



MAHARASHTRA METRO RAIL CORPORATION LIMITED

Pune Metro Rail Project

Joint Venture of Govt. of India & Govt. of Maharashtra

CIN: U60100MH2015SGC262054

Date: 08 February 2024

CORRIGENDUM-I

Subject: Extension of Bid Submission Response to Pre-Bid Queries

Name of work: Geotechnical Investigation of Underground Section of NS Corridor Phase-I Extension Swargate-Katraj of Pune Metro Rail Project.

Tender No. P1Misc-34/2024 dated 17 January 2024

Reference: Further to **NIT & Tender Document** dated 17 January 2024.

- A. The response to pre-bid queries are attached at Annexure-A. (03 Pages)
- B. Alignment Drawings (26 Pages)

The revised bid submission and opening date are as follow:

Activity (Event)	As per NIT	
Date & Time of Submission of Tender	Till 16.00 Hrs. on 12-02-2024	Till 16.00 Hrs. on 20-02-2024
Date & Time of Opening of Tender	Till 16.30 Hrs. on 13-02-2024	Till 16.30 Hrs. on 21-02-2024


(ED/Procurement & Contracts),
Pune Metro Rail Project,
Maharashtra Metro Rail Corporation Limited.



Corrigendum-01

Subject: Name of Work- Geotechnical Investigation of Underground Section of NS Corridor Phase-I Extension Swargate-Katraj of Pune Metro Rail Project

Tender No.: P1Misc-34/2024

Response to Pre-Bid Queries

SN	Section	Clause No. / Page no.	Bid Condition	Bidder's Queries	Maha-Metro's Response/Amended Condition
1	Part-2	2.0 Scope of Work,	point No. IV, Preparation of bore logs and location plan of boreholes on computer by using suitable Software. Point No. V Conducting various laboratory tests on soil and rock samples as per relevant IS codes with submission of test reports. Point No. VI Submission of draft report including Geological logs, lab test results & foundation analysis in 2 copies and final report in 3 copies.	Please clarify lab testing conducted by us or Maha Metro in in-house lab	Test shall be conducted in Maha-Metro in house Lab i.e. Durocrete Engineering Services Pvt Ltd at Civil Court. In case test is not available in Maha-Metro in house Lab i.e., Durocrete Engineering Services Pvt Ltd (Civil Court), then test can be conducted at any NABL accreditation lab. Cost of testing in any case shall be borne by Contractor.
2	Part-4	BOQ Sr. No. 1 (a) & 3	Conducting laboratory test on collected samples from Maha-Metro in house lab Durocrete Engineering Services Pvt. Ltd.		
3	Part-2	2.0 Scope of Work,		Please make clear the Laboratory test born by Maha-Metro, as in BOQ it is mentioned that the sample test done from Maha-Metro in House Lab Durocrete Engineering Services Pvt Ltd. If not born by Maha-Metro, please allow NABL accreditation lab for conducting sample testing.	
4	Part-4	BOQ item no 7	Conducting pressuremeter test and submission of Report including Mobilization & Demobilization of all required equipment and entire accessories etc to the site of work dismantling and removing away from site including loading unloading etc complete in all respect (Pressuremeter test)	Please mention the depth for pressure meter test mentioned at point no 7 of BOQ and also clarify the depth for maximum pressure for test.	Pressure to be measured at three locations. One at crown of the tunnel approximately 24m from ground, second at invert around 30m and third at bottom tip of the bore hole. At station locations emphasis shall be on change in station.
5	Part-4	BOQ item no 6	Conducting Single packer permeability test including Mobilization & Demobilization of all required equipment and entire accessories etc to the site of work dismantling and removing away from site including loading unloading etc complete in all respect (Packer test machinery)	Please clarify the packer permeability test done by constant head method and Falling head method and also mention depth accordingly. If in the constant head, please mention the one-point depth and also mention the interval depth for the falling head method. (BOQ point no. 6.)	Method to be followed shall be as per IS 5529 (Part-1):2013. Test Section shall be 1.5 to 3m as per IS 5529 (Part-2): 2006 Relevant reference can be taken from BS 5930:2015
6	Part-1	NIT		As per NIT the completion period is 03 months, but as per deliverable mentioned in Scope of work is 08 weeks. Please clarify the completion period, as 08-week time is too short to achieve deliverable.	Completion period is Three Months
7	Part-3, Section IX,	PCC 18.1, General Requirement for insurance	The insurance servicing for this contract for CAR and other Insurances are being entrusted to Government Insurance Fund on co-insurance cum-servicing basis with Government owned Insurance companies. The contractor will have to necessarily avail the insurance service as above.	It is mentioned that insurance will be taken from the Govt Insurance Fund on Co-insurance cum servicing basis with Govt Owned Insurance companies. Please allow for taking insurance from all insurance companies operating in India.	The Contractor shall obtain all insurances required in the contract from Insurance Companies operating in India.
8	Part-3: Conditions of Contract and Contract Forms Section -IX	GCC 4.2 Performance Security	The Contractor shall deliver the Performance Security to the Employer within 28 days after receiving the Letter of Acceptance	Please allow to replace the submission of Performance Bank Guarantee with withholding amount from Bill as time taken by bank for issuing the PBG is more.	Tender Condition Prevails
9	Part-4, Financial Bid & Bill of Quantities	BOQ Item No 9	Carrying out on land cross hole sonic test by using 2 receiver and 1 source hole upto 30m depth as per ASTM D4428 of 1.5 to 2 m interval including mobilization of cross test equipment and personnel	In the BOQ item number 9 there is mention of conducting Cross hole sonic testing but the ASTM code D4428 is for Crosshole Seismic test. Please confirm if Crosshole Seismic test has to be carried out which is the correct test for the application. Please specify if the rate for Drilling of boreholes is to be included in the rate for the test or would it be paid separately under drilling item	Cross Hole Sonic to be read as Cross Hole Seismic Test. Other Tender Condition Prevails

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10	Part-4, Financial Bid & Bill of Quantities	BOQ Item No 7	Conducting pressuremeter test and submission of Report including Mobilization & Demobilization of all required equipment and entire accessories etc to the site of work dismantling and removing away from site including loading unloading etc complete in all respect (Pressurmeter test)	For BOQ item number 7 Pressure meter testing , the quantity is 20 numbers. Please specify if this is 20 boreholes or 20 tests. Pleasealso specify the interval at which these tests have to be carried out in a borehole	Unit of measurement is 'number of bore holes'. Interval is as mentioned in Point no. 4
11	Part-2	2.0 Scope of Work,		The laboratory testing has to be carried out at Durocrete. Please clarify whether the payment for the same would be included in ourscope	Clarified at point no. 1 & Tender condition prevails
12	Part-2	2.0 Scope of Work,		We have inhouse world class NABL Accredited laboratory. We carry out testing for all major projects for railways, nuclear power plants,metros in India and outside India as well. We would like to carry out testing in our own laboratory to ensure the quality of data and timelycompletion of laboratory testing so that we can give the best possible report at the end of the project	Clarified at point no. 1 & Tender condition prevails
13	Part-4, Financial Bid & Bill of Quantities	BOQ Item No 1	Mobilization &Demobilization of boring rings (Calyx &Hydraulic tpe at work site including setting up at site and removing away from the site on completion of work including loading unloading etc complete	The BOQ mentions 18 rigs are required for completion of work. We feel from our past experience of 50 years that the work can be completed using a lesser number of hydraulic rigs . Please clarify on this point	Bidders to deploy adequate number of rigs to complete the work in Three Months. However, no extra payment will be made for number of rig deployed beyond quantity stipulated in BOQ.
14	Part-4, Financial Bid & Bill of Quantities	BOQ Item No 2	Vertical boring 150mm dia . through all kinds of soil and weathered/ soft &Hard rock with adequate/suitable equipment for a depth measured below existing ground upto a depth of 20mts or drilling in hard rock strata having RQD ---- 50% FIR 5.00 mts in depth whichever is earlier.b) Collecting undisturbed soil samples i 100 mm dia, 450 mm long thin walled tube sampler at every 3.00 m interval or at change of strata whichever occurs earlier & sealing the container .Conducting standard penetration test as per ISI : 213-1982 at 3 m interval or at change of strata and collecting disturbed sample. packaging & labelling the same. c) Conducting Laboratory test on collected samples as per list enclosed as Annexure- II	The boq mentions 150 mm dia of drilling has to be carried out in all kinds of strata. Generally As per the IS codes, NX/ NQ size(boreholesize 75mm and core size 54mm) core drilling can be carried out and which is also industry standard. This also aids carrying out laboratorytesting of rock cores in the laboratory. RQD is also calculated using NX/NQ dia. Please clarify as the same is mentioned in thespecifications	Tender Condition Prevails. To aviod poor recovery, double tube core barrel of NX size 54mm dia (inside)as specified in IS11315, Part-11 cl.5.2.
15	Part-2	Scope of Work, Laboratory Tests		We feel that Lots of important laboratory testing on rock required for Design of tunnel are missing viz: 1. Triaxial test on rocks 2.Hardness test on rock 3. Cerchar abrasivity test on rock 4. Petrographic analysis of rock 5.Lab Direct Shear test on Discontinuities; whichare also mentioned to be included in the report	Tender Condition Prevails
16	Part-3	PCC 14.4 Schedule of Payments	A) Running Bill : Only one Payment in a month will be granted by the Engineer-in-charge. Contractor should submit bills to the Engineer -in -charge in appropriate forms. The payment will be entertained by the department.	Please consider change in payment terms.The actual executed quantity would also vary depending on the field conditions and thereforewe suggest that payment terms should mention monthly billing for executed quantities. The mobilisation advance amount can be deductedfrom the monthly RA invoices on prorata basis	Tender Condition Prevails
17	Part-4, Financial Bid & Bill of Quantities			Part-4-Financial Bid & Bill of Quantities : 1) Quantity of mobilization is provided as 18 but distance between two points is unknown. We are requesting for the information of <i>distance between two points</i> so that we can quote accordingly.	Please refer Sr. No.22 for assessing the distance between two holes over total length of 5.50m



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18	Part-4, Financial Bid & Bill of Quantities			Part-4-Financial Bid & Bill of Quantities : 2) : c) Conducting laboratory test on collected samples from Maha-Metro in house lab Durocrete Engineering Services Private Limited: Please clarify whether laboratory tests will be carried out by the bidder or he has to submit the collected samples from the boreholes to Durocrete Engineering Services Private Limited. As in the document Part-2, Section-VII-A : Work Requirement: Scope of work, it is mentioned that laboratory tests will be performed by the bidder himself.	Please refer to response at query at point no. 1 above.
19				Numbers of the test (quantity of laboratory tests) for each bore hole/for whole project are not mentioned anywhere. Moreover, in the document Part-2, Section-VII-A : Work Requirement: Under Report Section, properties from Rock Triaxial Test is required which can be considered as special category test. However, volume / number of the same is not clear which misleads us in quoting any rate.	Please refer sr. No. 22 for description of BOQ item no. 4. All other tender conditions prevail.
20	Part-2, Section-VII-A			Under Report Section, It is mentioned to carry out Geotechnical Risk Assessment. We request like you to shade some light on the methodology/IS code for the same.	It is expected to asses the risks envisaged during execution of TBM operations, deep excavation for station work, presence of aquifiers, general risks for working deep below the ground level and temporary earth retaining protection measures.
21				kmz file of bore hole locations	Please refer to attached pdf drawing for alignment details. KMZ file cannot be shared.
22	Part-4-Financial Bid & Bill of Quantities	Item No. 4 of BOQ	Breaking of concrete pavement necessary) for drilling of holes in concrete surface		Item No. 04 of BOQ shall be read as "Breaking of concrete pavement necessary (1m x 1m) for driling of 90 bore holes approx"

