured by the Supplier.

36. Assignment

- 36.1 Neither the Purchaser nor the Supplier shall assign, in whole or in part, their obligations under this Contract, except with prior written consent of the other party.

SECTION VIII. SPECIAL CONDITIONS OF CONTRACT

The following Special Conditions of Contract (SCC) shall supplement and / or amend the General Conditions of Contract (GCC). Whenever there is a conflict, the provisions herein shall prevail over those in the GCC.

GCC 1.1(j)	The Purchaser is: The Commissioner, Vizianagaram Municipality, Vizianagaram-535001, Andhra Pradesh.. Country: <i>India</i>
GCC 1.1 (o)	The Project Site(s)/Final Destination(s) is/are: Vizianagaram Municipality Limits.
GCC 4.2 (a)	The meaning of the trade terms shall be as prescribed by Incoterms.
GCC 4.2 (b)	The version edition of Incoterms shall be 2000
GCC 8.1	<p>For <u>Notices</u>, the Purchaser's address shall be:</p> <p>Attention: The Commissioner, Address: <i>Near Clock Tower, Municipal Office .</i> City: <i>Vizianagaram</i> ZIP Code: <i>535001</i> Country: <i>India</i> Telephone: <i>(08922) 224793</i> Facsimile number: <i>(08922) 224793</i> Electronic mail address: <u><i>commvzm@yahoo.com</i></u>.</p> <p>The Supplier address shall be:</p> <p>Attention: Address:</p> <p style="text-align: center;">PHONE</p>

GCC 10.2**Settlement of Disputes**

The dispute settlement mechanism to be applied shall be as follows:

- (a) In case of Dispute or difference arising between the Purchaser and a domestic supplier 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 Purchaser and the Supplier. 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), Hyderabad.
- (b) In the case of a dispute with a Foreign Supplier, the dispute shall be settled in accordance with provisions of UNCITRAL (United nations Commission on International Trade Law) Arbitration Rules. The Arbitral Tribunal shall consist of three Arbitrators one each to be appointed by the Purchaser and the Supplier. 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), Hyderabad.
- (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), Bangalore both in cases of the Foreign supplier as well as Indian supplier, shall appoint the arbitrator. A certified copy of the order of the President of the Institution of Engineers (India), Hyderabad, making such an appointment shall be furnished to each of the parties.

	<p>(d) Arbitration proceedings shall be held at Hyderabad, India, and the language of the arbitration proceedings and that of all documents and communications between the parties shall be English.</p> <p>(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.</p> <p>(f) Where the value of the contract is Rs.10 million 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), Hyderabad.</p> <p>(g) Except otherwise agreed to by the Parties, Arbitrators should give a decision in writing within 120 days of receipt of notification of dispute.</p>
GCC 12.1	The scope of supply for the Goods and Related Services to be supplied shall be as specified in the <i>Schedule of Requirement</i> .

<p>GCC 13.1</p>	<p>Details of Shipping and other Documents to be furnished by the Supplier are given below:</p> <p>GCC 13.1 Upon delivery of the goods to the transporter/consignee, the supplier shall notify the purchaser and mail the following documents to the Purchaser :</p> <ul style="list-style-type: none"> (i) Three Copies of the Supplier invoice showing contract number, goods description, quantity, unit price, total amount; (ii) Delivery note, Railway receipt, or Road consignment note or equivalent transport document or acknowledgement of receipt of goods from the Consignee; (iii) Three Copies of packing list identifying contents of each package; (iv) Insurance certificate; (v) Manufacturer's/Supplier's warranty certificate; (vi) Inspection certificate issued by the nominated inspection agency, and the Supplier's factory inspection report; and (vii) Certificate or origin. <p>The above documents shall be received by the Purchaser before arrival of the Goods (except where it is handed over to the Consignee with all documents) and if not received, the supplier will be responsible for any consequent expenses.</p>
<p>GCC 15.1</p>	<p>The prices charged for the Goods supplied and the related Services performed <i>shall not</i> be adjustable.</p>
<p>GCC 16.1</p>	<p>GCC 16.1 Payment shall be made in Indian Rupees in the following manner:</p>

	<p>(a) (i) <i>On Delivery</i>: Eighty (80)% of the contract price shall be paid on receipt of Goods and upon submission of the documents specified in Clause 13 of SCC; and</p> <p>(ii) <i>On Final Acceptance</i>: the remaining twenty (20)% of the Contract Price shall be paid within thirty (30) days after the date of the Acceptance Certificate issued by the Purchaser’s representative in the proforma given in Section VI - item 6.</p> <p>(b) Charges for comprehensive maintenance services shall be paid after completion of warranty from the date of issue of acceptance certificate in equal quarterly installments at the end of each quarter as per the rates quoted in the price schedule against a unconditional Bank Guarantee for 2.5% of the cost of equipment / goods / materials excluding annual comprehensive maintenance charges in the form provided in the bidding document valid for 5 years from the date of completion of warranty period.</p>
GCC 16.5	<p>The payment-delay period after which the Purchaser shall pay interest to the supplier shall be 60 days.</p> <p>The interest rate that shall be applied is 8% per annum.</p>
GCC 17	<p>In the case of Excise duty waiver, the purchaser will issue only the certificates in terms of the Central Excise notification as per information given by supplier in form at serial no.8 of Section VI. Supplier is solely responsible for obtaining such benefits and in case of failure to receive such benefits, the purchaser will not compensate the supplier separately.</p>
GCC 18.1	<p>Within 21 days of Notification of Award, the supplier shall furnish Performance Security to the Purchaser shall be for an amount of 10% of the contract value, valid upto 60 days after the date of completion of performance obligations including warranty obligations.</p> <p>In the event of any correction of defects or replacement of defective material during the warranty period, the warranty for the corrected/ replaced material shall be extended to a further period of 12 months and the Performance Bank guarantee for proportionate value shall be extended 60 days over and above the extended warranty period.</p>

GCC 18.3	If required, the Performance Security shall be in the form of a unconditional “Bank Guarantee” or “a cashier’s cheque or banker’s certified cheque or crossed demand draft or pay order” drawn in favour of the Purchaser.
GCC 18.4	Discharge of the performance Security shall take place not later than 60 days following the date of completion of the Supplier’s performance obligations, including the warranty obligation, under the contract.
GCC 18.5	<p>Add as Clause 18.5 to the GCC the following:</p> <p>In the event of any contractual amendment, the Supplier shall, within 28 days of receipt of such amendment, furnish the amendment to the Performance Security, rendering the same valid for the duration of the Contract, as amended for 60 days after the completion of performance obligations including warranty obligations.</p>
GCC 23.2	<p><u>Packing Instructions:</u> The Supplier will be required to make separate packages for each Consignee. Each package will be marked on three sides with proper paint/indelible ink with the following:</p> <p>(i) Project; (ii) Contract No.; (iii) Country of Origin of Goods; (iv) Supplier’s Name; (v) Packing List Reference Number.</p> <p>Suppliers should use recycled materials as much as possible for packing</p>
GCC 24.1	The insurance shall be paid in an amount equal to 110 percent of the EXW value of the Goods from “Warehouse to warehouse (final destination)” on “All Risks” basis including War Risks and Strikes.
GCC 25.1	The Supplier is required under the Contract to transport the Goods duly insured to the specified final destination, and all related costs shall be included in the Contract Price.

GCC 26.1	<p>The inspections and tests shall be as detailed in Para 5 of Section VI-Schedule of Requirement:</p> <p>The supplier shall get each item indicated in the Schedule of requirement inspected in manufacturer's works and submit a test certificate and also manufacturer's guarantee /warranty certificate that the items are conforms to the laid down specification.</p> <p>The Purchaser or its representative may inspect and /or test any or all the items to confirm their conformity to the contract specification, prior to dispatch from the manufacturer's premises. Such inspection and clearance will not prejudice the right of the consignee to inspect and test the items on receipt at destination to verify conformity to technical specification.</p> <p>If the items are fails to meet the laid down specifications the supplier shall take immediate steps to remedy the deficiency or replace the defective parts of the each to the satisfaction of the purchaser/ consignee.</p>
GCC 26.2	The Inspections and tests shall be conducted at the Manufacturers' premises.
GCC 27.1	The liquidated damage shall be: 0.5% of contract price of delayed Goods or Services per week or part thereof. The maximum amount of liquidated damages shall be: 10% of the contract price.
GCC 28.3	The warranty period shall be 2 years from the date of final acceptance.
GCC 28.5	The period for repair or replacement shall be: 7 days.
GCC 28.6	The period shall be 14 days.
GCC 28.7	Add the following clauses.
	<p>28.7.1 Free maintenance services shall be provided by the supplier during the period of warranty.</p>
	<p>28.7.2 Not applicable</p>

	<p>28.7.3 Not applicable</p>
GCC 31.1	<p>This clause will apply only to variations in Excise duty/VAT/Sales tax/ Octroi etc payable in India on the final product which is being supplied and not for the individual components / raw materials which go into the product.</p>
GCC 37	<p>Add the following additional sub clauses.</p> <p>37.1 Supplier integrity:</p> <p>The supplier is responsible for and obliged to conduct all contracted activities in accordance with the contract using state- of- the- art methods and economic principles and exercising all means available to achieve the performance specified in the Contract.</p>
	<p>37.2</p> <p>Supplier's obligations :</p> <p>The Supplier is obliged to work closely with the Purchaser's staff, act within its own authority and abide by directives issued by the Purchaser and implementation activities.</p> <p>The Supplier will abide by the job safety measures prevalent in India and will free the Purchaser from all demands or responsibilities arising from accidents or loss of life the cause of which is the supplier's negligence. The Supplier will pay all indemnities arising from such incidents and will not hold the purchaser responsible or obligated.</p> <p>The Supplier is responsible for managing the activities of its personnel or sub- contracted personnel and will hold itself responsible for any misdemeanors.</p> <p>The Supplier will treat as confidential all data and information about the purchaser, obtained in the execution of his responsibilities, in strict confidence and will not reveal such information to any other party without the prior written approval of the Purchaser.</p>

Attachment: Price Adjustment Formula

Deleted

SECTION IX – CONTRACT FORMS

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1. CONTRACT AGREEMENT

[The successful Bidder shall fill in this form in accordance with the instructions indicated]

THIS CONTRACT AGREEMENT is made

the *[insert: **number**]* day of *[insert: **month**]*, *[insert: **year**]*.

BETWEEN

- (1) *[insert complete name of Purchaser]*, a *[insert description of type of legal entity, for example, an agency of the Ministry of of the Government of { insert name of Country of Purchaser }, or corporation incorporated under the laws of { insert name of Country of Purchaser }]* and having its principal place of business at *[insert address of Purchaser]* (hereinafter called “the Purchaser”), and
- (2) *[insert name of Supplier]*, a corporation incorporated under the laws of *[insert: country of Supplier]* and having its principal place of business at *[insert: address of Supplier]* (hereinafter called “the Supplier”).

WHEREAS the Purchaser invited bids for certain Goods and ancillary services, viz., *[insert brief description of Goods and Services]* and has accepted a Bid by the Supplier for the supply of those Goods and Services in the sum of *[insert Contract Price in words and figures, expressed in the Contract currency(ies)]* (hereinafter called “the Contract Price”).

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.
2. The following documents shall constitute the Contract between the Purchaser and the Supplier, and each shall be read and construed as an integral part of the Contract:
 - (a) This Contract Agreement
 - (b) Special Conditions of Contract
 - (c) General Conditions of Contract
 - (d) Technical Requirements (including Schedule of Requirements and Technical Specifications)
 - (e) The Supplier’s Bid and original Price Schedules
 - (f) The Purchaser’s Notification of Award
 - (g) *[Add here any other document(s)]*

3. This Contract shall prevail over all other Contract documents. In the event of any discrepancy or inconsistency within the Contract documents, then the documents shall prevail in the order listed above.
4. In consideration of the payments to be made by the Purchaser to the Supplier as hereinafter mentioned, the Supplier hereby covenants with the Purchaser to provide the Goods and Services and to remedy defects therein in conformity in all respects with the provisions of the Contract.
5. The Purchaser hereby covenants to pay the Supplier in consideration of the provision of the Goods and Services and the remedying of defects therein, 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.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of *[insert the name of the Contract governing law country]* on the day, month and year indicated above.

For and on behalf of the Purchaser

Signed: *[insert signature]*
in the capacity of *[insert title or other appropriate designation]*
in the presence of *[insert identification of official witness]*

For and on behalf of the Supplier

Signed: *[insert signature of authorized representative(s) of the Supplier]*
in the capacity of *[insert title or other appropriate designation]*
in the presence of *[insert identification of official witness]*

Note: This form is for information of the bidder. It is not to be completed and submitted / uploaded as a part of the bid.

2. PERFORMANCE SECURITY

[The bank, as requested by the successful Bidder, shall fill in this form in accordance with the instructions indicated]

Date: *[insert date (as day, month, and year) of Bid Submission]*
IFB No. and title: *[insert no. and title of bidding process]*

Bank's Branch or Office: *[insert complete name of Guarantor]*

Beneficiary: *[insert complete name of Purchaser]*

PERFORMANCE GUARANTEE No.: *[insert Performance Guarantee number]*

We have been informed that *[insert complete name of Supplier]* (hereinafter called "the Supplier") has entered into Contract No. *[insert number]* dated *[insert day and month]*, *[insert year]* with you, for the supply of *[description of Goods and related Services]* (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, a Performance Guarantee is required.

At the request of the Supplier, we hereby irrevocably undertake to pay you any sum(s) not exceeding *[insert amount(s)¹² in figures and words]* upon receipt by us of your first demand in writing declaring the Supplier to be in default under the Contract, without cavil or argument, or your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

This Guarantee shall expire no later than the *[insert number]* day of *[insert month]**[insert year]*,¹³ and any demand for payment under it must be received by us at this office on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 458, except that subparagraph (ii) of Sub-article 20(a) is hereby excluded.

[signatures of authorized representatives of the bank and the Supplier]

¹² *The Bank shall insert the amount(s) specified in the SCC and denominated, as specified in the SCC, either in the currency(ies) of the Contract or a freely convertible currency acceptable to the Purchaser.*

¹³ *Dates established in accordance with Clause 17.4 of the General Conditions of Contract ("GCC"), taking into account any warranty obligations of the Supplier under Clause 15.2 of the GCC intended to be secured by a partial Performance Guarantee. The Purchaser should note that in the event of an extension of the time to perform the Contract, the Purchaser would need to request an extension of this Guarantee from the Bank. Such request must be in writing and must be made prior to the expiration date established in the Guarantee. In preparing this Guarantee, the Purchaser might consider adding the following text to the Form, at the end of the penultimate paragraph: " We agree to a one-time extension of this Guarantee for a period not to exceed [six months] [one year], in response to the Purchaser's written request for such extension, such request to be presented to us before the expiry of the Guarantee."*

Note: This form is for information of the bidder. It is not to be completed and submitted / uploaded as a part of the bid.

3. ANNUAL MAINTENANCE SECURITY BANK GUARANTEE FORM

(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 Supplier" has undertaken, in pursuance of contract No. dated 20... to supply (Description of Goods and Services) hereinafter called "the Contract".

AND WHEREAS it has been stipulated by you in the said contract that the Supplier shall furnish you with a Bank Guarantee by a recognised Bank for the sums 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 Supplier a Guarantee.

THEREFORE WE hereby affirm that we are Guarantors and responsible to you on behalf of the Supplier, up to a total of Rs. (Amount of guarantee in words and figures) being 2.5% of the total cost of equipment / goods / materials and we undertake to pay you, upon your first written demand declaring the Supplier 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 sums 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.

Note: This form is for information of the bidder. It is not to be completed and submitted / uploaded as a part of the bid.