
MUMBAI METROPOLITAN REGION DEVELOPMENT AUTHORITY



TENDER FOR

**SUPPLYING OF X-RAY BAGGAGE INSPECTION SYSTEM &
HAND HELD EXPLOSIVE DETECTORS AT STATIONS OF
MONORAIL PHASE-1 (CHEMBUR TO WADALA)**

BID DOCUMENTS

February 2014

TRANSPORT & COMMUNICATIONS DIVISION

M.M.R.D.A

MMRDA Building, 8th floor,

Bandra-Kurla Complex,

Bandra (East)

Mumbai-400051.

TENDER COPY NO:

MUMBAI METROPOLITAN REGION DEVELOPMENT AUTHORITY

NAME OF WORK: Supplying of X-Ray baggage inspection system & Hand held explosive detectors at stations of Monorail Phase-1 (Chembur to Wadala)

Note: The tenderer is required to quote his rates on page No. 20 Only.

Issued to:

M/s. _____

C O N T E N T S

NAME OF WORK: Supplying of X-Ray baggage inspection system & Hand held explosive detectors at stations of Monorail Phase-1 (Chembur to Wadala)

Chapter	Description	Page No.	
		From	To
	Tender Notice	3	3
I	Guidelines for submission of tender	4	8
II	Additional General and Project Specific Conditions	9	16
III	Contract Agreement	17	18
IV	Declaration of the Contractors	19	19
V	Schedule of Price Bid	20	20
	Annexure-1: Detailed Break Up of Unit Price	21	21
	Annexure-2: Details to be submitted by Tenderer	22	28
	Annexure-3: Drawing	29	29



MUMBAI METROPOLITAN REGION DEVELOPMENT AUTHORITY
MMRDA Building, Bandra – Kurla Complex, Bandra (E), Mumbai – 400 051.
Tel: 26590001-04/26594000 Fax: 26591264

TENDER NOTICE

MMRDA is shortly commissioning the Monorail Phase-1 from Chembur to Wadala. It has about 8 Km length and 7 stations. MMRDA is intending to procure following items for the security of Monorail system. The Chief, Transport & Communications Division, 8th floor invites sealed offers on per number basis (including all taxes) for the following work from the experienced agencies and fulfilling following criteria.

Sr. No.	Name of Work	Approx Quantity (No)
1.	Supplying of X-Ray Baggage Inspection System	16
2.	Supplying of Hand Held Explosive Detectors	7

PS:

1.0 The Bid Document forms shall be issued during working days from 03/02/2014 to 07/02/2014 between 11.00 Hrs. to 16.00 Hrs. at the office of the Superintending Engineer (TTW), T & C Division on payment of Rs.1,000/- (Nonrefundable) in the form of Pay order/Demand Draft in favour of "MMRD fund" of Nationalized or Scheduled Bank.

2.0 a) **Specifications for X-ray baggage inspection system:**

1	Tunnel size 620 mm Width x 420 mm Height +/-10%
2	Conveyor belt speed should be between 0.18 and 0.3 m/s conveyor movement both ways
3	Penetrations should not be less than 30 mm thickness of steel
4	The machine should be so designed that the software enhancement can be easily implemented to take care of new technique in image processing and pattern recognition
5	Operational Training – Operation staff has to be provided free training
6	One year onsite warranty

b) **Specifications for Hand Held Explosive Detectors :**

Technology	Latest available
Sample collection	Trace particle and vapor
Explosives detection	RDX, PETN, TNT, Semtex, TATP, NG, Ammonium Nitrate, H ₂ O ₂ and others, also provision for upgradation
False alarm rate	Less than 1 %
Alarm Type	Audio & visual with substance identification
Analysis time	Detection within 10 seconds, complete analysis within 20 seconds
Battery operation time	4 hours min
Weight	3 to 4.5 kg
Operating temperature range	0°C to 40°C (32°F to 104°F)
Operating humidity	0 to 95 % non-condensing
Options	Protective cover with shoulder strap
Warranty	One year onsite warranty

The above are the minimum requirements however, agency shall submit its offer giving detailed specification and information about different models which meets the requirements. Above detailed in table is the base estimated rate per number however, the agency shall quote their rate including all applicable taxes. The agency shall clearly indicate applicable taxes, consumables if any and its periodicity, etc and 2 years AMC after warranty.

3.0 The sealed offers will be received upto 13.00 Hrs on 10/02/2013 and will be opened by The Chief, T & C on same day at 15.00 Hrs, if possible.

4.0 Bid will not be sent or received by Post.

5.0 The offer shall remain valid for a period of 120 days from the date of opening of the bid.

6.0 Other details can be seen in the bidding documents.

7.0 Right to reject any or all offers without assigning any reason thereof is reserved by MMRDA.

Date. 24/01/2014

Place: Mumbai

No. Monorail/Security/NIT/14

Sd/-

(P.R.K. Murthy)
 Chief, T & C Division

CONTRACTOR

NUMBER OF CORRECTIONS

EXECUTIVE ENGINEER

MUMBAI METROPOLITAN REGION DEVELOPMENT AUTHORITY**CHAPTER-I**
GUIDELINES FOR SUBMISSION OF TENDER

Sealed offers on per number basis (including all taxes) are invited for the work of **“Supplying of X-Ray baggage inspection system & Hand held explosive detectors at stations of Monorail Phase-1 (Chembur to Wadala)”**

1.1 Location of the work:

The work is to be carried out in Monorail stations of Phase-1 (Chembur to Wadala) in Mumbai.

1.2 Application for tender documents:

The Bid Document forms shall be issued during working days from 03/02/2014 to 07/02/2014 between 11.00 Hrs. to 16.00 Hrs. at the office of the Superintending Engineer (TTW), T & C Division on payment of Rs.1,000/- (Nonrefundable) in the form of Pay order/Demand Draft in favour of “MMRD fund” of Nationalized or Scheduled Bank. No tender will be issued or received by post. The bid document can be downloaded from the website <http://www.mmrda.maharashtra.gov.in>. In such case, the tenderer shall have to submit bid document fee as mentioned above while submitting the sealed offer.

1.3 Time limit for completion of work:

The work shall be completed in 6 (Six) weeks from the date of issue of order to commence the work.

1.4 Date and place of submission and date of opening:

The sealed offers complete in all respect must reach the office of The Chief, T & C, Division, upto 13:00 Hrs on 10/02/2014. They will be opened by the Chief on the same day at 15:00 Hrs, if Possible.

1.5 Scope of Contract:

The scope of work includes design, manufacturing, supplying, transportation, loading, unloading, installation, testing, commissioning of 16 Nos X-Ray Baggage Scanners & 7 Nos of Hand Held Explosive Detectors at stations of Monorail Phase-1 (Chembur to Wadala). Also comprehensive annual maintenance of equipments for 3 years after Defect Liability Period of 3 years from the date of final take over certificate. The work also includes training of the Employer's staff and O&M documentation for system necessary to deliver the requirements of the Contract including the relevant Contract Documents.

1.6 Performance Security Deposit:

Tenderer shall furnish Performance Security in the form of a Bank Guarantee of any Nationalized bank or banks promoted by All India Financial Institutions issued by a branch in Mumbai in format acceptable to MMRDA for an amount of 10% of total contract value while accepting the tender i.e. before issuing work order. Validity period for Performance security shall be up to 3 months from the date of expiry of "Defect Liability Period". For comprehensive annual maintenance contract (CAMC) period the amount of performance security shall be 15% of maximum of yearly maintenance contract amount and shall be valid for 3 years + 3 months.

1.7 Details of Earnest Money Deposit:

The earnest money amounting to Rs. 1,00,000/- (Separately for X-Ray Baggage Scanners & Hand Held Explosive Detectors) shall have to be paid by "Pay Order / Demand Draft" drawn of any Nationalized bank or banks promoted by All India Financial Institutions issued by a branch in Mumbai drawn in favour of "MMRD FUND". Tenders with no earnest money deposit shall be summarily rejected. The earnest money of unsuccessful tenderers will be refunded on application after intimation regarding rejection sent to him or on expiry of validity whichever is earlier.

1.8 Validity of Tender:

One Hundred Twenty days from the date of opening of the tender. During this period no tenderer shall be allowed to withdraw his tender.

1.9 All pages of tender documents accompanying tender shall be initialed at the lower left hand corner and signed wherever required in the tender papers by the tenderer or his authorized representative. All corrections, interpolations or erasing in the tender shall be attested by the tenderer or his authorized representative. No pages of the tender shall be removed or replaced.

1.10 Revision or Amendment in Tender Document:

The Competent Authority, may omit or suspend certain items of work, revise or amend the tender document before submission of tender. Such revisions or amendments or extension, if any, shall be communicated to all concerned by Hand delivery / by Registered Post / telephonically which will be issued, before the due date of receipt of tender.

1.11 Tender Rates:

The tenderer shall quote cost on unit i.e. per number basis including defect liability period of 3 years & comprehensive annual maintenance period of 3 years (including all taxes) both in words and figures in Schedule of Price Bid only at Page No.20. No alterations in the form of tender or additions etc. shall be permitted. The contractor shall particularly note the units on which the rates are based. In case of difference between the figures and in words, that written in words shall be taken as correct. No changes in unit shall be allowed. The rates quoted are for finished and completed items and no extra amount for carting or transporting material, labour etc. shall be paid unless specifically so mentioned or provided for in tender. The rates are inclusive of all leads and lifts for all materials in Mumbai limit and also include all taxes, rates, duties, royalties, Works Contract Tax, etc. No payment on this account will be made. The Works Contract Tax/Turnover Tax shall be deducted at source at the rate that will be in force from time to time.

1.12 Summary rejection of tender:

The tenders not accompanied with financial offer shall be summarily rejected. Similarly, if the tenderer proposes any alternation in or additions to the prescribed form of tender or reserves the right to decline to carry out any work in the tender document; of any conditions mentioned etc., his tender is liable to be rejected.

1.13 The successful tenderer will have to sign an agreement as per MMRDA's rules. The necessary stamp fees, etc. required for completing the agreement will have to be borne by the tenderer.

1.14 The tenderer is requested to visit the site of the work and see for himself the site conditions and all other matters, affecting the work before quoting the rates. Submission of a tender by a tenderer implies that they had read these instructions and has made himself aware of the scope of the work, conditions of contract and the MMRDA will not, therefore, any extra charges on any account, in case he finds on to have misjudged the site conditions or specifications.

1.15 The tender should be submitted in separate sealed covers as under:

Envelop-A:

One sealed cover should contain the forwarding letter and following documents only.

- 1) Forwarding letter clearly indicating documents attached there (**with page numbers**).
- 2) Bid document fee if downloaded from website.
- 3) Earnest money deposit.
- 4) List of previous clients (along with contact details) by mentioning number of similar machines supplied, cost & their performance, etc.
- 5) List of previous clients (along with contact details) by mentioning number of years experience in annual maintenance of similar equipments, cost & their performance, etc
- 6) Details of availability of maintenance facility along with staff in Mumbai.
- 7) Details of Technical specifications of machines as mentioned in Annexure-2;
- 8) The contractor has to submit the valid Work Contract Tax No. Certificate, VAT number certificate Sales Tax Registration No. Certificate.

Envelop-B:

The other sealed cover should contain the tender set itself along with duly signed common set of deviations if issued.

1.16 If the authority on opening the first sealed cover (A) is satisfied with all the above conditions, then only the other sealed cover (B) will be opened. Otherwise, the sealed cover (B) containing the tender set will not be opened at all, but will be sent for recording treating it as invalid.

1.17 Conditional tender shall not be accepted.

1.18 The right to reject all or any of the tenders without assigning any reason, whatsoever, is reserved with the Competent Authority.

1.19 The Chief T & C Div., MMRDA shall be the Competent Authority for accepting the tender.

-
- 1.20 The tenderer will have to enter into regular agreement on the receipt of acceptance of the tender and shall abide by all the rules and regulations embodied therein.
- 1.21 (1) The successful tenderer shall have to work in co-ordination and co-operation with any other contracting agencies appointed by the MMRDA to work simultaneously in the same or adjoining area. The decision of the MMRDA in case of any dispute between the different agencies appointed by the MMRDA shall be final and binding.
- (2) Income tax, Works Contract Tax, VAT, Service tax Labour cess and any other central, state, local tax ordered by the competent authority at the rates in force during the progress of contract or the percentage that will be in force from time to time shall be recovered / deducted from the gross amount of the bill whether for major work or advance payment or secured advance.
- (3) The Contractor shall have to make his own arrangement at no extra cost to the MMRDA for electric supply, etc. at the site of work.
- (4) The detailed tender notice along with the subsequent corrigendum, addendum etc. shall form part of the tender document.
- 1.22 (1) The Contractor shall furnish all tools plants, instruments, supervisory staff, labour, materials, any temporary works, consumable and everything necessary whether or not such items are specifically stated herein, for completion of the job in accordance with the specification requirements.
- (2) The Contractor shall carry out the necessary surveys of the site required for above work before starting the work.
- 1.23 The contractor shall familiarize himself with the site where he is expected to execute the work and quote his rates considering all the hurdles likely to face during execution.
- 1.24 Contractors shall take out necessary Insurance Policy, Policies so as to provide adequate insurance cover for execution of the awarded contract work. If the policy taken out by the contractors is not on co-insurance basis the same will not be accepted and the amount of premium calculated by the Directorate of Insurance will be recovered directly from the amount payable to the contractors for the executed contract work.
- 1.25 Right to reject any or all offers without assigning any reason thereof is reserved by MMRDA

CHAPTER-II
ADDITIONAL GENERAL AND PROJECT SPECIFIC CONDITIONS

A. Additional General Conditions:

1. These are to apply as additional specifications and conditions, unless otherwise already provided for contrary elsewhere in this contract.

2. **Interpretation**

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

2.2 If sectional completion is specified in the tender document, references in the Conditions of Contract to the works, the Completion date, and the Intended Completion Date apply to any section of the works (Other than references to the Completion date & intended completion date for the whole of the works.)

2.3 The documents forming the Contract shall be interpreted in the following order of priority, however in all cases of errors, omissions or doubts or discrepancies in dimensions or description in drawing or in specification etc:

- i) Letter of Acceptance
- ii) Work Order
- iii) Common Set of Clarifications/Deviations and Addendum, if any
- iv) Addition General and Project Specific Conditions
- v) Schedule of Price Bid
- vi) Tender Drawing

3. **RESPONSIBILITIES FOR LEVEL AND ALIGNMENT:**

The contractor shall be entirely and exclusively responsible for the horizontal and vertical alignment, the levels and correctness of every part of the work and shall rectify effectually any errors or imperfections therein; such rectifications shall be carried out by the contractor, at his own cost, when instructions are issued to that effect by Engineer.

4. Engineer's Decisions

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

5. Delegation

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

6. Communications

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

7. Other Contractors

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

8. Approval by the Engineer

8.1 The Contractor shall submit Specifications and Drawings showing the proposed Temporary Works to the Engineer, who is to approve them if they comply with the Specifications and Drawings.

8.2 The Contractor shall be responsible for design of Temporary Works.

8.3 The Engineer's approval shall not alter the Contractor's responsibility for design of the Temporary Works.

8.4 The Contractor shall obtain approval of third parties to the design of the Temporary Works where required.

8.5 All Drawings prepared by the Contractor for the execution of the temporary or permanent Works, are subject to prior approval by the Engineer before their use.

9. Safety

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

10. Correction of Defects

10.1 The Engineer shall give notice to the Contractor of any Defects before the end of the Defects Liability Period. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.

10.2 Every time notice of a Defect is given, the Contractor shall correct the notified Defect within the time specified by the Engineer's notice.

11. Uncorrected Defects

If the Contractor has not corrected a Defect within the time specified in the Engineer's notice, the Engineer will assess the cost of having the Defect corrected, and the Contractor will pay this amount.

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

12. Currencies

All payments shall be made in Indian Rupees.

13. Recovery of compensation for delayed completion

13.1 The Contractor shall pay compensation to the Employer at the rate per day stated in the document that the Completion Date is later than the Intended Completion Date. The Employer may deduct the compensation from payments due to the Contractor. Payment of liquidated damages does not reduce the Contractor's liabilities.

13.2 If the Intended Completion Date is extended after compensation have been paid, the Engineer shall adjust the same in next payment certificate.

"Time is the essence of the contract and payment or deduction of compensation shall not relieve the contractor from his obligation to complete the work as per agreed construction program and milestones or from any other of the contractor's obligations and liabilities under the contract."

14. Completion

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

15. Taking Over

The Employer shall take over the Site and the Works within seven days of the Engineer issuing a certificate of Completion.

16. Final Account

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

17. Operation and Maintenance Manuals

Contractor shall have to submit one soft copy on CD of "Operation and Maintenance Manual" and three hard copies within 10 days after completion of work. If the Contractor does not supply the same by the dates stated as above, or they do not receive the Engineer's approval, the Engineer shall withhold the amount of Rs.5,00,000/- from payments due to the Contractor.

18. Termination

18.1 The Employer or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract.

18.2 Fundamental breaches of Contract include, but shall not be limited to the following:

- (a) The Contractor stops work when no stoppage of work is shown on the current Program and the stoppage has not been authorized by the Engineer;

-
- (b) The Engineer instructs the Contractor to delay the progress of the Works and the instruction is not withdrawn;
 - (c) The Employer or the Contractor is made bankrupt or goes into liquidation other than for a reconstruction or amalgamation;
 - (d) The Engineer gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Engineer;
 - (e) The Contractor does not maintain a security which is required;
 - (f) The Contractor has delayed the completion of works for which the maximum amount of liquidated damages can be paid as defined in the Contract
 - (g) If the Contractor, in the judgment of the Employer has engaged in corrupt or fraudulent practices in competing for or in the executing the Contract.

For the purpose of this paragraph : “corrupt practice” means the offering, giving, receiving or soliciting of any thing of value to influence the action of a public official in the procurement process or in contract execution. “Fraudulent practice” means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Employer, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Employer of the benefits of free and open competition.”

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

18.4 Notwithstanding the above, the Employer may terminate the Contract for convenience.

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

19. Payment upon Termination

19.1 If the contract is terminated because of a fundamental breach of contract by the contractor, the Engineer shall issue a certificate for the value of the work done less advance payment received up to the date of the issue of the certificate, less other recoveries due in terms of contract, less taxes due to deducted at source as per applicable law and less 20% percentage to apply to the amount of work not completed. Additional Liquidated Damages shall not apply. If the total amount due to the Employer exceeds any payment due to the contractor the difference shall be a debt payable to the Employer.

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

20. Property

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

21. Release from Performance

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

The contractor shall engage an authorized and full time qualified technical representative on the work capable of managing and guiding the work and understanding all the specifications and contract conditions who will take orders as shall be given by the Engineer or his representative from time to time and shall be responsible for carrying out the work promptly and correctly. His technical representative should be posted at the site with

CONTRACTOR

NUMBER OF CORRECTIONS

EXECUTIVE ENGINEER

prior approval of the Engineer and should not be removed from the site without his prior approval.

22. **Permits and Licences:**

The Contractor shall procure at his own expenses all permits and licences comply with rules and regulations laid down by the concerned authority and pay all charges, fees and give all notices necessary and pay all dues in connection with lawful execution of the work.

23. **Patented Devices, Materials and process:**

Whenever the contractor desires to use any designed devices, materials or processes covered by letter of Patent or Copy Right, the right for such use shall be secured by suitable legal arrangement with the patent owners and the copy of their agreement shall be supplied to the Engineer if so desired by him. It shall be the responsibility of the contractor to observe all legal formalities for use of such patents and consequences, if any, due to failure on his part to do so shall be the sole responsibility of the contractor.

24. **Indemnity:**

The contractor shall indemnify the MMRDA against all actions, suits claims, damages and demands brought or made against him in respect of anything done or omitted to be done by the contractor in execution of or in connection with the work of this contract and against any loss or damage to the MMRDA in consequences of any action or suit being brought against the contractor for anything done or omitted to be done in execution of the work of this contract.

B. Project Specific Conditions:

1. Agency Obligation:

- i) The contractor shall co-ordinate with the works of other designated contractors of MMRDA on or in the vicinity of the stations;
- ii) The contractor shall carry out the work in such a way so as to take all safety precautions necessary during the course of loading the materials;
- iii) The contractor shall arrange insurance for employees as well as own & hired equipments as required under applicable law;

-
- iv) The contractor shall hold MMRDA harmless and save MMRDA from and against all actions, suits, proceedings, loss, cost, damages, charges, claims and demand of every nature and description brought or recovered against MMRDA by reason of act or omissions;
 - v) The contractor during the execution of works shall keep the site free from all unnecessary obstructions, and shall store or dispose any equipment or surplus material;
 - vi) The contractor shall be responsible for keeping unauthorized persons off the site, and authorized persons shall be limited to the employees, workmen or consultant, representatives or the persons authorized by MMRDA;
 - vii) The contractor shall familiarize themselves and confirm in all respects with applicable laws. They shall indemnify MMRDA against any liabilities incurred by MMRDA arising out of non compliance of applicable laws during execution of the works;
 - viii) Any other item not mentioned explicitly above but required is deemed to be included in the scope of work;

2. Payment Terms:

- 1. For supply, erection, Commissioning & testing:
 - i) 50 % against delivery at site;
 - ii) 40 % after installation & commissioning;
 - iii) 10 % against final take over certificate.
- 2. For defect liability period: Nil
- 3. For Annual Maintenance Period: At the end of year.

3. Liquidated Damages:

Delay in completion of delivery & installation at site shall be imposed penalty at 0.25 % of contract value per day subject to maximum of 10 % of the contract value.

CHAPTER – III
CONTRACT AGREEMENT

MUMBAI METROPOLITAN REGION DEVELOPMENT AUTHORITY

Name of Work:

THESE ARTICLES OF AGREEMENT made at Mumbai this.....day of Two Thousand Fourteen between the Mumbai Metropolitan Region Development Authority constituted and established under section 3 of the Mumbai Metropolitan Region Development Act, 1974 and having its principal office on 8th Floor, MMRDA office Building, Plot Nos.C-14/15, “E” Block of BKC Bandra (East), Mumbai – 400 051 hereinafter called “the Authority” (which expression shall unless the context does not admit, include its successor or successors and assign or assigns) of the one part and **Shri**....., Indian inhabitant and being Proprietor of the partnership firm carrying on business of civil Engineers and Civil Contractors in the name and style of **M/s.**and having their office athereinafter called collectively “the Contractor” (which expression shall unless the context does not admit, included their respective heirs, administrators, executors and surviving partner or partners) of the other part.

WHEREAS the Authority invited by its public advertisement No.published in thedatedpublic tenders for the execution of works referred to there in and more particularly described in the tender documents constituted in the Tender Notice, General Tender Notice, Instructions to the Tenderers, General Conditions of contract, Specifications, Technical Report, Schedule of Quantities of work and other allied documents.

AND WHEREAS the contractor submitted his tender datedfor a sum of Rs./-.

WHEREAS in exercise of its power under Clause (IV) of sub section (2) Section 6 of the Mumbai Metropolitan Region Development Authority Act, 1974 as amended upto-date.

AND WHEREAS the parties hereto are desirous of recording the Agreement so concluded between them which they do hereinafter.

NOW THIS AGREEMENT WITNESSES AS FOLLOWS :

1. In this Agreement, words and expressions shall have the same meaning as are respectively assigned to them in the Conditions of the Contract hereinafter referred to.
2. The following documents shall be deemed to form and be read and construed as a part of this Agreement, and the priority of the documents shall be as follows:

- i) Letter of Acceptance
- ii) Work Order
- iii) Common Set of Clarifications/Deviations and Addendum, if any
- iv) Addition General and Project Specific Conditions
- v) Schedule of Price Bid
- vi) Tender Drawing

3. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the works and remedy and defects therein conformity in all respects with the provisions of the Contract.

4. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the works 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 the day and year first before written:

SIGNED AND DELIVERED FOR AND ON)
BEHALF OF MUMBAI METROPOLITAN)
REGION DEVELOPMET AUTHORITY BY)
Executive Engineer) Signature
Designation:

In the presence of :

- (1)
- (2)

SIGNED AND DELIVERED FOR AND ON)
BEHALF OF THE CONTRACTOR BY)
Shri)
by the Partner pursuant to Authority of their) Signature
Deed of Partnership) Designation:

In the presence of :

- (1)
- (2)

CHAPTER – IV
DECLARATION OF THE CONTRACTOR (S)

I hereby declare that I have made myself thoroughly conversant with the local conditions regarding all materials and labour on which I have based my rates for this tender. The specifications and lead on this work have been carefully studied and understood by me before submitting the tender. I undertake to use only the best materials and method proposed to employ duly approved by the Engineer, MMRDA, Mumbai during execution of the work and to abide by the decision.

Signature of Contractor with Stamp

CHAPTER – V
SCHEDULE OF PRICE BID

No:
To,
The Chief, T&C Division,
MMRDA, 8th Floor,
Bandra Kurla Complex, Bandra (East),
Mumbai – 400 051.

Date: 10/02/2014

Subject: “Supplying of X-Ray baggage inspection system & Hand held explosive detectors at stations of Monorail Phase-1 (Chembur to Wadala)”

Sir,

We wish to provide the services for the above project as detailed in the tender document.

Our quotes for the projects are as follows:

Fees quoted

Sr. No	Name of Work	Approximate Quantity	Unit Price (In Indian Rs/Number)	Total Amount (In Indian Rs)
1	Supplying of X-Ray Baggage Inspection System including DLP & comprehensive annual maintenance contract period	16 Nos	In figures In Words	
2	Supplying of Hand Held Explosive Detectors including DLP & comprehensive annual maintenance contract period	7 Nos	In figures In Words	

Note:-

- i) Detailed break up of above unit price is as shown in Annexure-1.
- ii) Defect Liability Period is of 3 years from the date of final take over certificate and Comprehensive Annual Maintenance Contract period of 3 years after Defect Liability Period.
- iii) The above unit price is in Indian Rupees inclusive of all taxes and duties, etc at Mumbai.
- iv) The contract price shall remain firm for entire contract duration without any escalation on any account including exchange fluctuation risk.

We hereby undertake to provide the services as required by MMRDA and our offer is valid for 120 days.

Thanking you.

Signature of Contractor
(Authorized Representative)

Annexure-1**Detailed Break up of the Unit Price (Per Number)**

A) For X-Ray Baggage Inspection System: &

B) Hand Held Explosive Detectors:

Sr No	Details	Amount (In Indian Rs)
A	Supply, Erection & Commissioning	
1	Base Price	
2	Custom Duty	
3	VAT	
4	Octroi	
5	Any other	
	Total (In Indian Rs) ...A	
B	Defect Liability Period (3 Year)	
1	1 st Year	Nil
2	2 nd Year	Nil
3	3 rd Year	Nil
	Total (In Indian Rs)...B	Nil
C	Annual Maintenance Contract Period (3 Year)	
1	4 th Year	
2	5 th Year	
3	6 th Year	
	Total (In Indian Rs)...C	
D	Other, if any	
	Total (In Indian Rs)...D	
	Grand Total (In Indian Rs)... (A+B+C+D)	

**Signature of Contractor
(Authorized Representative)**

Annexure-2**DETAILS TO BE SUBMITTED BY TENDERER**

- 1.1 Constitution or legal status of Tenderer
[Attach copy]
 Class, Category and
 Place of registration: _____
- Principal place of business: _____
- Power of attorney of signatory of Tender
[Attach]
- 1.2 Total value of work executed and payments received in the last five years (In Rs Lakhs) (β)
- 2008-2009 _____
- 2009-2010 _____
- 2010-2011 _____
- 2011-2012 _____
- 2012-2013 _____
- Attach certificate from Chartered Accountant.*
- 1.3 List of previous clients (along with contact details) by mentioning number of similar machines supplied, cost & their performance, etc.
- 1.4 List of previous clients (along with contact details) by mentioning number of years experience in annual maintenance of similar equipments, cost & their performance, etc.
- 1.5 Details of availability of maintenance facility along with staff in Mumbai.
- 1.6 Name, address, and telephone, telex, and fax numbers of the Tenderer bankers who may provide references if contacted by the Employer.
- 1.7 Information on litigation history in which the Tenderer is involved by mentioning other party (ies), cause of dispute, amount involved & present status.
- 1.8 Details of Technical specifications of machines;

a. Detailed Specifications of X-Ray Baggage Inspection System:

Sr. No.	Required Specification	Information to be given
1	Tunnel Size 620 mm W (Width) X 420 mm (Height) +/- 10%	
2	Conveyor Height 800 mm +/- 2%	
3	Conveyor belt speed should be between 0.18 and 0.3 m/s conveyor movement bi directional	
4	All machines should operate on 230 VAC, 50 Hz power supply and should be able to withstand voltage fluctuations in the range of 170 V to 260 V, Single	

CONTRACTOR

NUMBER OF CORRECTIONS

EXECUTIVE ENGINEER

	Phase 5 Amp.	
5	Conveyor capacity more than 150 Kg, tolerance +15% or more	
6	Sensor > 1000 diodes, L shaped detector (Folded Array Type). In case of defective diode arrays scanning should be disabled and error should be displayed on the screen.	
7	X-Ray voltage 160 KV	
8	DUTY Cycle 100%	
9	Cooling - sealed Oil bath	
10	The X-Ray beam divergence should be such that the complete image at maximum site of bag is displayed without corner cuts.	
11	The radiation level should not exceed accepted health standard (0.1m R/Hr at a distance of 5 cm from external housing.) Relevant certificate from AERB.	
12	The Operating temp should be 10°C to 50°C.	
13	Storage temp 20°C to 50°C.	
14	Humidity 90% Non conditioning	
15	Resolution: the machine should be able to display un insulated tinned copper wire of 40 SWG. All penetrations and resolution conditions should be meet without pressing any functional key and should be online	
16	Penetrations should not be less than 35 mm thickness of steel.	
17	Continuous electronic zoom facility should be available to magnify the chosen area of an image eight times or more (8x) Image features should be keyboard controllable	
18	Video Display: 17" LCD Monitor or SVGA high resolution, low radiation, flicker free, resolution at least 1280 x 1024, 24 bit color real time processing.	
19	The machine should have features of multi energy X ray imaging facility where materials of different atomic no. will be displayed in different color to distinguish between organic and inorganic materials with this method to distinguish high density organic materials including explosives. Machine should have variable color or materials stripping to facilitate the operator to monitor images of organic material for closer scrutiny. All suspicious items (Explosive, High density, material narcotics) should be displayed in one mode and that should be online.	
20	Radiation Safety: the machine must comply with requirements of health and safety regulations with regard to mechanical, electrical, and radiation hazards. Before Installation of the machines, the supplier / manufacturer should furnish relevant certificates from atomic energy regulatory board of India regarding radiation safety. The company manufacturing the equipment should have ISO certification for manufacturing and serving of X-Ray Screening machine.	
21	Film Safety: Guaranteed Safety for High speed films upto ISO-1600. The machine should be film safe. In other words photographic films must not be damaged due to X-Ray examination.	
22	Machine should be rodent protected dust proof cover to be provided for covering when system is not in use.	
23	Facility for variable contracts must be incorporated to allow enhancement lighter and darker portion of the image.	

CONTRACTOR

NUMBER OF CORRECTIONS

EXECUTIVE ENGINEER

24	The machine should be so designed that the software enhancement can be easily implemented to take care of new technique in image processing and pattern recognition	
25	Through put should be 300 bags per hour or more.	
26	Full diagnostic built in test facility. All models should have software controlled diagnosis report facility and system should give printout if printer is connected.	
27	All software features of machine should be online and password protected.	
28	Machine should be capable for recalling 20 previous images.	
29	It should be capable for archiving minimum 8000 images.	
30	The operator personal identification number can be entered the keyboard	
31	Facility of image enhancement should be available	
32	All models should have online recording facility and images can be recorded in CD R/W.	
33	Lead impregnated safety screens should be available at either ends of the tunnel. This should be covered with the relevant AERB certificate Idle roller provided at either ends of the tunnel to facilitate olaclnc of baqoaqe at input and output.	
34	System should work on one software only. All software features should be controlled from 34 keyboard of machine only. Keyboard function should be user friendly. To enable/ disable the software features system should not be rebooted.	
35	If the machine fails to penetrate a particular item then an alarm video and audio both should be generated to notify the operator.	
36	The threat image projection (TIP) system software to be incorporated in all X-Ray BIS operation.	
37	Copy of all software including X-Ray software with recovery CD must be provided.	
38	Operational Training - Operating staff has to be provided free training.	
39	One operating & service manual shall be provided with each machine	
40	Other Features: a) Edge & Variable edge enhancement. b) Inverse Video c) Fast initial warm-up d) Pseudo color e) Date & time display.	

41	<p>Computer: Intel V Pro Configurationi) CPU: Intel Core 2 Duo 6300, 1.86 GHz, 2 MB L2 Cache and 1066 Mhz FSB.ii) Motherboards: Intel Q 965/Nvidia chip set, 7025 or better on OEM Motherboard.iii) Bus Architecture: Integrated Graphics, 2PCI, 1 PCI Express x 1 and 1 PCI BXpressx 16iv) Memory: 2 x 512 MB 533 MHz DDR2 RAM with minimum 4 total DIMM slots.v) Hard Disk Drive: 320GB 7200 rpm serial ATA HOD.vi) Mouse: Opticalvii) Bays: 4 nos (2nos 5.25 inches for Optical Media Drives and 2 Nos 3.5 inches forHard Disk Drives).viii) Ports: 6USB ports (with at least 2 in front), 1 serial port, Parallel port, 1 PS/2 Keyboard and 1 PS2 Mouse port, audio ports for microphone and headphone in front.ix) Cabinet: Mini towerx) DMI: DMI 2.0 compliance and support.xi) CD-R/RW Drive: CD writerxii) Networking facility: 10/100/1000 on board integrated Network Port with remotebooting facility remote system installation, remote wake up, out of badmanagement using any standard management software.xiii) Operating System: Windows Vista/Window XP Business reloaded with Media andDocumentation and certification of Authenticity.xiv) 00 Certification: Win Logo Vista Business OS/Window XP and Linux Certifications.xv) Power Management: Screen blanking, hard disk and system idle mode in PowerOn, Set up password, power supply SMPS surge protected.xvi) Preloaded Software: Norton, McAfee, E-trust or equivalent Antivirus (latestversion) with one year license.</p>	
42	UPS - 3KVA online with backup time of V2 hour.	
43	Defect Liability Period (DLP) shall be of Three Years from the date of commissioning of complete Lot. During the DLP, all the services, spares, consumables shall be supplied by the contractor. Nothing shall be paid extra.	
44	Comprehensive Annual Maintenance Contract (CAMC) shall be of Three Years after Defect Liability Period of 3 years. During the CAMC, all the services, spares, consumables, repairs, replacements of all defective parts shall be supplied by the contractor. Nothing shall be paid extra.	
45	Tenderer shall quote the rates for comprehensive Annual Maintenance Contract for period of three years beyond DLP of 3 years. The rates for 3 years CAMC shall show clearly the quoted rates for 1st year and rate of enhancement per year, if any. The CAMC can also be extended further for a period of 2 years on the basis of performance on the same rates given by contractor (plus rates of enhancement mentioned by the contractor, if any).	
46	<p>The availability of machine during DLP & CAMC shall not be less than 99% this will be calculated in following manner:</p> $\frac{\text{Total Time} - \text{Down Time} \times 100}{\text{Total Time}}$ <p>Total time taken shall be revenue hours of operation of Mumbai Monorail. At present it is different for different stations. Typical hours are from 05:00 Hrs to 24.00 Hrs every day.</p>	
47	Fault in machine should be attended within 2 hours of reporting. The rectification time shall never exceed 48 hours. In case of delay more than 48 hours, penalty @ 2% of value of machine shall be levied for every 24 hours of delay in rectification of machine. This will be applicable both during DLP& CAMC Period.	

48	Tenderer shall furnish Performance Security in the form of a bank guarantee from a scheduled commercial bank in India acceptable to the Employer for an amount of 10% of contract value. Validity period for Performance security shall be up to 3 months from the date of expiry of "Defective Liability Period". For CAMC period the amount of performance security shall be 15% of maximum of yearly maintenance contract amount and shall be valid for 3 years + 3 months.	
----	--	--

b. Detailed Specifications of Hand Held Explosive Detector:

Sr. No	Description	Required Specifications	Information to be given
1	Detection Capability	Should be able to detect all types of explosives including those with low vapour pressure and explosives in mixture from covering IEDs, RDX, TATP, EGDN, NG, TNT, PEK, dynamite, SEMTEX, C4, HMX, PETN,NC,GCS, all nitrate based explosives, commercial explosives, H ₂ O ₂ , etc. with programmable detection capability	
2	Detection Principle	Based on latest technology viz. Ion, Vapours, particulate, fast sensor	
3	Detection mode	Explosion Detection only. Recognition of multiple explosives in particulate, vapour mode	
4	Calibration	Automatic Calibration	
5	Technology	Should be the state of art latest equipment with microprocessor which enhances the detection speed	
6	Power Supply	100-240 V, 50 Hz AC, Auto sensing, should be DC operable	
7	False Alarm Rate	<1%	
8	Warm-up Time	<20 Minutes	
9	Sensitivity	Upto picogram and nanogram basis	
10	Decontamination/Clearance Time	Not more than a minute	
11	Analysis/Response	Detection within 10 Seconds, complete analysis within 20 Seconds	
12	Display/Alarm	Audio/Visual Alarm with LCD/LED Display with substance identification	
13	Storage	Minimum 1 GB Storage capacity in Hard Disk or more with USB connectivity	
14	Compatibility with Printer	Should be compatible	
15	Portability Weight	Maximum operating weight should not exceed 5 Kg	

CONTRACTOR

NUMBER OF CORRECTIONS

EXECUTIVE ENGINEER

16	EMI	Operation should not be affected by electromagnetic interference of other electronics/electrical devices	
17	Operating temp.	0° C to 40° C	
18	Humidity Range	0-95% RH non-condensing	
19	Mains/Battery operation	Capability of being operable on mains & rechargeable batteries with minimum 4 hours back up	
20	Battery recharge Time	With in 150 Minutes	
21	Carrying Case	The equipment should be provided with a proper carrying case for easy and safe transportation	
22	Identification of New Substances	There should be provision for adding new substances to the library of existing explosives	
23	Adjustment of sensitivity	There should be provision to adjust the sensitivity	
24	Certifications	Should be CE, ISO 9001, ISTA or similar certified and should have AERB certificate regarding radiation safety	
25	Miscellaneous	The firm should be able to provide the following along with the equipment i. Training Tools- Charts, slides, training brochure, training work model, blow up diagram, video films on demonstration and use etc. ii. Technical manual giving full description of the item. Practical training at least 4 times in a year continuing during warranty period. iii. Procedure for packing, handling, transportation, storage and battery replacement	
26	Defect Liability Period	Defect Liability Period (DLP) shall be of Three Years from the date of commissioning of complete Lot. During the DLP, all the services, spares, consumables shall be supplied by the contractor. Nothing shall be paid extra.	
27	Comprehensive Annual Maintenance Contract	Comprehensive Annual Maintenance Contract (CAMC) shall be of Three Years after Defect Liability Period of 3 years. During the CAMC, all the services, spares, consumables, repairs, replacements of all defective parts shall be supplied by the contractor. Nothing shall be paid extra.	
28	Comprehensive Annual Maintenance Contract	Tenderer shall quote the rates for comprehensive Annual Maintenance Contract for period of three years beyond DLP of 3 years. The rates for 3 years CAMC shall show clearly the quoted rates for 1st year and rate of enhancement per year, if any. The CAMC can also be extended further for a period of 2 years on the basis of performance on the same rates given by contractor (plus rates of enhancement mentioned by the contractor, if any).	

29		<p>The availability of machine during DLP & CAMC shall not be less than 99% this will be calculated in following manner:</p> $\frac{\text{Total Time} - \text{Down Time} \times 100}{\text{Total Time}}$ <p>Total time taken shall be revenue hours of operation of Mumbai Monorail. At present it is different for different stations. Typical hours are from 05:00 Hrs to 24.00 Hrs every day.</p>	
30	Fault	<p>Fault in machine should be attended within 2 hours of reporting. The rectification time shall never exceed 48 hours. In case of delay more than 48 hours, penalty @ 2% of value of machine shall be levied for every 24 hours of delay in rectification of machine. This will be applicable both during DLP& CAMC Period.</p>	
31	Security Deposit	<p>Tenderer shall furnish Performance Security in the form of a bank guarantee from a scheduled commercial bank in India acceptable to the Employer for an amount of 10% of contract value. Validity period for Performance security shall be up to 3 months from the date of expiry of "Defective Liability Period". For CAMC period the amount of performance security shall be 15% of maximum of yearly maintenance contract amount and shall be valid for 3 years + 3 months.</p>	

The above are the minimum requirements however, agency shall submit its offer giving detailed specification and information about different models which meets the requirements.

Annexure-3

Drawing

