



MUMBAI METRO RAIL CORPORATION (MMRC)

(A JV company of Govt. of India and Govt. of Maharashtra)

NaMTTRI Building, Behind MMRDA, Near Jetwan, Plot No. R-13, 'E' - Block,
Bandra Kurla Complex, Bandra (East), Mumbai 400051, India.

Telephone: +91 22 26384674

Fax: +91 22 26592005

Procurement of Part Design, Supply, Installation Testing and Commissioning of Ballastless track for underground section from Aarey to Cuffe Parade, Ballasted Track in the area of at-grade Aarey station and in the Depot for the Mumbai Metro Line 3.

Date: 05-07-2017

Loan Agreement Number: [ID-P 233]

IFP Number: [MM3-CBS-TWK]

Addendum No: 2

Sr No	Description and Clause No	Amended as
1	Part 1 , Section I – Instructions to Applicants, ITA 3.1 (d)	Add the following Clause ITA 3.1 (d) “Will recognize a Contractor as ineligible to be awarded a contract in principle if the Contractor or Subcontractor has been debarred by Delhi Metro Rail Corporation and/or other Metro Rail Corporation chaired by Secretary of Ministry of Urban Development, Government of India, with the prior concurrence of JICA, as on the due date of submission of bid”.

Sr No	Description and Clause No	Amended as
2	Part I, Section II- Prequalification Data Sheet, ITA 6.1	<p>Replace For clarification purposes only, the Employer's address is: Attention : Mr. S.K.Gupta Director (Projects), MMRCL Plot No.R-13 NaMTTRI Building, E Block Bandra Kurla Complex, Bandra (East), Mumbai– 400 051,India, Website: http://www.mmrcl.com Telephone: +91 22 26384674 Facsimile number:+91 22 26592005</p> <p>With For clarification purposes only, the Employer's address is: Attention : Mr. S.P.Shrivastava Advisor (Civil) MMRCL Plot No.R-13 NaMTTRI Building, E Block Bandra Kurla Complex, Bandra (East), Mumbai– 400 051,India, e-mail to: satyaprakash.shrivastava@mmrcl.com Website: http://www.mmrcl.com Telephone: +91 22 26384648 Facsimile number:+91 22 26592005</p>
3	Part I, Section III, Qualification Criteria Requirement, 4.2(a) (i) Specific Construction Experience	<p>Replace Total of Thirty Five (35) km single Ballastless track of Underground and or Elevated from maximum of Two (2) number of distinct contracts of comparable nature and complexity⁽ⁱⁱ⁾ of the proposed contract in Design, Supply, installation, testing and commissioning Contracts that have been successfully⁽ⁱⁱⁱ⁾ completed as a prime contractor (single entity or Consortium/JV member)^(iv) Starting from the period 1.1.2006 till the date of submission of application.</p> <p>With Total of Thirty Five (35) km single Ballastless track of Underground and or Elevated from maximum of Two (2) number of distinct contracts of comparable nature and complexity⁽ⁱⁱ⁾ of the proposed contract in Design, Supply, installation, testing and commissioning Contracts that have been successfully⁽ⁱⁱⁱ⁾ completed as a prime contractor (single entity or Consortium/JV member), management contractor or subcontractor^(iv) Starting from the period 1.1.2006 till the date of submission of application</p>

Sr No	Description and Clause No	Amended as
4	Part 2, Section VI- Scope of work 4.1 Salient Features	4.1 Salient Features Revised - Refer Attachment No.1
5	Deadline for Submission of Applications ITA 16.1 – PDS, Page 12 of 13	<p>Replace</p> <p>“ The deadline for Application submission is: Date: 14th July,2017 Time: 3:00 p.m.”</p> <p>With</p> <p>“The deadline for Application submission is: Date: 25th July,2017 Time: 3:00 p.m.”</p>
6	Opening of Applications ITA 18.1 – PDS. Page 12 of 13	<p>Replace</p> <p>“The opening of the Applications shall be at 4:00 p.m. on 14th July,2017”</p> <p>With</p> <p>“The opening of the Applications shall be at 4:00 p.m. on 25th July,2017”</p>

All the other terms and conditions shall remain same.

**Place: Mumbai,
Date: 5th July 2017**

**Sd/-
(Smt. Ashwini Bhide, IAS)
Managing Director MMRC**

4 Outline of Project

As shown in red in Figure 1, the alignment of Mumbai Metro Line 3 spans approximately 32.5 Kilometers from Colaba (Cuff Parade) in the south through Bandra, ending within the Special Electronics Export Processing Zone (SEEPZ) in the north, and consists of 26 underground stations.

One Depot and one (1) At-Grade station has been proposed to be constructed at AAREY with alignment SEEPZ – AAREY (1.8Km) as ramp.

4.1 Salient Features

The salient features of this project are shown in the table below.

Table 1 Salient Features

Sr. No.	Features Line 3
1	Gauge (Nominal): 1435 mm
2	Route Length (Between Dead Ends) : Colaba-Bandra-SEEPZ then to Aarey Milk Colony approximately 35 km.
3	No. of Stations: 27 stations (26 Stations UG and 1 Station At-Grade)
4	Max. Design Speed: 95 km/h Max. Operating Speed: 85 km/h
5	Traction Power System / Auxiliary Power System
	(a) Traction System Voltage: 25kV AC, Single Phase to Ground ,50 Hertz
	(b) Type of Traction System : ROCS System (Main Line).FOCS System (Depot)
	(c) Auxiliary Power System : 33kV/415 volt, Three Phase, 50 Hertz
6	Rolling Stock
	(a) 3.20 m wide with stainless steel or aluminum body
	(b) Maximum Axle Load: 17 t
	(c) Maximum Length of the cars: 22.6 m
	(d) distance between bogie centers as 14.750-/+0.350 m
	(e) Number Max of cars per train: 8
7	Headway (Target of 72 000 PPHPD) (Two loop service (CP-BKC, BKC-AMC) from Cuffe parade to Aarey milk colony).
	(a) 256 seconds for CP-BKC for year 2021 – 31 X 8 car trains in operation + Spares
	(b) 212 seconds for CP-BKC for year 2025 - 36 X 8 car trains in operation + Spares.

	<p>(c) 175 seconds for CP-BKC for year 2031 – 42 X 8 car trains in operation + Spares</p> <p>(d) After 2031, requirement of trains may increase up to 55x 8 car, depending upon traffic requirement, with 120 sec headway for CP-BKC.</p>
8	<p><u>Signaling</u></p> <p>CBTC (Communication based Train Control) shall be equipped for GOA4 system. In the beginning the commercial train operations (on Main lines) to be with CBTC at GOA2 level and the non-commercial (e.g. Stabling Line including in the part of Depot area) the train operations to be with CBTC at GOA4 level. Safety critical systems should comply with appropriate SIL levels as specified in EN50126.</p>
9	AFC
	a) Contactless Smart Card – For multiple journeys.
	b) Contactless Smart Token – For Single Journey
	<p>TVS/ECS</p> <p>(i) Tunnel Ventilation</p> <p>(a) Tunnel ventilation and Track exhaust systems utilizing the Tunnel Ventilation Fans (TVF).</p> <p>(b) Tunnel ventilation system with Saccardo nozzle to push smoke to the TVF exhaust point for the tunnel fire emergency scenarios.</p> <p>(c) Under-Platform Air Supply Systems (UPASS) consist of Air Handling Units which can provide ambient air into the track way.</p> <p>(ii) Environmental Control System</p> <p>(a) Chilled water cooling system for public areas, offices and plant rooms and Air cooler chillers for non –revenue hours.</p> <p>(b) Station smoke exhaust system to use TEF/SEFs.</p>
11	Escalators and Elevators (Lifts) at Stations
12	Signage - To be Advised

4.2 Other Information

- 1) Access to site- Information on access to site is described in the Bid documents.
- 2) Transportation, communications facilities and medical facilities The Contractor shall procure transportation, communications facilities and medical facilities at his own responsibility.
- 3) Land provided by the Employer. Temporary site for storage of PWAY material by the Employer will be described in the Bid documents.