

# SBI INFRA MANAGEMENT SOLUTIONS PVT LTD (WHOLLY OWNED SUBSIDIARY OF SBI)

INVITES TENDERS ON BEHALF OF SBI, LHO, THIRUVANANTHAPURAM IN TWO BID SYSTEM WITH PRICE BIDDING THROUGH E-REVERSE AUCTION

#### **FOR**

PREQUALIFICATION AND SELECTION OF OEMs/ AUTHORISED DISTRIBUTORS

#### **FOR**

SUPPLY & INSTALLATION OF COMPACTOR STORAGE SYSTEM (OPTIMISERS) AT SBI RACPC, RAVI'S ARCADE, SECOND FLOOR, IRON BRIDGE, KOLLAM.

Last date for submission of Technical bid: 2.00 P.M. (IST) on 28.12.2018

Opening of Technical bid: 02:30 P.M. (IST) on 28.12.2018.

The Assistant General Manager SBI Infra Management Solutions Pvt. Ltd. 4<sup>th</sup> Floor, SBI LHO Building Poojappura, Thiruvananthapuram-695012

#### **NOTICE INVITING TENDER (NIT No: 47/2018-19)**

Sealed applications are invited from Original Equipment Manufacturers (OEMs)/ **Authorized Distributors** for supply and installation of Compactor units at SBI RACPC, Second Floor, Ravi's Arcade, Iron Bridge, Kollam as per the instructions & specifications detailed as hereunder:

1	Release of advertisement in local newspapers	On 02.12.2018 (Tentatively)
2	Availability of Tender Documents in Bank's web site	From: 01.12.2018 To: 28.12.2018.
4	Last Date and Time for Submission of Tender:	28.12.2018 upto 2:00pm at the office of SBI Infra management Solutions Pvt Ltd, 4 <sup>th</sup> floor, SBI LHO Building, Poojappura, Trivandrum-12
5	Date and Time of opening of Technical Bid	28.12.2018 at 2.30pm
6	Address for communication:	The Assistant General Manager, SBI Infra Management Solutions Pvt. Ltd. 4 <sup>th</sup> Floor, SBI LHO Building, Poojappura, Thiruvananthapuram-695012 Ph: 0471 2192435/39, E-mail: headtri.sbiims@sbi.co.in
7	Contact person (during office hours on working days)	Manager (Civil Engg.), Contact Number: 9495550200
3	Cost of the tender	Rs.2,000/-(Rupees Two thousand only) in the form of DD/ Pay order in favor of 'SBI Infra Management Solutions Pvt. Ltd" payable at Trivandrum, to be submitted along with the Technical Bid. (Without the cost, tender will be rejected)
9	Earnest Money Deposit	Rs. 9,000.00 (Rupees Nine Thousand only) in the form of DD/ Pay order favouring "State Bank of India", payable at Kollam to be submitted along with Technical Bid. (Without EMD, tender will be rejected)
10	Initial Security Deposit	2 % of contract value including EMD
11	Retention money	5% of contract value including ISD
12	Site/ delivery address:	SBI RACPC, Second Floor, Ravi's Arcade, Iron Bridge, Kollam

Note: All the applicants are advised to visit the site and cross check the enclosed drawing measurements before submission of the bid. In case of any discrepancies/ doubts, the same may be got clarified during the Pre-Bid meeting as scheduled above.

#### A. MINIMUM ELIGIBILITY CRITERIA FOR PREQUALIFICATION:

(Ensure to enclose supporting documents for all the desired criteria)

- The applicant shall be Original Equipment Manufacturer (OEM)/ Authorized Distributor.
   All the supporting documents justifying Original Equipment Manufacturer)/ Authorized Distributor shall be furnished.
- 2. The applicant shall have a well established office/ service facilities in Kerala state.

  Supporting documents for proof of office/ service facilities shall be attached.
- 3. The applicant shall have a valid Income Tax registration/ PAN, GST registration and digital certificate for participating in the tender/ e- reverse auction (enclose proof)
- **4.** Applicant shall submit the details of service personnel attending the service calls.
- The applicant should have minimum 7 years of experience in the field of Compactor
   Unit Manufacturing/ dealing as on 30.09.2018. (Enclose proof)
- **6.** The applicant should have a **minimum average annual turnover of Rs. 3.00 Lakhs** during last three years as on 31.03.2018, duly supported by the audited Balance Sheet and IT Returns.
- 7. Experience of having successfully supplied & installed similar type of compactor units of magnitude as mentioned hereunder during last 5 years ended on 30.09.2018 for Central Govt./ State Govt./ PSU/ MNCs/ reputed private companies in Kerala State. This should be supported by copies of work order and completion certificate obtained from the respective Client, Form 26 AS (or proof of payments received), details of contact persons of the client with phone number etc.
  - a. One similar completed work costing not less than Rs. 7.10 lakhs
    Or
  - b. Two similar completed works costing not less than Rs. 4.50 lakhs each
    Or
  - c. Three similar completed works costing not less than Rs. 3.60 lakhs each

Note: Similar completed work shall refer to "Supply & Installation of Compactor Units"

#### B. BID EVALUATION PROCESS:

For the purpose of Tender, the short listed eligible applications will be evaluated in the following manner:

- 1. Sealed envelope superscribing "Prequalification & Selection of OEMs/ Authorised Distributors for Supply & installation of compactor units for SBI RACPC, Ravi's Arcade, Second Floor, Iron Bridge, Kollam" and containing two separate sealed covers (Cover –I: the technical bid, documents supporting desired eligibility criteria, duly filled Annexures 'A' to 'G' and 2 nos DDs towards Tender fee and EMD & Cover:II: Indicative price bid) should be submitted to The Assistant General Manager, SBI Infra Management Solutions Pvt. Ltd., SBI LHO building, Poojappura, Thiruvananthapuram 695012, before the due date and time specified for receipt of tender.
- Technical Bid shall be evaluated based on the predefined prequalification criteria, verification of credentials, confidential reports/ inputs received from the previous clients etc. The applicants thus qualified will be called as <u>'Prequalified vendors'</u> for the proposed work.
- 3. If necessary, the authorized representatives of Bank will visit many/ few projects/ sites which are recently executed/ being executed by the applicants, in order to evaluate the performance of the applicants.
- 4. Thereafter, Indicative Price bids of all the Prequalified/ eligible vendors will be opened. Thereafter, e-Reverse auction will be conducted to identify the L-1 bidder.
- **5.** Please note, the applications received are duly evaluated based on the details/ supporting documents furnished by the applicants. It is the sole responsibility of the applicants to submit the desired documents. Applications without supporting documents/ incomplete applications are liable to be rejected.

#### C. **GENERAL INSTRUCTIONS TO BIDDERS:**

- 1. Please read these instructions carefully before filling up the application form.
- 2. Conditional Tenders are liable to be rejected. Any conditions which may not involve any financial implications should be submitted in a separate cover enclosed within the main cover. Bank may, at its discretion, accept or reject the conditions and the tender.
- Separate DDs for Tender fee & EMD should be enclosed along with Technical Bid.
   Applications without prescribed DDs and other relevant documents as specified in the tender shall be summarily rejected.
- 4. The Tenderer must obtain, at his/ their own responsibility and expenses, all the information that may be necessary for the purpose of filling of this tender before SIGNATURE OF THE APPLICANT WITH DATE & SEAL Page 4 of 19 SBIIMS, TRIVANDRUM CIRCLE

- submitting the tender. The tenderer must scrutinize the drawings, inspect the site of work and acquaint himself/ themselves with all local conditions & matter pertaining thereto, before submitting the tender.
- 5. The tender forms must be filled in English. Each page of the tender documents is required to be signed by the person/ duly authorized persons as token of his/their having acquainted himself/ themselves with the general conditions etc. as laid down herein. Any tender with any of the documents not so endorsed is liable to be rejected:
- 6. Timelines pertains to tendering shall be strictly as per the schedule mentioned in table under NIT. In case of any extension/modification, the same will be announced in our Bank's website.
- 7. The application must be submitted in the proforma to be downloaded from our website without altering meaning of the text whatsoever. Any violation of this condition shall render the application invalid.
- 8. If the space in proforma is insufficient for furnishing full details, such information may be supplemented on separate sheet stating therein the part of proforma and serial number. Separate sheets may be used for each part of application. While filling up the application with regard to list of important works completed or on hand the applicant shall only include major works handled by the firm.
- 9. Bank's representatives may visit the applicant's projects and contact his past clients for verification of information given by the applicant. The applicant will be required to give them the necessary facilities and arrangements for verification.
- 10. The ability and competence of the applicant to render required services within the specified time frame and other relevant factors will be considered while deciding the empanelment of contractors.
- 11. Decision of the State Bank of India/ SBI Infra Management Solutions Pvt. Ltd regarding short listing of contractors for online reverse auction will be final and binding. Shortlisted Contractors will be informed within one month from the date of opening of Technical bid.
- 12. Application found with false and/ or incomplete information at any stage is liable for rejection.
- 13. The EMD money will be retained in case of the successful Tenderer as part of the Initial Security Deposit for the due fulfillment of the contract and will be refunded without any interest thereon to the unsuccessful Tenderers within 02 weeks from date of award of contract. EMD of successful bidder shall be forfeited if he fails to commence the work within the stipulated time or to execute agreement/ submit ISD or any other relevant documents.

- 14. Successful bidder shall submit Demand Draft, favouring 'State Bank of India' payable at Kollam, for a sum of 2% of the contract value less EMD within 7 days of receipt of work order and the same along with EMD shall form Initial Security Deposit. Initial Security Deposit shall be forfeited if the contractor fails to commence the work within the stipulated time/ complete the works satisfactorily.
- 15. Canvassing in connection with tenders is strictly prohibited and Tenders submitted by the contractors who resort to canvassing are liable to be rejected.
- 16. Bidders should have not been blacklisted/ barred by any of the state/ Central government department/ PSU/ any other organization. Self-declaration shall be submitted by the bidder. Bidders should provide necessary supporting documents as proof in support of all the above items as part of eligibility verification.
- 17. Validity period of Offer: The Tender shall remain valid for 90 days from the date of ereverse auction.
- 18. The successful tenderer will have to enter in to Agreement with the Bank as per the standard format within 10 days from the date of receipt of work order.
- 19. Under no circumstances shall SBI/ SBIIMS Pvt Ltd be held responsible for compensation or loss to the contractor due to any increase in the cost of labour and/ or material etc. The rates quoted shall include all costs including GST, excise duty, transportation & installation charges and all other taxes, levies etc complete.
- 20. It is imperative that the contractors submit their application in the prescribed format along with certificates of satisfactory completion of the job from their respective previous clients. Tenderers not giving the full particulars as mentioned above or as called for in the special Conditions or not complying with any of the conditions set forth above or therein are liable to be summarily rejected.
- 21. SBI/ SBIIMS Pvt Ltd does not bind themselves to accept the lowest or any tender and reserve to themselves the right to accept or reject any or all tenders, either in whole or in part, without assigning any reasons whatsoever for doing so;
- CC? Delivery and installation should be made within 6 weeks from the date of receipt of the Purchase order or from the date of handing over of site whichever is later.
- CD? **Payment Terms:** 95% Payment shall be made within 30 days from the date of the bill, raised after completion of delivery and installation of the units at our site and verification of the unit at the site by Bank's Officials. Remaining 5% value of actual final work including the value of EMD/ ISD will be withheld as Retention Money with the Bank and shall be released upon successful completion of Defects Liability Period (DLP) of one year from the date completion of the work.

- CE? **Testing of work and material:** The OEM/ Authorised Distributor shall, if required by the Bank, arrange to test materials and/ or portions of the work from laboratories (at his own cost), as directed by the Engineer in charge, in order to prove their soundness, efficiency, strength, physical & dimensional properties. In case any such test results gives below par values, the contractor shall pull down whole or part of the structure and redo the same at his own cost and the defective materials and the debris shall immediately be removed from the site.
- CF? Liquidated Damages / Penalty: A penalty @ 0.5% of the purchase order value per week or part thereof, subject to a maximum of 5% of the purchase order value, shall be levied as liquidated damages for delay in supply and completion of the work. However, for the delay due to reasons which shall not be attributable to agency, LD will not be imposed and on request by the vendor/ supplier before expiry of the original contract period, time extension can be granted without LD.
- CG? Guarantee / defect liability period:-. Defect liability period of 1 year will be applicable for this tender. During the said period, the OEM/ Authorised Distributor shall make good all the defects, at his own cost, as and when intimated. After the defect liability period, the OEM/ Authorised Distributor shall provide continuous maintenance support & spare parts supply at a reasonable cost for the entire lifetime of the product, failing which the OEM/ Authorised Distributor may not be allowed to participate in Bank's all future tenders.
- 27. **Maintenance during defect liability period:** The supplied items shall be maintained during defect liability period of one year or the warranty duration whichever is later. All defective/ faulty part or parts exhibiting unusual wear and tear during guarantee period shall be replaced at the cost of vendor and such replacement shall be new, equal or better than original. All labour, tools, materials, transportation etc. required in performance of guaranteed works shall be at the supplier's expenses.
- 28. Any Service calls should be attended within 48 hours.
- 29. Supply to be made at the address mentioned above (i.e., SBI RACPC, Second Floor, Ravi's Arcade, Iron Bridge, Kollam).
- DA? The bidders are requested to quote their rate against each & every items mentioned in the indicative price bid. No item should be left unquoted and in such case the entire bid is liable to be rejected.
- 31. Bank reserves the right to accept or reject any or all tenders or distribute the orders between vendors / bidders, increase / decrease the value of work without assigning any reason whatsoever.

#### D. GENERAL TERMS AND CONDITIONS OF e-TENDERING & e-REVERSE AUCTION

Against this tender, SBI will resort to "e-REVERSE AUCTION PROCEDURE" i.e. ONLINE BIDDING VIA INTERNET.

- 1. For the proposed e-tendering & e-reverse auction, technically and commercially acceptable bidders who are shortlisted only shall be eligible to participate.
- SBI/ / SBIIMS Pvt Ltd will inform the vendors the details of service provider viz., M/s. e-Procurement Technologies Pvt. Ltd. for e-tendering & e-reverse auction to enable them to contact and get trained (if required).
- 3. Business rules like event date, time, start price, bid decrement value, extensions, etc. also will be communicated through service provider for compliance.
- 4. Vendors have to e-mail the scanned copy of compliance form in the prescribed format (will be provided by service provider) before start of e-Reverse auction. Without this the vendor will not be eligible to participate in the event.
- 5. e-Reverse auction will be conducted on schedule date & time.
- 6. At the end of e-reverse auction event, the lowest bidder value will be known on the network.
- 7. The lowest bidder has to mail the duly signed and filled-in price confirmation in the prescribed format as provided on case-to-case basis to SBI/ SBIIMS Pvt Ltd through service provider within 24 hours of auction without fail.
- 8. The e-reverse auction will be treated as closed only when the bidding process gets closed in all respects for the items listed in the tender.
- 9. After the closure of e-Reverse auction, the lowest bidder has to submit the Price confirmation letter & detailed breakup for his offer (in the same format of 'Indicative Price Bid') containing the final rates of all the items. The break up shall be arrived by tabulating the rates quoted in the e-reverse auction proportionate to the rates of individual items quoted in the indicative price bid.

# SUPPLY & INSTALLATION OF COMPACTOR UNITS AT SBI RACPC, RAVI'S ARCADE, SECOND FLOOR, IRON BRIDGE, KOLLAM BIDDER INFORMATION

1	Name of the organization	
2	Address	
3	Name, mobile/ telephone Nos. and e-mail id of the contact person	
4	Constitution of the Firm (whether company/ firm/ Proprietary)	
5	Year of Establishment	
6	Whether registered with the Registrar of Companies / Registrar of firms. (if yes, mention number and date)	
7	Registration with Govt. Authorities (If the vendor does not possess or fails to submit the said registration details, bids will be rejected) Income-tax (PAN) No. GST no.	
8	Name, Address & Phone nos of Office/ Service facilities in Kerala State (Enclose proof)	
9	Names of Directors / Proprietor / Partners / Associate	
10	Name and value of similar works completed during the last 5 years (Details may be given in the enclosed format -Annexure 'B')	
11	Name & value of works on hand / awarded in Kerala (Details may be given in enclosed format -Annexure 'C')	

12	Details of performance reports enclosed (Minimum two numbers of re[ports in the enclosed format -Annexure 'D')	
13	Details of workshop / manufacturing unit facilities along with tools, plant and equipments (Details may be given in enclosed format -Annexure 'F')	
14	Banker's Name & address (Enclose proof)	
15	Latest Income Tax Clearance Certificate (copy to be enclosed)	
16	List of empanelment / enlistment / registration with other Organizations / statutory bodies etc. Furnish empanelment letter indicating their names, category and validity.	
17	Annual turnover for the last 3 financial years ending	
	31.03.2017 2014-15	
а —		
b	2015-16	
С	2016-17	
	Average [(a+b+c)/3]	
18	Name, Address & Phone nos of the persons (atleast 2 or 3 persons) who will be in a position to certify about the quality as well as performance of your firm	1.
		2.
		3.
19	If the Digital signature is not in the name of the applicant (s)/ their Co./ or firm, give the name, mobile no. and email ID of the person/ firm who will be participating in the ereverse auction on behalf of the applicant	

### DETAILS OF SIMILAR WORKS COMPLETED DURING THE LAST FIVE YEARS ENDING 30.09.2018

SI. No.	Name of work & location	Name of the Owner / Client with address & Phone No.	Name of the Architect/ Consultan t with address & Phone No.	Contra ct / Agree ment No.	Nature / Scope of work execute d	Final Cost of work in Lakhs	Estimat ed Duratio n of the work as per contract	Actual Duration of work completi on with dates	Litigation/ Arbitration pending/ In progress with details**	Name & address/ Tel No. of Officer to whom reference shall be made	Remarks
1	2	3	4	5	6	7	8	9	10	11	12

Note: 1. The list is to be substantiated with the documentary evidences such as copies of work orders, satisfactory completion certificate obtained from the client etc. without which the works mentioned herein may not be considered for scrutiny and your application is liable to be rejected.

- 2. The applicant shall mention only those works which are completed during the last five years ended 28.02.2018.
- 3. \*\* Indicate gross amount claimed and amount awarded by the Arbitrator ( if any)

#### **ANNEXURE - C**

#### **DETAILS OF SIMILAR WORKS UNDER EXECUTION OR AWARDED IN KERALA**

SL No.	Name of work & location	Owner / client or spons oring organi zations with Ph No.	Agreeme nt / Contract Number	Estima ted cost of the work in Lakhs	Estimated / Actual Date of Commence ment of Work as per conditions stipulated	Stipulate d Date of completio n	Up to date percenta ge progres s of work	Delay in progress (if any and reasons thereof)	Name. Address & Tel No. of Officer to whom reference may be made	Remarks (Indicate whether any Arbitration initiated during the progress of work)
1	2	3	4	5	6	7	8	9	10	11

#### <u>ANNEXURE - D</u>

## GENERAL PROFORMA OF PERFORMANCE REPORT FOR WORKS REFERRED TO IN ANNEXURE 'B' & 'C'

(To be obtained from the respective Client (s))

Na	ame of the work with location	:
1.	Scope of work.	:
2.	Agreement No.	:
3.	Estimated/ Tendered Cost of work	:
4.	Value of work done	:
5.	a. Stipulated date of start	:
	b. Actual date of start	:
	c. Stipulated date of completion	:
	d. Actual date of completion	:
	e. Reason for delay, if any	:
6.	Amount of compensation levied for delayed completion if any.	d :
7.	Performance report based on Quality of Work, Time Management, and Resourcefulness	: Very Good / Good / Fair / Bad
8.	Any other information	:
		SUPERINTENDINGENGINEER/CHIEF PROJECTMANAGER OR EQUIVALENT (NAME, DESIGNATION, ADRESS AND CONTACT TELEPHONE NOS OF ORGANISATION
	ace:	
Da	ate:	

#### MAN POWER LIST/ DETAILS OF SERVICE PERSONNEL ATTENDING THE SERVICE CALLS

Sr. No.	Name & Contact no	Office address & Phone number

#### **ANNEXURE - F**

# <u>DETAILS OF WORKSHOP / MANUFACTURING UNIT FACILITIES ALONG WITH</u> <u>TOOLS, PLANT AND EQUIPMENTS</u>

- 1. Details of Workshop / Manufacturing Unit facilities:
  - Location of Workshop / Unit
  - Year of establishment
  - Area of Workshop / Unit
  - Type of Infrastructure
  - · Type of facilities

#### **ANNEXURE - G**

#### **DECLARATION**

(To be furnished in the letter head of organization)

- 1. I / We have read the application and instructions appended to the proforma and I / We understand that if any false information is detected at a later date, any future contract made between ourselves and State Bank of India/ SBI Infra Management Solutions Pvt. Ltd, on the basis of the information given by me / us can be treated as invalid by the Bank/ SBIIMS and I / We will be solely responsible for the consequences.
- 2. I / We agree that the decision of State Bank of India/ SBIIMS Pvt Ltd in selection of contractors and award of work will be final and binding to me / us.
- 3. All the information furnished by me hereunder is correct and complete to the best of my knowledge and belief.
- 4. I / We agree that I / we have no objection if enquiries are made about the work listed by me / us in the accompanying sheets.
- 5. I / We agree that I / We have not applied in the name of sister concern for the subject project.
- 6. I / We give undertaking that I / We have not been blacklisted/ penalised by any of the companies at any instance for the similar type of works.

#### BENCHMARK TECHNICAL SPECIFICATIONS FOR COMPACTOR SYSTEM

These are the general specifications proposed for the compactors and minor deviations in these specifications can be considered at the sole discretion of SBI at the pre-tendering stage (i.e., before the ereverse auction), without compromising to the quality, strength etc, subject to approval of the competent authority of the Bank. The contractor should indicate the details of deviations from the general specifications in a separate letter, while submitting the prequalification documents/ technical bid. The deviation which may cause substantial financial implications or affect the quality & strength of the unit will not be considered.

#### **General Specifications**

The compactor should be movable and bolted to undercarriage which rolls on the channels and is firmly embedded to the ground. The main body should be rigid knock down construction is made of out of Side /back/top Panels. The storage body units to take the load bearing capacity of 70-90 Kg uniformly distributed load per shelf. The shelves should be mounted on support brackets & its level should be adjustable. A centralized locking arrangement should be provided at the end unit facilitating locking of the units when all the units are brought together.

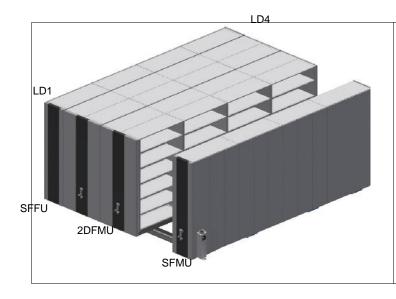
All the Mobile Units should be provided with the features such as mechanical drive with a handle for mechanically assisted drive mechanism consisting of a series of sprocket and chain mechanism for smooth movement of the compactor with minimum effort. It should be fitted with safety guard preventing the compactor units moving away from the rail and proper braking mechanism preventing reverse collision of mobile units. The guide track should be provided with an end stopper to avoid derailment of the units. Each compactor unit at the drive wheel face shall be provided with the label holders. No welding at site is allowed.

The Construction shall be rigid knock down type made out of 0.8 thick CRCA steel conforming to IS: 513. Finish shall be Epoxy polyester powder coated. Shelf construction shall be made from CRCA steel 0.8 mm thick IS:513 with uniformly distributed load capacity of 70 to 90 Kg. Undercarriage shall have construction in welded frame made of HR sheet 3.15 mm thick conforming to IS: 10748. Finish shall be with epoxy polyester powder coat of approved color & shade with a dry film thickness of minimum 35 microns. The Movements of the units shall be through chain drive type mechanism. There shall be centralized locking arrangement through locking stiffener mounted onto back of single movable last unit so that it gets locked on channels when all the units are brought together. Each Drive Type units shall have Locking Knob near the drive wheel for manual locking of individual units when a person is using those units. End stoppers shall be provided to prevent derailment. Guide channels shall have 'C' channels'/ 'J' section 2 mm thick HR & 25 mm Square bright bar. Each movable undercarriage shall have 4 nos. of antifriction ball bearings for rolling onto channels & 4 no. of antifriction ball bearings for guiding between channels & 'J' section. Fasteners shall be galvanized/ Zinc plated.

PREQUALIFICATION AND SELECTION OF OEMs/ AUTHORISED DISTRIBUTORS FOR SUPPLY & INSTALLATION OF COMPACTOR STORAGE SYSTEM (OPTIMISERS)

#### TYPICAL IMAGE OF THE PRODUCT

Compactor unit lying between LD1 to LD4 comprising of 1 SFFU, 'N' nos of DFMU and 1 SFMU



#### Typical image of the product

Above image shown with 4 Units viz. 2 DFMU & 1 SFMU & 1 SFFU.

Each face of the unit has 4 bays X 6 level shelves. Hence total no of compartments will be 24 nos.

SFFU - Single Faced Fixed Unit - Double Faced Movable Unit SFMU - Single Faced Movable Unit

(Shown above is indicative only. Actual requirement of bays/ shelves are as per details given in technical specification/ indicative price bid)

#### Design codes:

SEMA - Code of practice for the design of Mobile Shelving Systems, SEMA - Code of practice for the design of High and Low Rise Static steel shelving, BS: 5950 (V): 1998 – Code of practice for design of cold formed thin gauge sections, IS: 513, IS: 10748 etc

#### **Raw material General Specification:**

Minimum Steel Type guaranteed yield strength		Applicable standards	Component Usage	
Galvanized	210 Mpa	IS:277 D	G50 Upright, Shelf Panel, G50 inner cladding,	
Galvanized	alvanized 255 Mpa ASTM A 653M SS GRADE 37 (CLASS 1)		Shelf Clip, Cladding clamp	
HR	255 Mpa	IS: 5986 - Fe 410 / Equivalent (or) IS:2062 - E 250/ Equivalent JIS 3101: SS 400 EN 10025 : S 235	Undercarriage 'C' Channels	
CR	210 Mpa	IS:513 D JIS ; G3141	Peripheral Claddings, Top panel	
SG 500	500 Mpa	IS 1865: 1991	Stepped wheel, Plain wheel	

Boltless superstructure uses NO bolts for assembly of panels, panel stiffeners, back tie, fixed dividers. Fasteners are used in understructure assembly & cladding assembly. Fasteners used shall be of minimum Grade 8.8. All fasteners are with galvanized finish to suit industrial atmosphere as per IS 3655 & IS 1367. The contractor shall give an undertaking to the effect that the items proposed to be supplied confirms to the sepacifications stipulated in the indicative price bid/ technical bid and the said IS specifications.

### PREQUALIFICATION AND SELECTION OF OEMs/ AUTHORISED DISTRIBUTORS FOR SUPPLY & INSTALLATION OF COMPACTOR STORAGE SYSTEM (OPTIMISERS)

#### Surface finish:

For long life and protection from corrosion, all Powder coated components shall be given 4 stage 7 tank antirust/ anti corrosive surface treatment viz. de-greasing as per IS 6005:1970, rinsing, phosphate treatment as per IS 3618:1966 and RO water rinsing. The dry film thickness (DFT) of powder coating would be average 35 microns (Minimum).

#### Undercarriage

Movable undercarriage shall be provided with high strength, high precision cast iron wheels which runs on the rails. Drive unit is connected to the undercarriage via sprocket & chain assembly. Undercarriage is made up of 'C' Profiles which are assembled together to provide rigid base for the system. Suitable antitipping elements shall be incorporated in the undercarriage, to provide redundant safety to the operator. Fixed undercarriage is the sub assembly of the system which is grouted on the rails with ability to carry the entire pay load & super structure weight. Suitable anti-tipping elements are to be incorporated in the undercarriage, to provide redundant safety to the operator.

#### Rail assembly

Rails shall be enabling the undercarriage to move in a guided path & anti-tilt assembly also takes support from rail assembly ensuring less effort for the operator by spreading the total load to the ground uniformly. Rails are grouted with the ground using anchor bolts. There are minimum '12' bolts per meter length of rail provided with slope plates at both sides to avoid hindrance to people who are walking around the system.

#### **Anti-Toppling**

Anti-toppling assembly is a stability member, that is used when the height of the system with respect to its depth, goes beyond permissible limit.

#### **Locking Arrangement:**

A centralized locking arrangement should be provided at the appropriate location facilitating the locking the whole unit when all the units are brought together.

#### **Drive unit assembly:**

Drive unit assembly is provided with unit locking arrangement preventing unit from moving when in use. The unit should be ensuring hassle free operation with much ease to the user. Preferably finished with ABS plastic/ PU/ chrome plated handles as directed by Engineer in-charge.

#### Aisle space:

Aisle space between the units, when in opened position shall be minimum 90cm. Additional aisle space of 90cm may also be provided, if required, within the same cost.

Note: Compactors with pulley & belt type system (instead of chain drive type) may also be considered subject to the full satisfaction/approval of the Bank.

PREQUALIFICATION AND SELECTION OF OEMs/ AUTHORISED DISTRIBUTORS FOR SUPPLY & INSTALLATION OF COMPACTOR STORAGE SYSTEM (OPTIMISERS)

### <u>SUPPLY & INSTALLATION OF COMPACTOR UNITS AT SBI RACPC, RAVI'S ARCADE, SECOND FLOOR, IRON BRIDGE, KOLLAM - INDICATIVE PRICE BID</u>

(BREAK UP OF THE PRICE QUOTED IN THE E-REVERSE AUCTION SHALL BE ARRIVED PROPORTIONALLY BASED ON THE AMOUNT QUOTED FOR INDIVIDUAL ITEMS IN THE INDICATIVE PRICE BID)

SI No	Particulars	Quantity	Unit	Rate	Amount				
Gene CRCA Steel mm th of 35 or as for ro section of ind	General specifications: Main Body with Rigid Knock Down Construction made of 0.8 thick CRCA (Cold Rolled Close Annealed) steel conforming to IS: 513 and Shelf is 0.8 mm CRCA Steel with UDL 70 to 90 Kg. Undercarriage construction is Welded frame made of HR sheet 3.15 mm thick conforming to IS: 10748. And finish is epoxy polyester powder coat with minimum DFT of 35 microns. Guide channels shall have 'J' section 2 mm thick HR & 25 mm Square bright bar/ or as approved by the Bank. Each movable undercarriage has 4 nos. of antifriction ball bearings for rolling onto channels & 4 no. of antifriction ball bearings for guiding between channels & 'J' section. Each Drive Type units shall have Locking Knob near the drive wheel for manual locking of individual units when a person is using those units, Door locking, Fasteners, Guide Holder, Label holder. Each units/ bays shall have minimum 5 level shelves.								
1	Single static 3 bay (Chain drive type) of overall size about 2745 mm width x 457 mm depth x 2080 mm height, locks, handles and all other accessories etc complete.	2	Each						
2	Twin mobile 3 bay (Chain drive type) of overall size about 2745 mm width x 914 mm depth x 2080 mm height with shelves on both sides, locks, handles and all other accssories etc complete.	12	Each						
3	Single mobile last 3 bay (Chain drive type) of overall size about 2745 mm width x 457 mm depth x 2080 mm height, locks, handles and all other accessories etc complete.	2	Each						
4	Rails required for proper movement of the system including 3 feet/ 6 feet extra length (as per requirement) for moving space for using the compactors.  To be included in the rates quoted for items 1, 2 & 3 above								
Total	(inclusive of GST & other taxes)								

Any deviation from the above specification may be specified in separate sheet, along with the Technical bid.

#### Note:

- α. Rates quoted shall be inclusive of all taxes including GST, cost of materials, labour & transportation, installation, excise duty, levies etc complete.
- S? Applicants should study & correlate the drawings at the time of quoting.