

Corrigendum X**Date: 16/05/2016**

Name of Work: Construction of Seven Elevated Metro Stations and Three At Grade Stations (North South Corridor) viz. Congress Nagar to Khapri and Viaducts Between Ch:7/850 to 8/030 and Ch:8/574 to 9/692 in Reach-1

Tender No. as per NMRCL: N1C-04/2016

System Generated Tender No. 32

A. Revised Requirements**5. Personnel**

The Bidder must demonstrate that it has the personnel for the key positions that meet the following requirements:

No.	Position	Minimum Requirement	Qualification	In Similar Works Experience (years)
1	Chief Project Manager (Team Leader)	1	Graduate / Diploma in Civil Engg.	Minimum total experience of 15 years out of which, minimum 03 years as In-charge of similar works
2	Project Manager	2	Graduate / Diploma in Civil Engg.	Minimum total experience of 12 years out of which, minimum 03 years as In-charge of similar works
3	Dy. Project Manager	5	Graduate in Civil Engg. / Diploma in Civil Engg.	Minimum 10 years for Degree & 15 years for Diploma, out of which minimum 2 years in similar work.
4	Quality Assurance (QA)- Engineer	2	Graduate in Civil Engg. / Diploma in Quality Assurance	Minimum total experience of 10 years out of which minimum 05 yrs. in QA (field) and at least one year as In-Charge.
5	Architect	1	B.Arch	Minimum 5 year experience in design or execution of commercial/ public building
6	Civil Engineer	20	Graduate or Diploma in Civil Engineering	Minimum 5 years for Degree & 8 years for Diploma in project execution works

7	Electrical engineer	5	Graduate in Electrical Engg. / Diploma	Minimum 5 years for Degree & 8 years for Diploma
8	Mechanical Engineer	1	Graduate in Mechanical Engg. / Diploma	Minimum 5 years for Degree & 8 years for Diploma
9	Plumbing Engineers	1	Graduate/ Diploma in Civil Engg	Minimum 5 years in plumbing works of public buildings
10	Safety Manager	As per SHE Manual	As per SHE Manual	As per SHE Manual
11	Expert on Environmental, Health & Social	1	Graduate in Environmental Sciences	Should have minimum 10 years of experience out of which minimum 5 Years of Experience in similar Metro Rail / Highway / Airport development projects.
12	Expert on Social management	1	Master in Social Work (MSW)/ Graduate in relevant subjects	Should have minimum 10 years of experience out of which minimum 5 Years of Experience in similar Metro Rail / Highway / Airport development projects.
13	Project Management Engineer	1	Graduate in Civil Engg. / Diploma in Civil Engg.	Minimum experience of 5 years and should be expert in AutoCad & project management software. Preferably 5D BIM specialized.

The above requirements are minimum and the contractors should be capable to deploy additional technical work force if required as per site condition.

The Bidder shall provide details of the proposed personnel and their experience records using Forms PER-1 and PER-2 included in Section IV, Bidding Forms.

6. Equipment

The Bidder must demonstrate that it has the key equipment listed hereafter:

No.	Equipment Type and Characteristics	Minimum Number required	Max permissible age in years
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1	Piling equipment hydraulic rig	3	5
2	Fully automatic and computerized batching plant (2 nos. of 30 cum) minimum or equivalent capacity in different configuration at casting yard with an RO of suitable capacity for proper quality of water	60 cum/hr	10
3	Concrete pumps	6	10
4	Boom placers	2	10
5	Cranes / road cranes in casting yard / site of suitable capacity.	5	15 (Mobile crawler cranes); 10 (tyre mounted hydraulic crane)
6	Cranes / road cranes of suitable capacity for launching / erection	5	15 (Mobile crawler cranes); 10 (tyre mounted hydraulic crane)
7	Gantry of suitable capacity in casting yard	2	15
8	Minimum number of pre-casting beds (typical)	5	NA
9	Transit mixers	12	10
10	Trailers for carrying girders – 75T / 200T respective capacity	8	10
11	Lab testing equipment – fully equipped for site tests	As per requirement	--

The Bidder shall provide further details of proposed items of equipment using Form EQU in Section IV, Bidding Forms.

Note:

- (a) At the time of bidding contractor must demonstrate the possession of these plants & equipment and capable to mobilized within short notice without wasting prime working time.
- (b) In case contractor opts for short line method for casting, the no. of pre-Casting beds would increase accordingly.
- (c) These resources are for peak period of each activity. All plants and equipment need to be mobilized simultaneously; plants and equipment as required as per the progress of the work shall be brought at site in advance or as directed by Engineer in charge.

B. Revised Schedule

Dates as per Corrigendum VII	Revised Dates
Revised date of submission: Up till 16:00 Hrs. Dt. 24.05.2016 Date of Opening: At 16:00 Hrs., Dt. 26.05.2016 or as maybe decided by NMRCL	Revised date of submission: Up till 16:00 Hrs. Dt. 31.05.2016 Date of Opening: At 16:00 Hrs., Dt. 02.06.2016 or as maybe decided by NMRCL

C.

Annexure-IX-C (Revised)

CONTRACT KEY DATES AND COMPLETION DATE

The Contractor shall prepare and submit his detailed Programme of Work so as to achieve key dates of various activities on time. The Contractor shall complete the work in a phased manner by fixing priorities to different stretches of work to give access to the other interfacing contractors as per the requirement of project from time to time and as per the key dates (mile stones) indicated below:

The Contractor will be required to achieve the following Key Dates (KD) to be calculated from the commencement date of Work

[All numbers refer to weeks from Commencement Dates of the Works]

(i) FOR STATIONS

Key Dates	Time to achieve (in weeks from date of issue of notice to proceed)	Description of Stage
Key Date 1	8	Completion of road widening, Erection of Barricades, barricading for at least 2 stations and start the piling work.
Key Date 2	15	Completion of road widening, Erection of Barricades, barricading for remaining stations and start the piling work.
Key Date 3	35	Completion of Piling work of two stations including Pile cap.
Key Date 4	45	Completion of Piling work of remaining stations including Pile cap.
Key Date 5	65	Completion of concourse level slab of two stations.
Key Date 6	70	Completion of concourse level slab of remaining stations.
Key Date 7	75	Completion of Platform level slab of two stations with lift shaft and escalator pit.
Key Date 8	80	Completion of Platform level slab of remaining stations with lift shaft and escalator pit.
Key Date 9		Completion of:

		1. Operational rooms i.e. signaling room, Telecommunication room, ASS, and UPS Room including EMP work. 2. Roofing structure with roofing.
Key Date 9.1	90	For Two stations
Key Date 9.2	100	For balance stations
Key Date 10	108	Completion of TOM room & flooring with required cutting for raceways for fixing AFC for all stations.
Key Date 11	110	Completion of all architectural work of stations

Note: -

1. The Contractor shall interface and maintain a close liason with other agencies working for this project like viaduct contractors, Track work Contractor, electrical contractor, signal & telecom, traction, lift & escalator etc. for the timely availability of the access to ensure adherence to the Key Dates. In case the Contractor finds that there is slippage and likely Key Dates may not be adhered to, the Contractor shall inform the Employer in well advance for the likely delays in access to site with catch up program.
2. The achievement of a Key Date shall be subject to issue of “No Objection” from the Employer’s Representative upon notice of completion of each KD by contractor.
3. Failure to meet any Key Date, Liquidated Damages (LD) will be imposed at a rate of 0.05% of the balance value of contract amount (to be executed) per week of delay reckoned from the stipulated date of completion of each KD.
4. All L.D is put together is subjected to a maximum of 10% of accepted contract amount.
5. Any imposition of LD on account of delay in any Key Date (KD) will be waived and LD amount if deducted will be returned (without interest) provided the Contractor is able to accomplish the “successive key date (KD)” along with the immediate preceding delayed Key Dates.
6. The Penalties levied for not achieving any intermediate Key Dates are non-refundable, except the circumstances stated at S.No.-5 above, even if work as a whole is completed in time.
7. These penalties shall not relieve the Contractor from his obligation to complete the works or from any other obligations and liabilities under this contract.

8. Incentive Clause:

For earlier completion of the work as whole from the stipulated original date of completion, an incentive payment of **Rs. 15 (Fifteen) Lakhs per day** shall be paid to the contractor, subject to a maximum of **Rs. 6 (Six) Crores**. The engineer’s decision is final and binding on the contractor so far as incentive payment to the contractor is concerned. Even if incentive payment is made for final completion of the work earlier than the scheduled completion, the penalties imposed for delay caused to various intermediate Key Dates will not be refunded.

PROJECT CALENDAR

- (1) The Project Weeks shall be commenced on a Monday. A day shall be deemed to commence at 0001 hour on the morning of the day in question. Where reference is made to the completion of an activity or Milestone by a particular week, this shall mean by midnight on the Sunday of that week.
 - (2) A 7 day week calendar shall be adopted for various (Work) programme schedules for scheduling purposes.
 - (3) For Project purposes, the presentation shall be in "Week" units.
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**GM (Procurement),
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