JAIPUR METRO RAIL CORPORATION LIMITED

Bidding Document: ICB No: Contract JP/EW/1C&1D(Elevated)/02

Contract ICB No: JP/EW/1C&1D(Elevated)/02: Design and Construction of Elevated Ramp, Elevated Viaduct and One Elevated Station (Transport Nagar) from start of elevated ramp (CH:13040.00 m) to Transport Nagar Dead end (CH:13996.00 m) of Jaipur Metro Phase-1C and Design and Construction of Elevated Viaduct and One Elevated Station (Ajmer Road Chauraha including loop line) from Mansarovar dead end (CH:-1243.930 m)(excluding) to Ajmer Road Chauraha dead end (CH:-2595.90 m) of Jaipur Metro Phase-1D, including Entry Exit Structures, Architectural finishing, water supply, Sanitary Installations, Drainage Works, Pre-Engineered Sheet Roof Structure and Roof Sheeting Works for Jaipur Metro Phase-1C and Phase-1D at Jaipur, Rajasthan, India.

ADDENDUM/ CORRIGENDUM No.1 Summary Sheet

SN	Bidding Document	Page No	Clause	Addendum/	Remarks
	V 1 4 57 N 1	05	No/Item No	Corrigendum	5 1 5 05 11
1.	Volume-1 of 7:-Notice	05	Clause-1.1.2	Last Date of Bid	Replace Page 05 with
	Inviting Bid (NIB)		Key Details	Submission and	05 R1.
				Opening is	
				revised as	
				06.08.2023	
				(18:00 Hrs) and	
				07.08.2023	
				(15:30 Hrs)	
		<u> </u>		respectively.	
2.	Volume-1 of 7:	10	C 5.4(c)	Clause-C 5.4(c)	Replace Page 10 with
	Instructions to Bidders			is modified.	10 R1
	(ITB):	10	0.10.0		2 1 2 10 11
3.	Volume-1 of 7:	12	C 12.3	Clause- C 12.3	Replace Page 12 with
	Instructions to Bidders			is modified.	12 R1
	(ITB):	10			2 1 2 10 11
4.	Volume-1 of 7:	13	C 14.1	Clause- C 14.1	Replace Page 13 with
	Instructions to Bidders			is modified.	13 R1
	(ITB):	22	554	0 554:	D 1 D 22 11
5.	Volume-1 of 7:	23	E 5.4	Clause- E 5.4 is	Replace Page 23with
	Instructions to Bidders			Deleted.	23 R1
6.	(ITB): Volume-1 of 7:	41-42	Annexure-6	Annexure-6	Danless Dans 41 42
ъ.	Instructions to Bidders	41-42	Annexure-6	Is modified.	Replace Page 41-42 with 41 R1 to 42 R1
	(ITB):			is modified.	WILIT 41 K1 tO 42 K1
7.	Volume-1 of 7:	46-48	Annexure-7	Annexure-7	Replace Page 46 to 48
/.	Instructions to Bidders	40-46	Alliexure-7	Is modified.	with 46 R1 to 48 R1
	(ITB):			is infoditied.	WILL 40 KI to 40 KI
8.	Volume-1 of 7:	51	Annexure-7A	Annexure-7A	Replace Page 51 with
0.	Instructions to Bidders		/ IIIICAGIC /A	Is modified.	51 R1
	(ITB):			is mounicu.	
9.	Volume-1 of 7:	56	Annexure-7C	Annexure-7C	Replace Page 56 with
	Instructions to Bidders			Is modified.	56 R1
	(ITB):			(0)	Ail Corps
	1 1		1	- / <u>\&</u> /	01 1

ICB No: Contract JP/EW/1C&1D(Elevated)/02:Addendum/Corrigendum-01

Page **1** of **4**

Director

SN	Bidding Document	Page No	Clause No/Item No	Addendum/ Corrigendum	Remarks
10.	Volume-1 of 7: Instructions to Bidders (ITB):	57-58	Annexure-7D	Annexure-7D Is modified.	Replace Page 57-58 with 57 R1 to 58 R1
11.	Volume-1 of 7: Form of Bid(FOB):	48-49	Appendix-30	Appendix-30 Is modified.	Replace Page 48-49 with 48 R1 to 49 R1
12.	Volume-2 of 7: Part 2 Special Conditions of Contract (SCC)	3	Clause 2 Sub-Clause-3.2	Clause 2 Sub-Clause-3.2 Is modified.	Replace Page 3 with 3R1
13.	Volume-2 of 7: Part 2 Special Conditions of Contract (SCC)	4-5	Clause 6 Sub-Clause- 4.11	Clause 6 Sub-Clause- 4.11 Is modified.	Replace Page 4-5 with 4 R1 to 5 R1
14.	Volume-2 of 7: Part 2 Special Conditions of Contract (SCC)	19	Schedule-1	Schedule-1 Is modified.	Replace Page 19 with 19R1
15.	Volume-2 of 7: Part 2 Special Conditions of Contract (SCC)	22-23	Schedule-2	Schedule-2 Is modified.	Replace Page 22-23 with 22 R1 to 23 R1
16.	Volume-2 of 7: Part 1 General Conditions of Contract (GCC)	15-16	Clause-4.2 Sub Clause- 4.2.1 [1,2,3,4(2)] Sub Clause- 4.2.2 Sub Clause- 4.2.3 (i)	Clause-4.2 Sub Clause- 4.2.1 [1,2,3,4(2)] Sub Clause- 4.2.2 Sub Clause- 4.2.3 (i) are modified.	Replace Page 15-16 with 15 R1 to 16 R1
17.	Volume-2 of 7: Part 1 General Conditions of Contract (GCC)	20	Clause-4.6	Clause-4.6 is modified.	Replace Page 20 with 20 R1
18.	Volume-2 of 7: Part 1 General Conditions of Contract (GCC)	26-27	Clause-4.33.1 Sub-Clause(c): Debarment from bidding: (2)& (3)	Clause-4.33.1 Sub-Clause(c): Debarment from bidding: (2)& (3) is modified.	Replace Page 26-27 with 26 R1 to 27 R1
19.	Volume-2 of 7: Part 1 General Conditions of Contract (GCC)	45,46 & 48	Clause-11; Sub Clause- 11.1.1(iii); Sub-Clause- 11.1.4(ii); Sub-Clause- 11.2.1 (2nd Para); Sub-Clause- 11.3.3;	Clause-11; Sub Clause- 11.1.1(iii); Sub-Clause- 11.1.4(ii); Sub-Clause- 11.2.1 (2nd Para); Sub-Clause- 11.3.3; are modified.	Replace Page 45,46 & 48 with 45 R1, 46R1 and 48 R1

ICB No: Contract JP/EW/1C&1D(Elevated)/02:Addendum/Corrigendum-01

Page **2** of **4**

SN	Bidding Document	Page No	Clause No/Item No	Addendum/ Corrigendum	Remarks
20.	Volume-2 of 7: Part 1 General Conditions of Contract (GCC)	52-54	Clause-12.1(5)	Clause-12.1(5) is modified	Replace Page 52-54 with 52 R1 to 54 R1
21.	Volume- 3 of 7: Part 1 Employer's Requirement	28	Clause No-2.8 Construction Depot and Dumping Area	Clause No-2.8 Is modified.	Replace Page 28 with 28 R1
22.	Volume- 4 of 7: Outline Construction Specifications (OCS) Part-4	96	Clause-6.4.8 Anchorages	Clause-6.4.8 Is modified.	Replace Page 96 with 96R1
	Part-4	150	Clause-8.1.6 Pile Cap	Clause-8.1.6 Is modified.	Replace Page 150 with 150R1
	Part-4	151	Clause-8.1.7 (iii)	Clause-8.1.7 (iii) is modified.	Replace Page 151 with 151R1
	Part-5	179	Clause-9.1.3 (a)	Clause-9.1.3 (a) is modified.	Replace Page 179 with 179 R1
	Part 6	309	Annexure-A	Annexure-A is modified.	Replace Page 309 with 309 R1
23.	Volume-5 of 7: Bid Drawings	Addition to Bid Docume nt.	Addition	Bid Drawings No 17 and 41 are added as given in Index of Bid Drawings.	As per Index given in Bid Document; Drawing S.No 17 [Roof Level Plan Ajmer Road Station: JMRC-STN-AJR-TED-ARP-11004-R0] and Drawing S.No 41 [Viaduct Drawings, Earthing Arrangement (Sheet 02 of 02): VID-JMRC-STR-TD-00206B-R0] are added.
24.	Volume-7 of 7: Geotechnical Investigation Report- Part-1	Page No- 01, 05 to 06	Point No-02 of Chapter-01: Details of Ste & General Geological History. Point No-4.1: Filed Investigation in Soil Strata.	Point No-02: Details of Ste & General Geological History is modified. Point No-4.1: Filed Investigation in Soil Strata.	Replace Page No-01, 05 to 06 with 01R1, 05R1 to 06R1

SN	Bidding Document	Page No	Clause	Addendum/	Remarks
			No/Item No	Corrigendum	
25.	Volume-7 of 7:	Page No-	Soil	Page No-79 to	Replace Page No-79 to
	Geotechnical	79 to 87	Characteristics	87 replaced	87 with 79R1 to 87R1
	Investigation Report-		Data: for BH	with good	
	Part-1		No-04, BH No-	scanned copy.	
			05 & BH-AJC		
			ST-02		
26.	Reply to bidder's				Total Pages 14 Nos.
	queries received up to			Rail Corp	
	07.07.2023		/2		

------END------END-----

	day before the meeting (latest by 1100 hrs on 06.07.2023) to the registered official email of JMRC i.e. jmrc.phase1cand1d.elevated@jaipurmetrorail.in so that link having details such as software, meeting ID, password etc. can be mailed to these persons at least 12 hours before the scheduled pre- bid meeting.				
Last date of issuing addendum (if any)	17.07.2023				
Date & time of Submission of Bid online	Bid submission start date: 18.07.2023 (09:00 hrs). Bid submission end date: 06.08.2023 (18:00 hrs).				
Date & time of opening of Bid online	07.08.2023 at 15:30 hrs.				
Authority for purchase of Bid documents (in case of physical Bids), seeking clarifications and submission of completed Bid documents	Director Project, Jaipur Metro Rail Corporation Ltd., 1st Floor, A-Wing, Admin Building, Bhrigu Path, Mansarovar Metro Depot, Mansarovar, Jaipur- 302020. Contact; +91-141-2822781 / 2822786. E-Mail id: - jmrc.phase1cand1d.elevated@jaipurmetrorail.in ;				

To facilitate payment of Tender Fee, E-Bidding Processing Fee and Bid Security through RTGS, NEFT & IMPS, the details of bank account of JMRC is mentioned below

Name of Bank	Bank's Address	Account Name & No.	Account Type	IFSC code
ICICI Bank. Branch:-Tilak Marg,C- Scheme, Jaipur.	Khanij Bhawan, Tilak Marg, C- Scheme, Jaipur- 302005, Rajasthan	Corporation	Current	ICIC0006786

1.1.3 QUALIFICATION CRITERIA:

1.1.3.1 Eligible Applicants:

i.

The Bids for this work will be considered only from those Bidders (proprietorship firms, partnerships firms, companies, corporations, consortia or joint ventures) who meet requisite eligibility criteria prescribed in the sub-clauses of Clause 1.1.3 of NIB. In the case of a JV or Consortium, all members of the Group shall be jointly and severally liable for the performance of whole contract. Also, each member shall be individually responsible for its duties as specified in the MOU/JV agreement submitted by the bidder in terms of clause 1.1.3.1 vii d.

Performance of each JV/Consortium partner shall also be judged on quarterly basis. In case, the performance of the partner(s) is not found satisfactory, actions as deemed appropriate by the Employer may be taken including termination of contract or termination of any of JV/Consortium member(s) from the contract i.e Part Termination of the contract. In case of part termination of contract, the Performance Security(ies) submitted by the member(s) for their portion of work in contract as per their share in JV/Consortium shall be forfeited and the scope of the work/duties assigned to the defaulting JV/Consortium member(s) as per the MOU/agreement submitted, may be terminated, however, same may be done by the Employer only if other member(s) of JV/Consortium are ready to complete the entire scope of work. In such a case, remaining works pertaining to the scope of defaulting member of JV, may be completed by other member(s) of JV in the following manner:

Director

C3 Form of Bid

The Form of Bid shall be completed and signed by a duly authorized and empowered representative of the Bidder. If the Bidder comprises a partnership, consortium or a joint venture the Form of Bid shall be signed by a person who is duly authorized by each member or participant thereof or by authorized signatory of each member. Signatures on the Form of Bid shall be witnessed and dated. Copies of relevant powers of attorney shall be attached.

C4 Outline Quality Plan

The Bidder shall submit **Appendix-3** of Form of Bid to form part of his Bid an Outline Quality Plan illustrating the intended means of compliance with the Employer's Requirements (Volume 3) and setting out in summary form an adequate basis for the development of the more detailed document required under Clause 16 of the SCC. The Outline Quality Plan shall contain sufficient information to demonstrate clearly the proposed method of achieving the Bidder's quality objectives with regard to the requirements of the Contract.

C5 Outline Safety & Health Plan and Outline Environment Plan

- C5.1 The Bidder shall submit **Appendix-4** of Forms of Bid to form part of its Bid an Outline Safety & Health Plan and Outline Environment Plan which shall contain sufficient information to demonstrate clearly the Bidder's proposals for achieving effective and efficient safety & health and environment procedures. The Outline Safety & Health Plan and Outline Environment Plan should include an outline of the safety procedures and regulations to be developed and the mechanism by which they will be implemented for ensuring Safety & Health and Environment as required by the Employer's Requirements (Volume 3) and **Clause 8 & 9 of the SCC**.
- C5.2 The Outline Safety & Health Plan and Outline Environment Plan shall be headed with a formal statement of policy in relation to safety & health and environment and shall be sufficiently informative to define the Bidder's safety plans and set out in summary an adequate basis for the development of the Contract specific Site Safety & Health Plan and Site Environment Plan to be submitted in accordance with Clause 8 & 9 of the SCC.
- C5.3 The Bidder may be requested by JMRC in writing to amplify, explain or develop his Outline Safety & Health Plan and Outline Environment Plan prior to the date of acceptance of the Bid and to provide more details with a view to reaching provisional acceptance of such plans.

C5.4 C&D Waste Management and Use of Recycled Products in Jaipur/Rajasthan. -

Regarding Construction and Demolition (C&D) Waste management and use of recycled products in Jaipur/Rajasthan, the bidders must note that;

- a) They have to devise appropriate measures for management of Construction and Demolition (C&D) Waste generated including its processing and for using the recycled products in the best possible manner. The Bidder shall adhere to the Construction & Demolition (C&D) Waste Management Rules, 2016 notified by Govt. of India. The bidder should also take note of advisory of Govt. of Rajasthan in combating and mitigating climate change phenomenon and giving high priority to Swachh Bharat Mission of Govt. of India.
- b) Refer Clause No. 52.7.3 of Conditions of contract on Safety & Health and Environment.
- c) Compliance certificate and details of compliance of these conditions shall be submitted by the Contractor along with respective running account bill. The payment of running account bill shall be released by the Employer after verification and certification by the Engineer.

Rail Con

C9.2.3 The Contractor shall be responsible for the security of the Site during the construction phase of the Contract, until the issuance of a Taking-Over Certificate.

C10. Payment Schedule:

The payment for items given in Bill of Quantity (Volume 6) shall be made on the basis of actually executed quantities.

C11. Sub-Contracts

- C11.1 Sub-contracting, excluding design work shall be generally limited to 50% of the Contract price.

 The terms and conditions of sub-contracts and the payments that have to be made to the sub-contractors shall be the sole responsibility of the Contractor.
- C11.2 For sub-contracts exceeding Rs.5 million, it will be obligatory for the Contractor to obtain a Notice of No Objection from the Engineer to the identity of the sub-contractor. The value of each sub-contract shall be provided by the Contractor to the Engineer. The Contractor shall certify that the cumulative value of the sub-contracts (including those up to Rs. 5 million each) awarded is within the aforesaid 50% limit. In this regard the Bidder's attention is invited to **Clause 4 of SCC.**
- C11.3 The Terms and Conditions of the sub-contract are the sole prerogative of the Contractor and are deemed to be included in the contract price.

C12. Staffing Schedule and Related Details

- C12.1 The Bidder shall submit with his Bid (**Appendix-7** of Form of Bid) a staffing schedule containing the names, qualifications, professional experience and corporate affiliation of all proposed management personnel (above the level of shift supervisor) and specialists for this work. Details shall be included for all such personnel whether directly employed or engaged on a consultancy or advisory basis and whether associated with the design or the construction of the Works. The submission shall include a provisional management structure and organization chart showing areas of responsibility, relative seniorities and lines of reporting. The proposed staffing plan shall be in conformity with the **Annexure 3 and Annexure 4** of ITB.
- C12.2 The Bidder shall include his proposals for his Co-ordination Control Team and include the name and qualifications of the Team Leader responsible for the interface co-ordination with Designated Contractors.
- C12.3 The key staff for execution of this work shall be from that member of the JV/Consortia who has the experience of similar work and on whose experience the JV/Consortia qualifies the criteria of work experience. If the JV qualifies on the credentials of work eligibility by the foreign partner, then the Project Manager deployed shall be an expatriate having minimum 15 years of total experience out of which 05 years should be in projects of similar nature as mentioned in Annexure-3 & Annexure- 4 of ITB. The Project Manager must be involved actively in the project execution. He will be required to attend all meetings/inspections conducted by JMRC officials or Its Engineer. He must take prior permission from Engineer for obtaining leave during his tenure as Project Manager. In case the JV do not follow these instructions, action shall be initiated under the conditions of contract to impose penalty or to terminate the contract. The JV/Consortium members shall submit undertaking to this effect in Appendix-6A of Form of Bid.



In case the successful bidder is a JV/Consortium having a foreign partner and if the experience of civil works for the purpose of qualifying the minimum eligibility criteria is fulfilled by the foreign partner then the foreign partner shall submit an additional Bank Guarantee (In addition of performance security) of an amount equal to 1% of the contract value as per LOA for the fulfillment of the condition of deployment of key staff and the expatriate Project Manager for the project.

The foreign partner shall submit bank guarantee from their respective bank account. Bank guarantee executed from the bank accounts of JV/Consortium or any other bank account shall not be accepted.

This bank guarantee shall be valid up to the completion period of the contract and shall be from Scheduled commercial Bank (including Scheduled Commercial Foreign Banks) in India in the currency in which the contract price is payable. This Bank Guarantee shall be furnished to the employer within 30 (thirty) days of receipt of the Letter of Acceptance. The form of this Bank Guarantee provided in **Annexure-7A** of ITB.

C13. Contractor's Equipment

C13.1 The contractor shall deploy plants and equipment required to complete the work as per the schedule and within the completion period with minimum of numbers given in **Annexure-5 of ITB.**

C14. Proposals for Use of Work Areas

- C14.1 The Bidder shall note the requirements of <u>Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013.</u>
- C14.2 The Bidder shall note the provision contained in the Employer's Requirements.
- C14.3 The Bidder is to note that the Contractor will be fully responsible for the provision of all utility services like water, electricity, sewerage etc necessary for the construction and completion of the Works.

C15. Pricing Document

- C15.1 The Pricing Document is included in Bill of Quantities; Volume 6. The Bidder shall complete the Pricing Document in accordance with the instructions given in Bill of Quantity/Pricing Document. The completed Pricing Document including price of minor deviations in **Annexure-13A** of BOQ for such deviation as mentioned in **Appendix-13** of FOB shall be submitted.
- C15.2 The price of each such minor deviation will be the price which the bidder agrees to offer to the employer from his quoted offer in BOQ if deviation is agreed by the employer. Any such deviation without a price shall not be considered and will be treated as withdrawn by the bidder. Any other deviation mentioned anywhere in the submission other than in **Appendix-13** of FOB shall be considered as if mentioned inadvertently by the bidder and shall be considered as withdrawn without any confirmation from the bidder.
- C15.3 The Bidder is to note the S.No. (iv) of **Appendix-1 of FOB** for Liquidated Damage for delay in completion of the work.

C16. Currencies of Bid and Payment

C16.1 The Bidder shall give his priced offer for BOQ in Indian Rupees Only.

Director (Project)

E5.1.5 Evaluation of financial offer will be based on quantities in Bill of quantities (BOQ) and rates quoted. Any alteration in BOQ will not be given any cognizance.

E5.2 Correction of Errors (Rule-64 of RTPPR-2013)

- E5.2.1 Bids determined to be technically acceptable after technical evaluation will be checked by the Employer for any arithmetical errors in computation and summation during financial evaluation. Errors will be corrected by the Employer as follows:
 - a) If there is a discrepancy between the unit price and the total amount derived from the multiplication of the unit price and the quantity, the unit price as quoted will normally govern unless in the opinion of the Employer there is an obviously gross misplacement of the decimal point in the unit price, in which event, the total amount as quoted will govern; and
 - b) if there is a discrepancy in total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
 - c) If there is a discrepancy between amounts in figures and in words, the amount in words will govern in case of physical form of bidding unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to clause (a) and (b) above. However, in case of e-bidding, amount in figures will govern: and
 - d) If a Bidder does not accept the correction of errors as outlined above, his Bid will be rejected and the Bid security shall be forfeited.

E5.3 Comparison of Bids

Bids will be compared in **Indian Rupees** only.

E5.4 Deleted.

- **E5.5** For the purpose of comparative evaluation of bids received, the sum total of following shall be considered:-
 - (i) The amount quoted as lump sum by the bidder for the given schedule-A, and
 - (ii)The total amount worked out from the quoted percentage (above/below/at par) by the bidder for the given Schedule-B & C.
 - The total value of above thus obtained in equivalent INR shall be compared amongst various bidders to determine the lowest evaluated Bid.
- **E5.6** If the lowest bidder as evaluated as per E5.5 has given some minor deviations then the Employer has right to accept some or all such minor deviation and the offer of the lowest will be reduced by the price of such accepted deviations.
- **E5.7** The Employer reserves the right to accept or reject any variation, deviation. Variations, deviations and other factors which are in excess of the requirements of the Bid Documents or otherwise result in the accrual of unsolicited benefits to the Employer shall not be taken into account in Bid evaluation.

E6 Indigenisation

E6.1 Bidders are encouraged to involve domestic firms in the Contract organization and procurement processes.

Director

Instructions to Bidders

Annexure 6 (As per Clause C18.1)

FORM OF BANK GUARANTEE FOR BID SECURITY

(To be stamped in accordance with Stamp Act, if any, of the country of issuing bank)

1.	KNOW	ALL	MEN	by	these	prese	ents	that	we
				. (Nam	e of Bar	nk) having	our registe	ered off	ice at
			(Name of	count	try and	its offic	e addres	s in	India)
	(hereinafte	er called "th	e Bank") are	e bound	l unto Ja	ipur Metro I	Rail Corpo	ration L	imited
	(hereinafte	er called "th	e Employer") in the	sum of I	Rs	for w	hich pay	yment
		uly to be m	ade to the s presents.	aid Em	ployer, tl	ne Bank bir	nds itself, it	s succe	essors
2.	submitted i 1.1.1 of NI Bank Guar	ts Bid dated B) hereinafte antee for the	(Na I er called the e sum of Rs. D WHEREAS	for Bid. AN	D WHER	(Name EAS the Bid as Bid S	of the wor Ider is requ ecurity agai	k as pe ired to f inst the	r clause urnish a Bidder's
			greed to give			,		in, nave	, at the

3. We further agree as follows:

- a. Deleted.
- b. That the guarantee hereinbefore contained shall not be affected by any change in the constitution of our Bank or in the constitution of the Bidder.
- C. That any account settled between the Employer and the Bidder shall be conclusive evidence against us of the amount due hereunder and shall not be guestioned by us.
- d. That this Guarantee commences from the date hereof and shall remain in force till (date to be filled up)(date to be filled as mentioned in Clause 1.1.2 of NIB)
- e. That the expression 'the Bidder' and 'the Bank' herein used shall, unless such an interpretation is repugnant to the subject or context, include their respective successors and assigns.

4. THE CONDITIONS OF THIS OBLIGATION ARE:

- a. if the Bidder withdraws his Bid during the period of Bid validity specified in the Form of Bid, or
- b. if the Bidder does not accept the correction of his Bid price in terms of Clause **E5.2** of the "Instructions to Bidders".
- c. if the Bidder having been notified of the acceptance of his Bid by the Employer during the period of Bid validity:
 - i. fails or refuses to furnish the Performance Security in accordance with Clause **F 5.1** of the "Instructions to Bidders" and/or
 - ii. fails or refuses to enter into a Contract within the time limit specified in Clause **F4** of the "Instructions to Bidders".
- d. if the Bidder withdraws his Bid after opening of his financial package (in two package system) during the period of validity of his Bid or breaches any provision of code of integrity prescribed for bidders specified in the RTPP-Act-2012 and Chapter VI of RTPP rules, 2013, or in case of (c) above, beside forfeiture of Bid security, the bidder shall not only be



debarred from participating in the re-Bid of same work but also will be debarred from participating in any Bid of JMRC for a period of three year from the date of withdrawal of his Bid or from date of issue of letter of annulment of LOA, as the case may be.

We undertake to pay to the Employer mere on demand without demur up to the above amount upon receipt of his first written demand, without the Employer having to substantiate his demand provided that in his demand the Employer will note that the amount claimed by him is due to him owing to the occurrence of any one or more of the conditions (a), (b), (c) and (d) mentioned above, specifying the occurred condition or conditions.

Notwithstanding anything contained here	erein	ntained	thina coi	a a	Notwithstanding	. No	5
---	-------	---------	-----------	-----	-----------------	------	---

a)	Our liability under thi	s Bank Guarantee sh	nall not exceed Rs	(Rupees)
a,		S Darik Guarantee Si	Idii Hol exceed NS	

- b) This Bank Guarantee shall be valid up to.....
- C) We are liable to pay the guarantee amount or part thereof under this Bank Guarantee only & only if you serve upon us a written claim or demand on or before.............
- d) The amount covered under the above Bank Guarantee shall be automatically credited in the accounts of Jaipur Metro Rail Corporation in ICICI BANK LTD, Khanij Bhawan, Tilak Marg, C-Scheme, Jaipur-302005 through IFSC: ICIC0006786. Bank Account No. 678605111973 on the date of expiry or its validity, unless the agencies get it re-validated well before its expiry date or produce NOC from Jaipur Metro Rail Corporation Ltd. in writing for its release.

	Signature of Authorized Official of the Bank
Signature of Witness Name :	Name of Official Designation
Address:	Stamp/Seal of the Bank

Notes:

- Please note that, as per clause C18.1, any deviation in Bid security with regard to amount, validity and format shall be considered as material deviation and bid shall be dealt accordingly.
- 2. The stamp papers of appropriate value shall be purchased in the name of the Bank, who issues the 'Bank Guarantee'.
- 3. The 'Bank Guarantee' shall be from the Scheduled Commercial Bank based in India, acceptable to Employer.
- 4. Bid Security to be furnished on appropriate non-judicial stamps & should be valid for the next 07 months from the bid opening date.

Director

Instructions to Bidders Annexure 7 (As per Clause F5.1)

FORM OF PERFORMANCE SECURITY (GUARANTEE) BY BANK

1.	(To be given by a Scheduled Bank in India) (To be executed on non-judicial stamp) (Rule-75 & 75A of RTPPR-2013) (Refer Clause F5 of "Instructions to Bidders") This deed of Guarantee made this day of
2.	Whereas Jaipur Metro Rail Corporation Limited has awarded the contract for (Name of work as per Clause 1.1.1 of NIB) (hereinafter called the contract) to (Name of the Contractor) hereinafter called the Contractor.
3.	AND WHEREAS the Contractor is bound by the said Contract to submit to the Employer a Performance Security for a total amount of Rs(Amount in figures and words).
4.	Now we the Undersigned(Name of the Bank) being fully authorized to sign and to incur obligations for and on behalf of and in the name of(Full name of Bank), hereby declare that the said Bank will guarantee the Employer the full amount of Rs(Amount in figure sand Words) as stated above.
5.	NOW THEREFORE, we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Contractor and we hereby unconditionally, irrevocably and without demur undertake to immediately pay to the Employer upon first written demand and without cavil or argument, any sum or sums within limits of (Amount of Guarantee) as aforesaid without reference to the Contractor and without your needing to prove or show grounds or reasons for your demand for the sum specified therein. The Bank shall pay to the Employer any money so demanded notwithstanding any dispute/disputes raised by the Contractor in any suit or proceedings pending before any Court, Tribunal or Arbitrator/s relating thereto and the liability under this guarantee shall be absolute and unequivocal.
6.	This Guarantee is valid till (The initial period for which this Guarantee will be valid shall be as stated in Clause 4.2.1 of the "General Conditions of Contract".)
7.	At any time during the period in which this Guarantee is still valid, if the Employer <u>agrees to grant a time extension to the Contractor or if the Contractor fails to complete</u> the Works within the time of completion as stated in the Contract, or fails to discharge himself of the liability or damages or debts as stated under Para 5, above, it is understood that the Bank will extend this Guarantee under the same conditions for the required time on demand by the Employer and at the cost of the Contractor.
8.	The Bank agrees that no change, addition, modifications to the terms of the contract Agreement

or to any documents, which have been or may be made between the Employer and the Contractor, will in no way release us from the liability under this Guarantee; and the Bank, hereby, waives any requirement for notice of any such change, addition or modification to the Bank.

Director

CONTRACT ICB No: JP/EW/1C&1D (Elevated)/02/Volume-1/ITB

Page 46 R1 of 60

- 9. The Guarantee hereinbefore contained shall not be affected by any change in the Constitution of the Bank or of the Contractor.
- The neglect or forbearance of the Employer in enforcement of payment of any moneys, the payment

	whereof is intende shall not relieve th	_			•	mployer for	the paym	ent here o
	The expressions " respective succes	· -		and "the (Contractor" herei	nbefore use	d shall ir	nclude their
12. N	lotwithstanding ar	nything contained	herein:					
a)	Our liability	•	this	Bank	Guarantee	shall	not	exceed
b)	This Bank Gua	rantee shall be va	alid upto					
c)	We are liable to	o pay the guaran us a written clain		•		s Bank Gua	ırantee oı	nly &only it
d)	Scheme, Jaipu	covered under the pur Metro Rail (ur-302005 throug or its validity, un from Jaipur Metro	Corporation h IFSC: lless the	on in ICICI ICIC00067 agencies g	BANK LTD, K 86. Bank Accou et it re-validated	Chanij Bhaw unt No. 678 d well befor	an, Tilak 86051119	Marg, C- 973 on the
In witn	ess whereof I/W	e of the bank ha	ave signe	ed and sea	led this guarant	ee on the .		. day of
	(Month & y	/ear) being here	with duly	authorized	d.			
For an	d on behalf of th	ıe		Bank.				
Signat	ture of Authoriz	ed Bank officia	al					
Name		:						
Design Stamp	nation /Seal of the Ban	: k :						
Signed,	sealed and deliv e of :	ered for and on	behalf o	f the Bank	by the above n	amed		. in the
Wit	tness 1.				Witness 2.			
Sig	nature			;	Signature			Rail Corpa
							\ \\\	Olyen 18

With 633 1.	Without L.
Signature	Signature
Name	NameDirector
Address	Address

Notes:

- 1. The stamp papers of appropriate value shall be purchased in the name of the Bank, who issues the 'Bank Guarantee'.
- The 'Bank Guarantee' shall be from the Scheduled Commercial Bank based in India, acceptable to Employer
- 3. The 'Bank Guarantee' must be issued on the Structured Financial Messaging System (SFMS) platform.
- 4. A separate copy of the BG has to be sent by the issuing bank to the Employer's bank through SFMS. The details of Employer's bank are as under.

ICICI BANK LTD; Jaipur Metro Rail Corporation Branch:-Tilak Marg, C-Scheme, Jaipur. Khanij Bhawan, Tilak Marg, C-Scheme, Jaipur-302005, Rajasthan. A/C:678605111973

IFSC: ICIC0006786

5. Following codes are to be used by issuing bank for the purpose of Confirmation and amendment in Bank Guarantees:-

<u>Code</u> <u>Purpose</u>

MT760 Confirmation of bank guarantee

MT767 Amendment in bank guarantee

6. <u>Bank Guarantee issued on the SFMS platform with any other code other than</u> mentioned above for the purposes shall not be acceptable to the employer.



Signed, sealed and delivered for and on behalf of the presence of :	ie Bank by the above named in the
Witness 1.	Witness 2.
Signature	Signature
Name	Name
Address	Address

Notes:

- 1. The stamp papers of appropriate value shall be purchased in the name of the Bank, who issues the 'Bank Guarantee'.
- 2. The 'Bank Guarantee 'shall be from the Scheduled Commercial Bank based in India, acceptable to Employer.
- 3. The 'Bank Guarantee 'must be issued on the Structured Financial Messaging System (SFMS) platform.
- 4. <u>A separate copy of the BG has to be sent by the issuing bank to the Employer's bank through SFMS. The details of Employer's bank are as under.</u>

ICICI BANK LTD; Jaipur Metro Rail Corporation

Branch:-Tilak Marg, C-Scheme, Jaipur.

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MT767 Amendment in bank guarantee

6. <u>Bank Guarantee issued on the SFMS platform with any other code other than</u> mentioned above for the purposes shall not be acceptable to the employer.



Instructions to Bidders (Annexure – 7D Clause F5.1.1) Performance Security Declaration (Rule-75 of RTPPR-2013) (To be executed on a non-judicial stamp)

Date: _____ [insert date (as day, month and year)]

Co	ontract Name and No.: [insert name and number of Contract]
Го	: [insert Designation and complete address of Procuring Entity]
We	e, the undersigned, declare that:
1.	We are a (Strike out which is not applicable. Please enclose an authentic certificate issued by the
	Administrative Department of respective government under which the bidder entity is constituted.):
	(i) Departments/Boards of the State Government or Central Government; or
	(ii) Government Companies as defined in clause (45) of section 2 of the Companies Act, 2013; or
	(iii) Company owned or controlled, directly or indirectly, by the Central Government, or by any State Government or Governments, or partly by the Central Government and partly by one or more State Governments which is subject to audit by the Auditor appointed by the Comptroller and Auditor-General of India under sub-section (5) or (7) of section 139 of the Companies Act, 2013; or
	(iv) Autonomous bodies, Registered Societies, Cooperative Societies which are owned or controlled or managed by the State Government or Central Government.
2.	We understand that we are eligible for submission of a Performance Securing Declaration in lieu of Performance Security under Rule 75 (1) of RTPP Rules, 2013.
3.	We understand that, according to your conditions, the Contract must be supported by a Performance Security Declaration as a guarantee to ensure fulfillment of our all performance obligations under the Contract for [insert name of subject matter of procurement]
1.	We accept that we will automatically be suspended from being eligible for bidding in any contract with you for the period of time of 3 years as per section 46 of RTPP Act, 2012 [Procuring Entity to indicate here the period of time for which the Procuring Entity will declare a Bidder ineligible to be awarded a Contract if the performance Security Declaration is to be executed] starting on the date that we receive a notification from you, the bid accepting authority, MD / CMD, JMRC [Designation of the Procuring Entity] that our Performance Security Declaration is executed, if we are in breach of any of our performance obligation under the conditions of the Contract.

5. We understand this Performance Security Declaration shall expire after 60 days of completion of our all obligations under the Contract including Defect Liability, warranty/ Guarantee, operation,



maintenance, etc. in accordance with the conditions of the Contract.

Signed:	[insert signature of person whose nam	e and capacity are shown
In the capacity of:	[insert legal capacity of person signi	1 2
Declaration]		-
Name:	[insert complete name of person	on signing the Declaration]
Duly authorized to sign	the Contract for and on behalf of:	[insert complete name
and address of the Bido	ler]	
Dated on day of _ [inse	ert date of signing]	
Corporate Seal		



FORM OF BID - Appendix-30

Power of Attorney for Authorized Signatory of Bidder Firm.

POWER OF ATTORNEY FOR SIGNING THE BID

Know all men by these presents, We		(name of	the firm and	address
of the registered office) do here by irrev	ocably constitute, n	nominate, a <mark>j</mark>	opoint and a	uthorize
Mr./Ms.(name)	Son/daughter/wife	of		
and presently residing at		, who	is pr	esently
employed with us and holdin	g the p	oosition o	f	
as our true and lawful attorney	(hereinafter referre	ed to as the	: "Attorney")	to do in
our name and on our behalf, all such a	cts, deeds and thin	gs as are n	ecessary or	required
in connection with or incidental	to submission	of our	Contract I	CB No:
JP/EW/1C&1D(Elevated)/02: Design	and Construction	of Elevate	ed Ramp,	Elevated
Viaduct and One Elevated Station	(Transport Nagar)	from star	t of elevate	ed ramp
(CH:13040.00 m) to Transport Nagar D	ead end (CH:1399	6.00 m) of	Jaipur Metro	ວ Phase-
1C and Design and Construction of E	levated Viaduct an	nd One Ele	vated Statio	n (Ajmer
Road Chauraha including loop line	e) from Mansarov	var dead	end (CH:-1	1243.930
m)(excluding) to Ajmer Road Chauraha	•	,	•	
1D, including Entry Exit Structures,	Architectural fini	shing, wat	er supply,	Sanitary
Installations, Drainage Works, Pre-Eng				•
Works for Jaipur Metro Phase-1C and F	Phase-1D at Jaipur	, Rajasthan	, India." inclı	uding but
not limited to signing and submission of				•
and other conferences and providing	•			•
representing us in all matters before J	•			
contracts including the Contract and ur	~	=	-	
and generally dealing with the JMRC of	•			
relating to or arising out of our Bid for	•	nd/or upon	award there	eof /or till
the entering into of the Contracts with J	MRC.			

AND we hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things lawfully done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Attorney in exercise of the powers hereby conferred shall and shall always be deemed to have been done us.

THE ABOVE NAMED			,	WE	WHEREOF	IN WITNESS
ATTORNEY ON THIS	OF	POWER	THIS	ED	AVE EXECUT	PRINCIPAL HA
		ear).	onth & Y	,(Mo	AY OF	D
_						
For (Signature)						
Title and Address) Witnesses:	(Name					
Thic and Address; withesses.	(Ivairie,	,				
Accepted						
Signature)	tarna. ()	of the At	م ۸ ما ما سم	ام ممم	/Nama Tit	
(Notarized)	lorney)	ss of the At	a Addres	ie and	(Name, 11	
(1101411204)						

Notes:

The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the chartered documents of the executants and when it is so required, the same should be under common seal affixed in accordance with the required procedure. Also, wherever required, the Applicant should submit for verification the extract of the chartered documents and documents such as a resolution/power of attorney in favors of the person executing this Power of Attorney for the delegation of power hereunder on behalf of the Applicant.

The Applicant should submit Board of Directors resolution in which proposal of authorizing a particular signatory was passed.



1 **Sub-Clause 1.4 Contract Agreement** The Form of Contract Agreement shall be in the format given in Schedule 2 to these Special Conditions of Contract.

2 Sub-Clause 3.2 Functions of Engineer

In addition to the duties mentioned in Clause 3.2 of General Conditions of Contract:

- (i) <u>Engineer</u> shall watch and inspect the Works, monitor the test results and examine any material to be used and workmanship employed by the Contractor in connection with the Works;
- (ii) <u>Engineer</u> shall carry out such duties and exercise such powers vested in the Engineer in accordance with the provisions of the Contract;
- (iii) **Engineer** shall issue instructions which in his opinion are necessary for the execution of the Works; and
- (iv) <u>Engineer</u> may issue any other instruction which in his opinion is desirable in connection with the Works.
- (v) Engineer will assist in Technical , Contractual and in Arbitration matter and judicial forums.
- (vi) Engineer shall submit one set of updated GFC to Employer as and when updated

In case The Engineer is employee of any agency hired by the Employer, the Engineer shall take the approval of the Employer for all technical and financial matters otherwise he shall be deemed to have taken the approval of the Employer.

3 Sub-Clause 4.2.4 Guarantees, Warranties and Undertakings

The forms of Contractor warranty shall be in the format given in the Schedule-1 of these Special Conditions of Contract.

4 Sub-Clause 4.5 Sub-Contractors

The sub-contracting, excluding design work shall be limited to 50% of the Contract Value. The value of a sub-contract, other than for Design work as when awarded, should be intimated by the Contractor to the Engineer and it should also be certified that the cumulative value of the sub-contracts awarded so far is within the aforesaid limit of 50%. A copy of the contract between the Contractor and Sub-Contractor shall be given to the Engineer within 15 days of signing and in any case 7 days before the Sub Contractor starts the Work and thereafter the Contractor shall not carry any modification without the consent in writing of the Engineer. The terms and conditions of sub-contracts and the payments that have to be made to the sub-contractors shall be the sole responsibility of the Contractor. Payments to be made to such subcontractors will be deemed to have been included in the Contract price. However, for major sub-contracts (each costing over Rs. 50 lacs), it will be obligatory on the part of the Contractor to obtain consent of the Employer. The Employer will give his consent after assessing and satisfying himself of the capability, experience and equipment



resources of the sub-contractor. In case the Employer intends to withhold his consent, he should inform the Contractor within 15 days to enable him to make alternative arrangements to fulfil his programme.

The Contractor shall provide sufficient superintendence, whether on the site or elsewhere, to ensure that the work to be carried out by a subcontractor complies with the requirements of the Contract.

In the case of sub-contracts for electrical and mechanical works, which the Contractor intends to procure on the basis of outline design, design briefs and performance specification, the Contractor shall, prior to inviting bids from sub-contractors, submit such documents to the Engineer for review.

The proposed sub-contract terms and conditions shall impose on the sub-contractor such terms of the Contract as are applicable and appropriate to the part of the Works to be sub-contracted, to enable the Contractor to comply with his obligations under the Contract.

Notwithstanding any consent to sub-contract given by the Engineer, if in his opinion it is consider necessary, the Engineer shall have full authority to order the removal of any sub-contractor from the Site or off-Site place of manufacture or storage.

5 Sub-Clause 4.9 Site Data

The Geotechnical and other related data provided by the Employer are based on the investigation conducted by JMRC and are for reference purposes only. The Bidder should satisfy himself with the data furnished and make his own investigations, if required, for submitting his offer. Any change in design or construction methodology later during execution on account of change will be borne by the Contractor.

The Contractor shall not be relieved from any risk or obligation imposed on or undertaken by him under the Contract on any such ground or on the ground that he did not or could not foresee any matter which may affect or have affected the execution of the Works, or compliance with his other obligations under the Contract.

6 Sub-Clause 4.11 Access Route

All operations for the execution of the Works shall be carried out so as not to interfere unnecessarily with the convenience of the public or the access to public or private roads or footpaths or properties owned by the Employer or by any other person.

The Contractor shall select routes, choose and use vehicles so that movement of Contractor's Equipment, Plant and Materials from and to the Site is limited so that traffic is not delayed and damage to highways and bridges is prevented. If there is any delay or damage or injury, the cost of rectification or reconstruction of highways or bridges shall be borne by the Contractor. The Contractor shall indemnify the Employer in respect of all claims, demands, proceedings, damages, costs, charges and expenses what so arising out of or in relation to any such matters.

If during the execution of the Works the Contractor shall receive any



claim arising out of the execution of the Works in respect of damage to highways or bridges or any other public utility or private property, he shall immediately report the facts to the Engineer. The Contractor shall negotiate a settlement in respect of such claims and indemnify the Employer in respect of all claims, proceedings, damages, costs, charges and expenses in relation thereto.

7 Sub-Clauses 4.13 Programmes

The Contractor shall prepare and submit his detailed Programme of Work so as to achieve key dates of various activities. The Contractor shall complete the work in a phased manner fixing priorities to the different stretches of the work to give access to other interfacing contracts as per the requirement of project from time to time.

The Engineer on receipt of a programme shall inform the Contractor in writing within 21 days after receipt of the above information;

- (a) that the programme has received his consent; or
- (b) that the programme is rejected, in which case reasons for such rejection shall be given; or
- (c) that further information is required to clarify or substantiate the programme or to satisfy the Engineer as to its reasonableness, or
- (d) that the programme has received his consent subject to incorporation of comments attached to the Notice of No Objection.

Provided that if none of the above actions is taken within the 30 day period, the Engineer shall be deemed to have given consent to the programme submitted.

The Contractor shall, within 21 days of receiving notification under subparagraphs (c) or (d) above, provide further information requested or the programme shall be deemed to have been rejected. The Engineer shall, within 21 days of receipt of such further information, either reject the programme or give his consent.

In the event of a programme being rejected, or deemed to have been rejected, the Contractor shall, within 21 days thereafter, submit a revised programme taking account of the reasons given for the rejection or incorporating further information requested by the Engineer, as the case may be.

The Contractor, following receipt of consent to the Works Programme, may at any time, submit to the Engineer an amended version. In the event that the Engineer grants an extension of time, instructs an Employer's Variation, or on the occurrence of any event or happening or situation, which could materially affect the progress of the Works, the Contractor shall submit a revised programme to the Engineer for his consent.

Director (Project)

If the Engineer feels that there is a significant deviation between the actual or anticipated progress of the Works and the Works programme, the Engineer may require the Contractor to submit a revised/modified programme to ensure timely completion of Whole of Works or a Key Date or a milestone. The Contractor shall submit such revised

SCHEDULE-1

CONTRACTOR'S WARRANTY

		(Refer clause 3 of SCC and Sub-Clause 4.2.4 of GCC)
(1)		WARRANTY is being issued on the day ofMonth
	Note	1]] ([Jointly] "the Contractor")
(2)	Admir	r Metro Rail Corporation Limited] [of]/[whose registered office is at] [1st Floor, A-Wing, Building,bhrigu Path, Mansarovar Metro Depot, Jaipur-302020] (together with its ssors and assigns, "the Employer").
		WHEREAS
(A)	Corpo desigi Comn	contract dated [] ("the Contract") made between (1) the Jaipur Metro Rail bration Limited ("the Employer") and (2) the Contractor, the Contractor has agreed to n, execute, complete, test and commission (including Integrated Testing and nissioning) and remedy any defect in the Works upon the terms and conditions ned in the Contract.
(B)	[See <u>l</u>	Note 3].
(C)		request of the Employer and pursuant to the terms of the Contract the Contractor has d to enter into this Warranty.
	NOW	IT IS AGREED AS FOLLOWS:
1.	The C	contractor hereby warrants and undertakes that:
	(a)	He will design, execute, complete, test and commission (including Integrated Testing and Commissioning) and remedy any defect in the Works in accordance with the terms of the Contract; and
	(b)	he owes a duty of care to the Employer in relation to the performance of its duties under the Contract; and
	(c)	he will replace free of cost to the Employer any defect or failure of equipment provided in the Works for a period of (as specified) months from the date of Taking Over of the last Section of the Works; and
	(d)	he agrees that should any design modification be required to any section or component due to any defect, the period of (as specified) months shall recommence from the date when the modified part is commissioned into service, and such modification shall be carried out free of cost to the Employer in all sub-systems and systems for all sections; and
	(e)	he shall maintain the manufacture or spare of replacement parts for at least 10 years.
2.		ability of [the companies comprising [see Note 3]] the Contractor under this Warranty be joint and several and [see Note 3]] shall not be released, diminished or in any way

affected by any independent inquiry or investigation into the Works or any matter related to the Contract whether carried out by or on behalf of the Employer or any liability or right of

action which may arise out of such inquiry or investigation.

oro Rail Cor

Director (Project)

SCHEDULE 2

FORM OF CONTRACT AGREEMENT

(Refer Clause F4 of ITB)

This Agreem	ent is made	e at Jaipur d	on the .		(day of	(mor	ith) 2023	Betwe	en Jaip	ur
Metro Rail C	Corporation	Limited, 1s	t Floor	, A-W	√ing,	Admin	Building,bl	nrigu Pa	ith, Ma	nsarov	ar
Metro Depot	t, Jaipur-30	2020									
hereinafter c	called "the	Employer"	of the	one	part	and a	a company	incorpo	orated	under	th

NOW THIS AGREEMENT WITNESSETH as follows:

- 1. In this Agreement words and expression shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to.
- - a) Notice Inviting Bid (NIB)
 - b) Instructions to Bidders (ITB)(Including Annexures)
 - c) Special Conditions of Contract (SCC)
 - d) General Conditions of Contract (GCC)
 - e) Conditions of contract on Safety & Health & Environment (SHE).
 - f) Outline Design Specifications
 - g) Outline Construction Specification for Civil Works
 - h) Technical Specification for Architecture & Finishing Works
 - i) Bid Drawings
 - j) Bill of Quantities
 - k) Form of Bid with Appendix
 - I) Letter of acceptance (LOA)
 - m) Contractor's proposal submitted along with the bid
 - n) Any other item as applicable

The modifications to the biddocuments communicated through the Addenda (...... Numbers) hosted on the e-bidding portal at the time of bid have been incorporated in the consolidated contract documents.

Director

(Project)

Special Conditions of Contract (SCC)

- 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 by **...... and remedy any defects therein in 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 Total Contract Price of **`
 being the sum stated in the letter of acceptance subject to such additions thereto or deductions there from as may be made under the provisions of the Contract at the times and in the manner prescribed by the Contract.

5. **OBLIGATION OF THE CONTRACTOR**

The contractor shall ensure full compliance with <u>all applicable laws in force in India including but not limited to</u> tax laws with regard to this contract and shall be solely responsible for the same. The contractor shall submit copies of acknowledgements evidencing filing of returns every year and shall keep the Employer fully indemnified against liability of tax, interest, penalty etc. of the contractor in respect thereof, which may arise.

6. **JURISDICTION OF COURT**

The Courts at Jaipur, Rajasthan, India shall have the exclusive jurisdiction to try all disputes arising out of this agreement between the parties.

IN WITNESS WHEREOF the parties hereto have caused their respective Common Seals to be hereunto affixed / (or have hereunto set their respective hands and seals) the day and year first above written.

For and on behalf of the Contractor For and on behalf of the Employer

Signature of the authorized official Signature of the authorized official

Name of the official Name of the official

Stamp/Seal of the Contractor Stamp/Seal of the Employer

SEALED, SIGNED & DELIVERED

By the said(Name) on	By the said(Name) on
behalf of the Contractor in the presence of :	behalf of the Employer in the presence of :
Witness	Witness
Name :	Name :
Address:	Address:

Note:

- * To be made out by the Employer at the time of finalization of the Form of Agreement.
- ** Blanks to be filled by the Employer at the time of finalization of the Form of Agreement.
- *** To be deleted if not applicable



f) the location of and the authorisation required for and the means of diversion of any services and facilities required for the purposes of the Works.

The Contractor shall whenever be required by the Engineer, submit details of the arrangement and methods which the Contractor proposed to adopt for the execution of the Works. No alteration to these arrangements or methods shall be made without the approval of the Engineer.

Performance Security Amount

4.2

- **4.2.1** (1) Performance security shall be <u>furnished within 30 days from the date of</u> issue of LOA by the successful bidder except the:-
 - (i) Departments/Boards of the State Government or Central Government;
 - (ii) Government Companies as defined in clause (45) of section 2 of the Companies Act, 2013;
 - (iii) Company owned or controlled, directly or indirectly, by the Central Government, or by any State Government or Governments, or partly by the Central Government and partly by one or more State Governments which is subject to audit by the Auditor appointed by the Comptroller and Auditor-General of India under sub-section (5) or (7) of section 139 of the Companies Act, 2013; or
 - (iv) Autonomous bodies, Registered Societies, Cooperative Societies which are owned or controlled or managed by the State Government or Central Government. However, a performance security declaration shall be taken from them. The State Government may relax the provision of performance security in a particular procurement or any class of procurement.
 - (2) The amount of performance security shall be ten percent of the amount of work order in case of procurement of works. In case of Small-Scale Industries of Rajasthan it shall be one percent of the amount of quantity ordered for supply of goods and in case of sick industries, other than Small Scale Industries, whose cases are pending before the Board of Industrial and Financial Reconstruction (BIFR), it shall be two percent of the amount of supply order.
 - (2A) Notwithstanding anything contained in sub-rule (2) above, where the State Government being of the opinion that there exist grave situations such as natural calamity or Pandemic or Epidemic diseases or floods etc. in which the economy is adversely affected, the State Government may, by order, direct the procurement entity to reduce the performance security taken in case of existing contracts of ongoing projects, from such date and on such conditions as may be specified in the order.
 - (3) Performance security shall be furnished in any one of the following forms-
 - (a) [Deleted]
 - (b) Bank Draft or Banker's Cheque of a scheduled bank;
 - (c) National Savings Certificates and any other script/instrument under National Savings Schemes for promotion of small savings issued by a Post Office in Rajasthan, if the same can be pledged under the relevant rules. They shall be accepted at their surrender value at the time of bid and formally transferred in the name of **Employer** with the approval of Head Post Master.
 - (d) Bank guarantee/s of a scheduled bank. It shall be got verified from the issuing bank. Other conditions regarding bank guarantee shall be same as mentioned in the rule 42 of RTPPR, 2013;
 - (e) Fixed Deposit Receipt (FDR) of a scheduled bank. It shall be in the name of **Employer** on account of bidder and discharged by the bidder in



advance. The procuring entity shall ensure before accepting the Fixed Deposit Receipt that the bidder furnishes an undertaking from the bank to make payment/premature payment of the Fixed Deposit Receipt on demand to the **Employer** without requirement of consent of the bidder concerned. In the event of forfeiture of the performance security, the Fixed Deposit shall be forfeited along with interest earned on such Fixed Deposit.

- (f) In case of procurement of works, the successful bidder at the time of signing of the contract agreement, may submit option for deduction of performance security from his each running and final bill @ 10% of the amount of the bill
- (4) Performance security furnished in the form specified in clause (b) to (e) of sub-rule (3) shall remain valid for a period of sixty days beyond the date of completion of all contractual obligations of the bidder, including warranty obligations and maintenance and defect liability period.

Additional Performance Security-

- (1) In addition to Performance Security as specified in clause 4.2.1, an Additional Performance Security shall also be taken from the successful bidder in case of unbalanced bid. The Additional Performance Security shall be equal to fifty percent of Unbalanced Bid Amount. The Additional Performance Security shall be deposited in lump sum by the successful bidder before execution of Agreement. The Additional Performance Security shall be deposited through Demand Daft, Banker's Cheque, Government Securities or Bank Guarantee. Explanation: For the purpose of this rule,-
- Unbalanced Bid means any bid below more than fifteen percent of Estimated Bid Value.
- ii. Estimated Bid Value means value of subject matter of procurement mention in bidding documents by the Procuring Entity.
- iii. Unbalanced Bid Amount means positive difference of eighty five percent of Estimated Bid Value minus Bid Amount Quoted by the bidder.

Enhanced performance security for variation: If the original contract price increased either by due to contractor's or due to employer's variation, the 10 % amount shall be deducted from the each running bill equal to amount of variation of the original contract price.

(2) <u>Performance Security and Additional Performance Security shall be payable and encashable at Jaipur only.</u>

Forfeiture

Failure of the successful Bidder to furnish the required Performance Security and Additional Performance Security shall be a ground for the annulment of the award of Contract and forfeiture of the Bid Security.

The whole of the Performance Security <u>including Additional Performance Security</u> amount shall be liable to be forfeited by the Employer at the discretion of the Employer, in the event of any breach of contract on the part of the Contractor. The forfeiture of the Performance Security amount by the Employer would be without prejudice to any amount(s) of money that the Employer may recover as Liquidated Damages or any other damages from the Contractor. The forfeiture of Performance Security amount by the Employer, would not operate as bar/set off/ adjustment from any amount of money which becomes recoverable or is recovered by the Employer. In case of the Performance Security Amount Bank Guarantee being invoked and forfeited by the Employer, the Contractor would immediately replenish the amount of Performance Security.

Release

4.2.3

4.2.2

(i) On completion of the entire Work/part Work, one half of the proportionate Performance Security <u>including Additional Performance</u>

Security shall be refunded to the Contractor, on issue of Taking



matters and payments amicably and speedily with the Sub-contractors.

4.5.4 The Contractor shall ensure that their Sub-contractors, material/equipment Suppliers, Consultants and other Agencies deployed by them in connection with execution of the Contract do not make any claim or raise any dispute before JMRC. For this, necessary provision is to be made in the agreement between Contractor and their Sub-contractors/Consultants/other Agencies. Similarly the agreement should also incorporate the provision of dispute resolution. An undertaking in the following format shall be submitted by Contractor in respect of each such agency:-

"Name of Work.....

In connection with above Work, M/s....., Contractor has/is engaging M/s....., as Sub-contractor(or Consultant or material/equipment Supplier or Service provider). For this, the terms and conditions of agreement include necessary provisions for resolution of dispute if any arising between Contractor and Sub-contractor.

It is confirmed by the Sub-contractor that any claim/dispute arising out of the above Work shall be resolved in terms of agreement and shall not be raised before JMRC and also shall not make any claim against JMRC before any forum/court.

Signature of Contractor

Assignment of Contractor's and Sub- contractor's Obligations

4.6

The Contractor shall not assign a right or benefit under the Contract without first obtaining Employer's prior written consent, otherwise than by **charge in favour of the Contractor's bankers of any money due or to become due under the Contract.**

- a. Deleted.
- b. Deleted.

If a Sub-contractor's obligations extend beyond the expiry date of Defects Liability Period then the Contractor shall assign the benefits of such obligations to the Employer.

In the event that a Sub-contractor of any tier provides to the Contractor or any other Sub-contractor a warranty in respect of Plant, Materials or Services supplied in connection with the Works, or undertakes a continuing obligation of any nature whatsoever in relation to such Plant, Materials or Services (including without limitation an obligation to maintain stocks of spare parts) extending for a period exceeding that of the Defects Liability Period or where there is more than one Defects Liability Period exceeding that of the latest Defects Liability Period, and if the Engineer so directs in writing within 21 days of the expiry of the Defects Liability Period or the latest Defects Liability Period (as the case may be), the Contractor shall immediately assign or obtain the assignment of the benefit of such warranty or obligation to the Employer or at the direction of the Employer, to any third Party referred to in Sub- Clause 2.4.

Compensation for 4.7 Breach

Any breach of Sub-clauses 4.5 to 4.6 shall entitle the Employer to rescind the Contract under Clause 13.2 of these conditions and also render the Contractor liable for loss or damage arising due to such cancellation.

Setting Out 4.8

Accurate Setting Out

4.8.1 The Contractor shall be responsible for

- a) the accurate setting out of the Works in relation to the original points, lines and levels of reference given by the Engineer in writing
- b) the correctness of position, levels, dimensions and alignments of all parts of the Works
- c) the provisions of all necessary instruments, equipment, apparatus and



- a) the Contractor shall be responsible for keeping unauthorised persons off the Site; and
- b) Authorized persons shall be limited to the Employees of the Contractor, Sub-contractor or persons authorized by the Engineer.

Contractor's 4.28 Operations on Site

The Contractor shall confine his operations to the Site, and to any additional area which may be provided to the Contractor and agreed by the Engineer as working areas. The Contractor shall take all necessary precautions to keep his personnel and equipment within the Site and such additional areas, and to keep and prohibit them from encroaching on adjacent land.

Discoveries

4.29

All fossils, coins, articles of value or antiquity, structures and other remains or things of geological or archaeological interest, in addition to oil and other minerals discovered on the Site shall be the absolute property of the Government of India. The Contractor shall take all the necessary precautions to prevent its workmen or its Sub-contractors' workmen or any other person from removing or damaging any such article or thing and shall immediately upon discovery thereof, acquaint the Engineer of such discovery and carry out the instructions of the Engineer.

Publicity

4.30

The Contractor shall not publish or otherwise circulate alone or in conjunction with any other person, any articles, photographs or other materials relating to the Contract, the Site, the Works, the Project or any part thereof, nor impart to the Press, or any radio or television network any information relating thereto, nor allow any representative of the media access to the Site, Contractor's Works Areas, or off-Site place of manufacture, or storage except with the permission, in writing, of the Employer. The Contractor shall ensure that his Sub-contractors of any tier shall be bound by similar obligation and shall, if so required by the Employer, enforce the same at his own expense. The provisions of this Sub-clause shall not exempt the Contractor from complying with any statutory provision in regard to the taking and publication of photographs.

Disclosure of Relationship

4.31

If the Contractor or any partner of the Contractor or Director of the Contractor's company is closely related to any of the Officers of the Employer or the Engineer, or alternatively, if any close relative of an officer of the Employer or the Engineer has financial interest/stake in the Contractor's firm, the same shall be disclosed by the Contractor at the time of filing his Bid. Any failure to disclose the interest involved, shall entitle the Employer to rescind the Contract, without payment of any compensation to the Contractor. The Contractor shall note that he is prohibited from developing such interest during the Contract period **also**.

Use of Explosives 4.32

Explosives if required on the Work shall be used by Contractor only with prior Approval of the Engineer and in the manner and to the extent permitted by him. The Contractor shall be responsible for safe upkeep of such explosives in a special magazine as per the law on explosives as well as for taking all the precautions in the usage of the explosives with proper license and at Contractor's cost, sole risk and responsibility. The Contractor shall hold the Employer harmless and indemnify for the above.

Corrupt / Fraudulent/ Collusive/ Coercive Practices

4.33

Definition 4.33.1

The Employer requires that the Bidders/Contractors, their designated Contractors and/or their Agents observe the highest standards of ethics during Biding and execution of this Contract. In pursuance with this Policy, the Employer:

- a. defines, for the purpose of these provisions, the terms set forth below as follows:
 - i) "Corrupt practice" means the offering, giving, receiving or soliciting of Page | 26 R1



- anything of value to any officer/employee of JMRC or Engineer or to any other person to influence in the procurement process or in Contract execution and/or after the execution of the Contract.
- ii) "fraudulent practice" means a concealment or misrepresentation of facts in order to influence a procurement process or during the execution of a Contract and/or after the execution of the Contract, which may or may not be 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 noncompetitive levels and to deprive the Employer of the benefits of free and open competition and further includes concealment or misrepresentation of facts leading to breach of any of the Contract condition during execution of the Contract which may or may not be to the detriment of the Employer.
- iii) "Collusive practice" means amongst Bidders (prior to or after bid submission) a scheme or arrangement designed to establish bid prices at artificial non-competitive levels and to deprive JMRC of the benefits of free and open competition.
- iv) "coercive practice" means impairing or harming or threatening to impair or harm directly or indirectly, any Agency or JMRC or its employees/ consultants or its property, to influence improperly the actions of an Agency or JMRC or its employees/ consultants, obstruction of any investigation or auditing of a Procurement/ Contract process.
- v) [Deleted].
- vi) [Deleted].
- vii) [Deleted].
- b. If it is found that the Bidder/Contractor has indulged in corrupt/fraudulent/ collusive/coercive practices, actions such as rejection of bid/forfeiture of Bid Security or rescission/termination of Contract/forfeiture of Performance Security etc.

c. Debarment from bidding.-

- (1) A bidder shall be debarred by the State Government if he has been convicted of an offence -
- (i) under the Prevention of Corruption Act, 1988 (Central Act No. 49 of 1988); or
- (ii) under the Indian Penal Code, 1860 (Central Act No. 45 of 1860) or any other law for the time being in force, for causing any loss of life or property or causing a threat to public health as part of execution of a public procurement contract.
- (2) A bidder debarred under sub-section (1) of section 46 of RTPP Act-2012 shall not be eligible to participate in a procurement process of any procuring entity of the State/JMRC for a period not exceeding three years commencing from the date on which he was debarred.
- (3) If a procuring entity finds that a bidder has breached the code of integrity prescribed in terms of section 11 **of RTPP Act-2012**, it may debar the bidder for a period not exceeding three years.
- (4) Where the entire bid security or the entire performance security or any substitute thereof, as the case may be, of a bidder has been forfeited by a procuring entity in respect of any procurement process or procurement contract, the bidder may be debarred from participating in any procurement process undertaken by the procuring entity for a period not exceeding three years.



extent of any such obligation, the Contract shall be deemed to remain in force.

Emergency defect rectification

10.11

If any defect or damage is one requiring immediate attention from safety, environmental or operational viewpoint, the Engineer has the authority to proceed with rectification in any manner suitable and deduct such sums from the Contract Price.

11 Contract Price and Payment

The Contract Price Inclusions/ Exclusions

11.1

- i) Unless otherwise stated in the Special Conditions of Contract, the Contract Price, subject to any adjustment thereto in accordance with the Contract, shall be all inclusive (including all taxes, duties, royalties etc.)
 - ii) Nothing extra shall be payable over the quoted rates, notwithstanding any provision to the contrary in any law for the time being in force, save and except what is specifically provided in General or Special Conditions of Contract.
 - iii) The payment (as per this Sub-clause) of whatsoever nature shall be provided only for Permanent Works. No **payment** (as per this Sub-clause) shall be provided for Temporary Works and fuel.

Maintaining Records and Availing Exemptions

11.1.2

- i) In the event of exemption of custom duties, GST (CGST/IGST/SGST etc.) or any other cess/levy being granted by the Government in respect of the Works, the benefit of the same shall be passed on to Employer. The Contractor shall therefore maintain meticulous records of all the taxes and duties paid and provide the same as and when required by the Employer, so that the Employer is able to avail the reimbursement for which JMRC may issue a procedure order separately. Alternatively, the Employer may direct the Contractor to get the reimbursements based on exemption certificates / government's order and it shall be obligatory on part of the Contractor to get the reimbursements from the statutory authorities and pass on the benefit to JMRC.
- ii) In case of Contractor's failure in availing the exemptions as stipulated above, the recovery of equivalent amount will be made from Contractor's dues.

Adjust in Contract Price

11.1.3

Adjustment in Contract price shall be done if a "Price Variation Formula" is given in the Special Conditions Of Contract otherwise it will be a fixed price contract.

Change in Taxes/Duty

11.1.4

- i. The liability, if any, on account of quarry fees, royalties, octroi and any other taxes and duties in respect of materials actually consumed **on** public work, shall be borne by the Contractor.
- If any rates of Tax are increased or decreased, a new tax is introduced in India only, an existing Tax is abolished, or any change in interpretation or application of any Tax resulting from a change or Introduction in India only due to any National or State Statute, Ordinance, Decree or other law or any regulation or bye-law of any local or other duly constituted authority in India only, in the course of performance of contract, which was or will be assessed on the Contractor, in connection with the performance of the Contract, an equitable adjustment of the Contract price shall be made to fully take into account any such change by addition to the Contract Price or deduction there from, as the case may be. However, these adjustments would be restricted to direct transactions between the **Employer** and Contractor only those items which are included in bid. Further, no adjustment of the Contract Price shall be made on account of variation in deemed export benefits, if any. Any increase or decrease which is included in price variation formula incorporated



in the contract shall not be accounted for this purpose. Such increase including GST shall not be made in the extended period of contract for which the contractor alone is responsible for delay as determined by authority for extension of time.

Advances Mobilisation Advance

11.2

11.2.1

In respect of works costing more than Rs. 50.00 Crore (Rs. Fifty Crore) only the JMRC will, if provided in bidding document and requested by the Contractor to make mobilization advance, payment to the Contractor (at 9% per annum interest compounded annually basis) to assist in defraying the initial expenses that necessarily be incurred by the Contractor for mobilization. The total of such advance payments and the number & timing of installments is stated here under-

The total amount of Advance shall not be more than 10% of the <u>original</u> <u>contract value</u>. Payment of Mobilization Advance shall be made in two equal installments, <u>the</u> first installment shall not be more than 5% of the <u>original</u> <u>contract value</u> and on compliance of the requisite conditions as stated in the bid document, the remaining amount of <u>original contract value</u> shall be in second installment.

Release of Mobilization Advance:

On recommendation of the Engineer-in-charge, Mobilization Advance shall be released, as follows:

- (i) Execution of the Agreement by the parties thereto,
- (ii) Submission by the Contractor of an unconditional and irrecoverable bank guarantee in amounts and currencies equal to the advance payment being requested. Such bank guarantee shall be issued either by a Nationalized or Scheduled Bank as declared by the RBI, should be encashable in Rajasthan and acceptable to JMRC. The guarantee shall remain effective until the full recovery of the advance payment with total interest payable thereon. If the advance payment has not been repaid by the date 28 days prior to expiry date of B.G. the contractor shall extend the validity of B.G. until the advance payment has been repaid.
- (iii) The mobilization advance payments shall be made in two installments as stated above, subject to the conditions described below. The advance payments shall be used by the Contractor exclusively for mobilization expenses, as per the programme approved by the Engineer-in-charge.
- (iv) For this purpose, the Contractor shall open a dedicated Contract Bank Account in a bank located at office headquarter or in case of non-functioning of bank's branch at office headquarter than at the nearest place to office headquarter in Rajasthan and the JMRC will transfer or deposit the advance payments directly into the aforesaid dedicated Bank Account of the Contractor. The Contractor will not be permitted to use these funds for any purpose other than for expenditures under the Contract and the JMRC will be entitled to verify that the transactions from this account are used exclusively for the purposes for which they are intended. In case the advance payment is not utilized by the Contractor as per the approved programme and within the stipulated period to the satisfaction of the Engineer-in-charge, default proceedings as per the relevant clause of Contract, shall be initiated against the Contractor.

Release of First Installment: The JMRC will make, payment of the first installment of the mobilization advance only after the Contractor has fulfilled the following conditions:-

- (a) Contractor has executed the agreement with JMRC
- (b) Requisite Bank Guarantee has been deposited by the contractor.
- (c) Established the dedicated Contract Bank Account.
- (d) Any other condition mentioned in bid document in order to release installment.

Release of Second Installment: After the first installment of the advance payment has been utilized as per the approved programme, substantiated by



Contract in this regard.

The Contractor, if required by the Engineer shall provide the details of utilisation of Mobilization Advance.

Provisional Payment Against Material at Site

11.3

A provisional payment on account of main construction materials required for the Permanent Works, shall be paid on request of the Contractor after these materials are brought to Site, against an Indemnity Bond in a form acceptable to Employer is duly executed. The payment shall be limited to 80% of the actual value or assessed value of these materials and the total of such provisional payment on account of construction materials at a time shall be limited to three percent of Original Contract Value or likely average consumption of such materials for three months, whichever is less and at any time the total outstanding provisional payment against material at site shall not exceed four percent of the Original Contract Value. The valuation of the average consumption of such main construction materials shall be approved by the

Written Request for Advances/ Provisional Payment against Material at Site

11.3.2

The provisional payments as admissible, shall be payable only on Contractor's written request to the Employer/Engineer.

Recovery of Provisional Payment against Material at Site

11.3.3

a. Deleted.

Engineer, whose decision shall be final.

- b. Deleted.
- c. In case of provisional payment against Materials, the amount consumed every month shall be recovered from the next month's on-account bill and the recovery to be completed in 3 monthly installments. In case recovery could not be made due to any reason, interest will be charged at the rate equal to State Bank of India's Marginal Cost of fund based Lending Rate (MCLR) applicable for tenure of 01 year prevailing on the due date of recovery.

Application for Interim Payment Certificates

11.4

11.4.1 In case of 'Lump Sum' Contract with cost centre and Milestone payment, the fixed Lump Sum Price shall be apportioned by the Contractor amongst the various Cost Centres. The amount thus apportioned under each Cost Centre will be further apportioned amongst various Milestones with the approval of the Employer. The Contractor shall be entitled to submit to the Engineer requests for interim payments only upon the achievement of one or more of the Milestones described in the Cost Centre.

At the beginning of each month, the Engineer shall issue to the Contractor certificate in respect of each Milestone due to be achieved in the preceding month stating:

- (i) the date on which the Milestone was achieved; or
- (ii) the non-achievement of the Milestone.

The Contractor shall submit a statement in three copies to the Engineer at the beginning of each month, in a form approved by the Engineer, showing



contractor, assignee or any subsidiary or allied Firm through the Contractor, and shall have power to examine and inspect the same. The above obligations are without prejudice to the obligations of the Contractor under any statute, rules or orders.

Withholding and Lien for Sums Claimed

11.17

- i. The Employer shall have lien over all or any moneys that may become due and payable to the Contractor under the Contract, and/or over the deposit of Performance Security or other amount or amounts made under the Contract and which may become payable to the Contractor.
- ii. And further, unless the Contractor pays and clears immediately on demand any claim of the Employer, the Employer shall at all times be entitled to deduct the amount of the said claim from the moneys, securities and / or deposits which may have become or will become payable to the Contractor under the presents, or under any other Contract or transaction whatsoever between the Employer and the Contractor even if the matter stands referred to Arbitration. The Contractor shall have no claim for any interest or damage whatsoever in respect of any amounts withheld or treated as withheld under the lien referred to above and duly notified as such to the Contractor.

Signature on Receipts for Payments

11.18

Every receipt of payment to Contractor including refund of the Performance Security shall be signed by the person authorized to do so on his behalf. In the event of death of any of the Contractor's partners in case the Contractor is a partnership firm, during the currency of the Contract, it is hereby expressly agreed that every receipt by any one of surviving Contractor's partners, shall, if so signed as aforesaid, be a good and sufficient discharge as aforesaid, provided that nothing in this Clause shall be deemed to prejudice or affect any claim, which the Employer may hereafter have against the legal representatives of any Contractor's partner so dying, for or in respect of breach of any of the conditions of the Contract. Provided also that nothing contained in this clause shall be deemed to prejudice or affect the respective rights and obligations of the Contractor's partners, or of the legal heirs / representatives of any deceased Contractor / partner interse.

Post Payment Audit

11.19

It is an agreed term of the Contract, that the Employer reserves to himself the right to carry out a post payment audit and / or technical examination of the Works, and the Final bill including all supporting vouchers, abstracts, etc., and to make a claim on the Contractor for the refund of any excess amount paid to him, if as a result of such examination, any over-payment to him is discovered to have been made in respect of any Work done or alleged to have been done by the Contractor, under the Contract. If any under-payment is discovered, the same shall be paid by the Employer to the Contractor. Such payments or recoveries, however, shall not carry any interest.

Recovery of money due to the Employer

11.20

All damages (including, without limitation, Liquidated Damages), costs, charges, expenses, debts, or sums for which the Contractor is liable to the Employer under any provision of the Contract may be deducted by the Employer from monies due to the Contractor under the Contract (including, without limitation, Liquidated Damages) and the Employer shall have the power to recover any balance not so deducted from monies due to the Contractor under any other Contract between the Employer and the Contractor or from performance security amount.

When the Contractor has as per the provision of the Contract assigned to a third Party the right to receive monies due, or, to become due, under the Contract to the Contractor or charged such monies in favour of a third Party, the Employer's right to deduct damages (including without limitation Liquidated Damages), costs, charges, expenses, debts or sums for which the Contractor is liable to the Employer from monies due to the Contractor under the Contract shall be limited to the right expressed above.

12 Variations

12.1

Right to Vary

(1) If the procuring entity does not procure any subject matter of procurement or



procures less than the quantity specified in the bidding documents due to change in circumstances, the bidder shall not be entitled for any claim or compensation except otherwise provided in the bidding documents.

- (2) Orders for extra items may be placed by the procuring entity in accordance with the Schedule of Powers of JMRC, up to 5% of the value of the original contract, if allowed in the bidding documents. The fair market value of such extra items payable by the procuring entity to the contractor shall be determined by the procuring entity in accordance with guidelines prescribed by the administ.deptt.
- (3) Orders for additional quantities may be placed, if allowed in the bidding documents, on the rates and conditions given in the contract and the original order was given after inviting open competitive bids. Delivery or completion period may also be proportionately increased. The limits of orders for additional quantities shall be as under:-
- (a) 50% of the quantity of the individual items and 50% of the value of original contract in case of works; and
- (b) 50% of the value of goods or services of the original contract.

Provided that in exceptional circumstances and without changing the scope of work envisaged under the contract, a procuring entity may procure additional quantities beyond 50% of the quantity of the individual items as provided in the original work order with prior approval of the administrative deptt as follows:-

- (i) the procuring entity shall obtain prior approval for revised requirements from the competent authority for reasons to be recorded in writing. Wherever necessary, due to the quantum of orders for additional quantities, the procuring entity shall obtain prior and revised technical, financial and administrative sanctions from the competent authorities;
- (ii) that the additional quantities so procured shall be part and parcel of the work being executed;
- (iii) that the limit of 50% of the value of original contract shall not be exceeded in any case
- (4) Deriving Rates For New Items / Negotiation:

This Sub-clause shall be applicable to all Schedules of BOQ including Lump-Sum Schedule.

In case Engineer introduces an item for which the Contract does not contain any rates or prices applicable to the varied Works, the rate of such items shall be derived, wherever possible, from rate for similar items available in the Bill of Quantities of the accepted Tender. In case this is not possible, the rate may be decided on the following basis:

- a) Cost of Materials at current market price, as actually utilized in the final finished Permanent Works, including a reasonable percentage for wastage and transportation.
- b) Cost of enabling works if any (unless provided for separately) worked out on the above basis but with less stringent quality. Specifications minus salvage value of serviceable material released after completion of Work and cost of material released as scrap.
- c) Cost of labour actually used at the site of Work at rates under Payment of Minimum Wages Act for the area of Work for each category of worker, further enhanced by a percentage of 10% of the aforesaid rates to account for labour not directly utilised at Site and other ancillary and incidental expenses on labour.
- d) Hire charges for Plant & Machinery, scaffolding, shuttering, forms, etc., required to be used at the site of the work. The tools used by the various trades shall not be counted as Plant & Machinery for this purpose.
- e) An amount of 20% of items B.(i) a), b), c) and d) above to allow for Contractor's overheads including water/electricity charges and labour cess etc., profits and corporate taxes etc. No such percentage shall be applicable to the



Page | 53 R1

estimated cost of Materials supplied free of cost to the Contractor.

f) In all cases where extra items of Work are involved, for which there are no rates in the accepted Bill of Quantities, the Contractor shall give a notice to the Engineer, of at least 7 days before the need for its execution arises.

(5). Value Engineering:

The Contractor may, at any time, submit to the Engineer-in- charge a written proposal which (in the Contractor's opinion) will, if adopted, (i) accelerate completion, (ii) reduce the Cost to the **Employer** of executing, maintaining or operating the Works, (iii) improve the efficiency or value to the **Employer** of the completed Works, or (iv) otherwise be of benefit to the **Employer**.

The proposal shall be prepared at the Cost of the Contractor and shall include the items such as Deviations, Variations and Pricing.

If a proposal, which is approved by the Engineer-in-charge, includes a change in the design of part of the Permanent Works, then unless otherwise agreed by both Parties:

- i. the Contractor shall design this part,
- ii. Contractor's General Obligations as per GCC 4.1 shall apply, and
- iii. If this change results in a reduction in the Contract value of this part, the Engineer-in-charge shall proceed in accordance with Clause 3.5 to agree or determine a fee, which shall be included in the Contract Price.

13 Termination of the Contract

Notice to Contractor

13.1

If the Contractor fails to carry out any of his obligations, or if the Contractor is not executing the Works in accordance with the Contract, the Engineer may give notice to the Contractor requiring him to make good such failure and remedy the same within such time as the Employer / Engineer may deem to be reasonable.

Termination of Contract Due to Contractor's Default

13.2

Conditions Leading to termination of Contract

13.2.1 The Employer shall be entitled to terminate the Contract if the Contractor or any one of its constituents,

- a) fails to comply with a notice under Sub-clause 13.1
- b) abandons or repudiates the Contract
- c) without reasonable excuse acceptable to the Engineer, fails to commence the Works in accordance with the Contract
- d) Sub-contracts the whole of the Works or assigns the Contract without approval of the Employer
- e) becomes bankrupt or insolvent or goes into liquidation except voluntary liquidation for the purpose of amalgamation or reconstruction
- f) persistently disregards instructions of the Engineer or contravenes any



Contract ICB No.JP/EW/1C&1D (Elevated)/02: Design and Construction of Elevated Ramp, Elevated Viaduct and one Elevated Station (Transport Nagar) from start of elevated ramp (CH: 13040.00 m) to Transport nagar Dead end (CH: 13996.00 m) of Jaipur Metro phase-1C and Design and Construction of Elevated Viaduct and one Elevated Station (Ajmer Road Chauraha including loop line) from Mansarovar dead end (CH: -1243.930 m) (excluding) to Ajmer Road Chauraha dead end (CH: -2595.930 m) of Jaipur Metro Phase-1D, including Entry Exit Structures, Architectural finishing, water supply, Sanitary Installations, Drainage Works, Pre-Engineered Sheet Roof Structure and Roof Sheeting Works for Jaipur Metro Phase-1C and Phase-1D at Jaipur, Raiasthan, India

will be as below:

- (i) Provision in NIT,
- (ii) Outline Design Specifications (ODS) / Outline Construction Specifications (OCS),
- (iii) MORTH Specification for road & Bridges,
- (iv) CPWD specifications,
- (v) Standard Codes of Practice

In case of discrepancy among Standard Codes of Practice, the order of precedence will be IRS, IRC, IS, BS, DIN.

2.6 <u>DIMENSIONS</u>

- 2.6.1 As regards errors, omissions and discrepancies in Specifications and Drawings, relevant clause of Special Conditions of Contract will apply.
- 2.6.2 The levels, measurements and other information concerning the existing site as shown on the conceptual / layout drawings are believed to be correct, but the Contractor should verify them for himself and also examine the nature of the ground as no claim or allowance whatsoever will be entertained on account of any errors or omissions in the levels or strata turning out different from what is shown on the drawings.

2.7 ASSOCIATED WORKS

Works to be performed shall also include all general works, preparatory works for the construction and works of any kind necessary for the design and satisfactory construction, completion and maintenance of the works to the intent and meaning of the drawings adopted and outline construction specifications (OCS), to best Engineering standards and orders that may be issued by the Engineer from time to time, compliance by the agency with all Conditions of Contract, supply of all materials, apparatus, plants, equipment, tools, fuel, water, strutting, timbering, transport, offices, stores, workshop, staff, labour and the provision of proper and sufficient protective works, diversion, temporary fencing, lighting and watching required for the safety of the public and protection of works on adjoining land; first-aid equipment, sanitary accommodation for the staff and workmen, effecting and maintenance of all insurances, the payment of all wages, salaries, fees, royalties, duties or the other charges arising out of the erection of works and the regular clearance of rubbish, clearing up, leaving the site perfect and tidy on completion.

2.8 CONSTRUCTION DEPOT & DUMPING AREA

For casting yard, batching plant and other activities a plot of land of approx. 35,000 Sqm (combined for Elevated section of package 1C and 1D at one location) will be made available by Engineer on as is where is basis within 45 Km from the work site free of cost. This land shall be made good for such offsite activities as needed by the Contractor at no extra cost to the employer. The land shall be cleared from debris, all structures made by the contractor including, RCC footings and rafts etc. and reinstated to the line, level and to the same conditions as existed before the work started before handing over back to the Employer within 60 days after Taking over Certificate. The final bill shall be released to the contractor after all structures from the construction depot are removed & clearance of site. The cost of setting of yard & reinstatement is included in lump sum price in schedule 'A'.

Director

6.4.5 Protection of Prestressing Steel

Prestressing steel shall be continuously protected against corrosion, until grouted. 'The corrosion protector shall have no deleterious effect on the steel or concrete or on the bond strength of steel to concrete. Grouting shall conform to these specifications or as directed by the Engineer.

6.4.6 Sheathing

The joints of all sheathings shall be water-tight. Special attention shall be paid to the junction at the anchorage end, where the sheathing must tightly fit on the protruding trumpet end of anchorage and thereafter sealed preferably with adhesive water proof tape as per approved manufacturer.

The sheathing and all joints shall be water tight. Any temporary opening in the sheathing shall be satisfactorily plugged and all joints between sheathing and any other part of the prestressing system shall be effectively sealed to prevent entry of mortar, dust, water or other deleterious matter. Sheathing shall be neatly fitted at joints without internal projection or reduction of diameter. Sheathing shall be firmly tied so that while concreting they should not float up. Sheathing shall be aligned accurately with respect to vertical and horizontal coordinate. Enlarged portions of the sheathing at couplings or anchorages shall be of sufficient length to provide for the extension of the tendons.

6.4.7 Grout Vents

Grout vents of at least 20 mm diameter shall be provided at both ends of the sheathing and at all valleys and crests along its length. Additional vents with plugs shall also be provided along the length of sheathing such that the spacing of consecutive vents does not exceed 20 m. Each of the grout vents shall be provided with a plug or similar device capable of withstanding a pressure of 1.0 MPa without the loss of water, air pressure or grout.

6.4.8 Anchorages

All bearing surfaces of the anchorages shall be cleaned prior to concreting and tensioning. Anchor cones, blocks and plates shall be securely positioned and maintained during concreting such that the centre line of the duct passes axially through the anchorage assembly. The anchorages shall be recessed from the concrete surface as per drawings.

After the prestressing operations are completed and prestressing strands are cut, the surface shall be painted with two coats of epoxy of suitable formulation having a dry film thickness of 80 microns per coat and entire recess shall be filled with concrete or non-shrink/pre-packaged mortar or epoxy concrete within 7 days of grouting(in case of stressing and grouting are done in two or more stages, the recess filling should be done within 7 days of last stage grouting but in no case it shall be more than 14 days)

6.4.9 Handling and Storage

Care shall be taken to avoid mechanically damaging, work-hardening or heating prestressing tendons while handling. All prestressing tendons shall be stored clear of the



8.1.5 Alignment of Piles:

- i) Piles shall be installed as accurately as possible according to the drawings either vertically or to the specified batter. All deviations will be measured at the cut off level of the piles. The deviation from the true axis shall not be more than 1.5% for vertical piles and 4% for rake piles. Piles should not deviate in location by more than 75mm when used in groups. For single or 2 piles used under columns, deviation shall not be more than 50mm.
- ii) The Contractor shall maintain a record of actual pile locations in the form of drawing and submit the information to the Engineer at suitable intervals.

8.1.6 Pile Cap:

Pile caps shall be of reinforced concrete. A minimum offset of 250 mm shall be provided beyond the outer faces of the outer most piles in the group. If the pile cap is in contact with earth at the bottom, a leveling course of minimum 75 mm thickness of PCC of grade M15 shall be provided or as shown in the drawings.

The attachment of the pile head to the cap shall be adequate for the transmission of loads and forces. A portion of pile top may be stripped of concrete and the reinforcement anchored into the cap. Manual chipping may be permitted after three days of pile casting while pneumatic tools for chipping shall not be used before seven days after pile casting. The top of pile after stripping shall project at least 50mm into the pile cap. Concreting of the pile cap shall be carried out in dry conditions. All the operations and tools required for making the pile in dry condition is included in the item.

The road surface after casting of pile cap should be repaired immediately. If the surface is not repaired immediately, penalty will be imposed as decided by the Engineer.

8.1.7 Testing of Piles:

- iii) The load tests shall be in accordance with the Indian Standard Code of Practice for Design and Construction of Pile Foundations IS 2911 (Part IV) Load Tests on Piles. For initial load test, test load will be 2.5 times the theoretical designed capacity of pile. For initial load, test arrangement to be designed shall also cater for additional 25% above test load and nothing extra will be paid on this account. Permissible stresses in test arrangement (steel truss or plate girder) to cater for test load plus additional 25% load shall be within permissible stresses as per IS: 800 (as for permanent structure). For test frame, steel of Grade –B conforming to IS: 2062 shall be used.
- iv) Engineer will decide the locations of initial and routine horizontal and vertical load test. One no. initial load test is to be performed in each km for each diameter of pile being used in viaduct. The contractor shall undertake test piles required for initial pile load test in the initial stages of work using the same methodology and equipment"s which will be subsequently used for working piles. These tests shall be undertaken well in advance of working pile. No working pile would be allowed to undertaken till initial satisfactory initial pile load tests have been completed.



Non-granting of permission for pile/ pile cap by Engineer in such respect will not be considered as reason for delay or any claim thereof. The test arrangement to be employed shall be of nature which is quick to install and remove and easily transferable. At every one KM of viaduct initial load test both vertical and horizontal are to be performed by the contractor for each type of pile. Also one initial load test both vertical and horizontal per station are to be performed by the contractor for each type of pile.

- v) Routine horizontal & vertical load tests are performed as a check on the load carrying capacity and settlements of the pile foundations. At least one routine test shall be performed for every 100 piles unless otherwise specified by the Engineer. Initial and routine vertical and horizontal load test shall be conducted on different piles.
- vi) The Contractor shall give the Engineer at least 48 hours notice of the commencement of construction of these piles which are to be subjected to Initial Tests.
- vii) The load tests shall not normally be conducted unless the concrete is at least 28 days old. However in special circumstances, permission can be given by Engineer for prior testing.
- viii) All testing shall be done under the direction of experienced personnel conversant with the equipment and the testing procedure.
- ix) Before the commencement of the tests all the particulars regarding the test pile including boring data and concrete cube strengths shall be made available at site and shall form a part of the test report.
- x) On completion of each load test the Contractor shall submit a report of the load test which shall include the following information.
 - a) Description of soil conditions, ground water table, actual boring and installation records, concrete cube test results.
 - b) Method of load application
 - c) Load settlement readings during loading and unloading
 - d) Time load-settlement curve
 - e) All other observation relevant to the test being conducted.
- xi) Integrity test

Two types of pile integrity tests will be performed:

Dynamic Integrity Test:

The Dynamic Integrity test using pile driving analyser or approved equivalent for pile integrity shall be performed on all the piles. The top of the pile shall be made accessible, chipped off up to hard concrete, levelled by trimming it back as far as practicable. The reinforcing bars of the piles tested shall be bent sideways. The test shall be performed after removal of bad/weak concrete at top so that the wave propagation is steady through hard concrete. The test shall be carried out at minimum 3 locations on each pile in such a way that the entire cross section of the pile is evenly covered. The test shall be conducted with a minimum age of



Grades of raw elastomer of proven use in elastomeric bearings, with low crystallization Grades of raw elastomer of proven shelf life (e.g. Neoprene WRT, Bayprene 110 Skyprene B and Denka S 40V) as indicated in latest revision of IRC-83, Part II) shall be used

No reclaimed rubber or vulcanized wastes or natural rubber shall be used.

The raw elastomer content of the compound shall not be lower than 60 per cent by its weight. The ash content shall not exceed 5 percent (as per tests conducted in accordance with ASTM D-297, sub-section 10).

EPDM and other similar candidate elastomer for bridge bearing use shall not be permitted.

b) Properties

The elastomer shall conform to the properties specified in Clause 4.3.1 of the IRICEN publication titled "Bearings for Railway Bridges" and those specified in Table 2000-1 of the publication titled "Specifications for Road and Bridge Works", published by IRC on behalf of MORTH (Roads Wing).

c) Fabrication and Tolerances

Fabrication and Dimensional tolerances shall be governed by the specifications laid down in Clause 4.3.2 of the IRICEN publication & Clause 2005.3 of the MORTH specifications mentioned above.

d) Acceptance Specifications

For inspection and testing requirement Clause 4.4 of the above mentioned IRICEN publication shall be referred with modifications of lot size as mentioned below:-

Sampling testing and acceptance consideration will be made on a lot basis. A lot shall be defined as those bearings presented for inspection at a specific time or date. A lot shall be further defined as the smallest number of bearings as determined by the following criteria.

- i. A lot shall not exceed a single contract or project quantity;
- ii. A lot shall not exceed 50 bearings;
- iii. A lot shall consist of those bearing of the same type regardless of load capacity.

Accepting and testing requirements shall also conform to the specifications laid down in Clause 2005.4 of the referred MORTH specifications.

In addition to tests mentioned above, all bearings shall be also weight actually and compared with the theoretical weight.

All bearings shall carry a warrantee of not less than 15 years in an approved format. The contractor shall be responsible for immediate repair or replacement of the bearings in case of failure / distress to the satisfaction of the owner at no extra cost to the Owner within the warrantee period.

Criteria for Selection of bearing manufacturer shall conform to requirement of Most letter No-RW/NH-34057(1) / 95-(S & R) dated 2nd November,2000. It is necessary that all manufacturers of all elastomeric bearings shall have in house facilities for carrying out Infrared Spectro-Photometry as per ASTM D-3677.



ANNEXURE A

SPECIFICATION OF CRYSTALLINE PRODUCTS

Product - Integral Crystalline Waterproofing/Durability Admixture

CRYSTALLINE ADMIX

Dosage - minimum 0.8% by weight of cement + cementitious material (OR such lower dosage as recommended by Manufacturer at which product meets the product qualification criteria listed in this document- Duly approved by JMRC).

Integral Waterproofing/ Durability admixture should be SINGLE part cementitious powder consisting of hydrophilic chemicals. When added to plastic mix, will permanently create impermeable hardened concrete by developing insoluble needle like crystals to seal the pores, capillaries, micro-cracks in the whole mass of concrete and enhances the durability of concrete. The crystalline admixture must be compatible with any other concrete admixture confirming to ASTM D494 and IS 9103. It shall be used for all underground structures (including shortcrete in tunnel lining). In addition, the waterproofing admixture must confirm to the following requirements:

- i. It shall possess CE approval as per EN934-2.
- ii. The crystalline admixture shall be compatible with any other concrete admixture confirming to ASTM D494. The product shall be approved by MORTH & must have IRC accreditation for durability enhancement.
- iii. At the manufacturer's recommended dosage, material must fulfil the requirements of American Concrete Institute Guidelines ACI-212-3R-10 Chapter 15 and fall under PRAH (Permeability reducing Admixtures for HYDROSTATIC conditions) and must reduce Coefficient of Permeability of concrete by more than 90%(preferably zero permeability), when compared to control concrete and tested as per DIN 1048 Part 5 by carrying out 4 cycles each of 5 bar Hydrostatic Pressure for 72 hours and drying for 48 hours between the cycles & Coefficient of Permeability calculated as per Darcy's Formula/ Valenta equation by incorporating penetration values obtained at the end of fourth cycle pressure.
- iv. At the manufacturer's recommended dosage rate, the material must reduce Chloride Diffusion Co-efficient by minimum 45% when tested as per ASTM C 1556 -4 / or its equivalent and compared with the control concrete, thereby prolonging the durability & service life of the treated concrete structure.
- v. At the manufacturer's recommended dosage rate, the crystalline admixture treated concrete must be able to withstand high hydrostatic pressure of 16 bar (156 M of water head) when tested as per DIN 1048



Ajmer Road (Chauraha) Ch: -2166.230m POLYCARBONATE ROOFING SHEET POLYCARBONATE ROOFING SHEET POLYCARBONATE ROOFING SHEET POLYCARBONATE ROOFING SHEET GALVALUME ROOF LEVEL GUTTER AT ROOF LEVEL RAINWATER PIPE AS/ PLUMBING RAINWATER PIPE RAINWATER PIPE RAINWATER PIPE HIGH POINT -HIGH POINT AS/ PLUMBING HIGH POINT AS/ PLUMBING GALVALUME ROOF SHEET SOLAR PANELS SOLAR PANELS SOLAR PANELS SOLAR PANELS SOLAR PANELS SOLAR PANELS TRACK CENTRE LINE MAINTÉNANCÉ WALKWAY MAINTENANCE WALKWAY MAINTÉNANCE WALKWAY MAINTENANCE WALKWAY TRACK CENTRE LINE +436.09 M GALVALUME GUTTER AT ROOF SHEET ROOF LEVEL GALVALUME ROOF SHEET AS/ PLUMBING AS/ PLUMBING 1 ROOF LEVEL PLAN 1. GROUND LEVELS ARE INDICATIVE, CONTRACTOR TO VERIFY EXISTING FINISHED LEVELS AT SITE PRIOR TO COMMENCEMENT OF CONSTRUCTION. 2. CONTRACTOR TO VERIFY THE LEVELS FOR STAIRCASE, AND VERTICAL TRANSPORTATION ELEMENTS OF THE GENERAL. NOTES: ENTRY STRUCTURES PRIOR TO COMMENCEMENT OF CONSTRUCTION. 1. ALL DIMENSIONS ARE IN MM, UNLESS OTHERWISE MENTIONED. 3. ALL LEVELS ARE IN METERS, INDICATING T.O.C. WHEREVER APPLICABLE (TOP OF CONCRETE). 2. ALL DIMENSIONS ARE TO BE READ AND NOT MEASURED. 4. ABSOLUTE RAIL LEVEL SHALL BE TAKEN FROM JMRC ALIGNMENT DRAWING. 3. THIS DRAWING MUST BE READ IN CONJUNCTION WITH ALL RELEVANT ALL MINIMUM INTERNAL CLEARANCE ARE MANDATORY AND SHALL BE PROVIDED. ARCHITECTURAL, STRUCTURAL, PLUMBING, FIRE FIGHTING, ELECTRICAL AND REFER LATEST STRUCTURAL & SETTING OUT DRAWINGS IN CONJUNCTION WITH ARCHITECTURE DRAWINGS TRAFFIC MANAGEMENT DRAWINGS. PRIOR TO COMMENCEMENT OF CONSTRUCTION. 4. ANY DISCREPANCIES MUST BE BROUGHT TO NOTICE OF THE ENGINEER 7. ALL CUTOUTS AND FIRST FIX PROVISIONS FOR MEP/SYSTEMS REQUIREMENTS TO BE REFERRED FROM LATEST BEFORE EXECUTION OF WORK AT SITE. REVISION OF DISCIPLINE DRAWINGS. 5. CONCOURSE LENGTH MAY GET REVISED AS PER FUTURE ROOMS MASONRY WORK OF THE STATION MAY VARY AS PER DETAILED ARCHITECTURAL LAYOUT OF THE STATION. REQUIREMENTS GIVEN BY SYSTEM VIDE CONTRACTORS OR OPERATIONAL/ 9. DOUBLE SLAB MAY BE PROVIDED UNDER STAIRCASE/ ESCALATOR FOR ALL ROOMS TO AVOID SEEPAGE TECHNICAL DEPT. OF JMRC BETWEEN THE GAP OF STAIRCASE AND ESCALATOR. 6. FOR FURTHER INFORMATION ABOUT FINISHES REFER TO FINISHES SCHEDULE. 10. APPROVALS TO BE TAKEN BY THE CONTRACTOR FOR ANY DEVIATIONS IN MATERIALS/QUANTITIES ON THE BOQ. 7. FOR ANY DEVIATION FROM B.O.Q. IN MATERIALS / QUANTITIES APPROVAL MAY 11. FOR LIGHTING ARRANGEMENT & ELECTRICAL DETAILS PLEASE REFER SPECIFIC ELECTRICAL DRAWINGS. BE TAKEN. 12. FOR 33KVA AND S&T CUTOUT/SHAFT SHOULD BE REVIEWED BY RESPECTIVE SYSTEM VIDE CONTRACTOR. 8. ALL DOOR/WINDOWS SILL & LINTEL LEVELS ARE FROM MAIN FLOOR FINISH 13. EARTH MAT SIZE AND LOCATION TO BE CONFIRMED BY E&M (JMRC) 14. WATER PROOFING TO BE DONE AT O.H. & UG TANK LEVEL/ OTHER WET AREA MATERIAL AS PER/BOQ. 9. COLUMN LOCATION AND STRUCTURAL ARRANGEMENT SHOWN ARE INDICATIVE 15. REFER VENDOR DRAWINGS FOR ESCALATOR AND LIFT PIT SIZE AS FINALIZED BY JMRC. 16. REFER VERTICAL TRANSPORTATION VENDOR DRAWINGS FOR FINAL STRUCTURAL PROVISIONS AS FINALIZED 10. ALL THE COMPONENTS LIKE RAMPS, DROP OF ETC COMPLETE FOR MMI INTEGRATION AS PER GUIDELINES & APPLICABLE CODES TO BE CONSIDERED 17. BEFORE STARTING ANY E&M WORK INTERFACE WITH CIVIL CONTRACTOR TO BE REQUIRED. PROVISION OF UNDER RELEVANT BOQ OR DMRC AGREEMENT. SUPPORTS IN PRECAST/ PRE-STRESSED SLABS IS IN THE SCOPE OF CIVIL CONTRACTOR. 11. ALL THE WORK ARE IN LUMPSUM SCOPE UNLESS OTHERWISE MENTIONED. 18. THE EXISTING UTILITY PLAN FOR UNDERGROUND AND ABOVE GROUND WILL BE PROVIDED BY JMRC, DRAWING Ayesa India Private Limited 12. FLOOR AND WALL CUTOUT LOCATIONS ARE TENTATIVE. TO BE FINALIZED MAY REVISED IN FUTURE AS PER UTILITY PLANS. BASED ON SEM AND WOD DRAWINGS 19. PROVISION OF SUPPORT IN FOB FOR TRAVEL OF SERVICES TO BE PROVIDED BY CIVIL CONTRACTOR. प्रमाणित किया जाता है कि यह है कि दस्तावेज डी० डी० सी० की चित्रांकन संदर्भ जारी किये गए चित्रांकन NOTICE OF NO OBJECTIONS' FROM EMPLOYER'S REPRESENTATIVE. PROJECT:-Design and Construction of Elevated Ramp, Elevated Viaduct and one Elevated Station Authorised Signatory for DDC. ओर से गुणवत्ता आश्वासन योजना के अनुसार तैयार किया गया है। REFERENCE DRAWINGS ISSUED DRAWINGS (Transport Nagar) from Badi Chaupar (excluding) to Transport Nagar dead end of Jaipur Metro Phase-1C GENERAL CONSULTANTS (DMRC) Certified that this document has been designed and checked in accordance with DDC Quality Assurance Plan. and Design and Construction of Elevated Viaduct and one Elevated Station (Ajmer Road Chauraha) from चित्रांकन संख्या Doulon DESCRIPTION Mansarovar (excluding) to Ajmer Road Chauraha dead end of Jaipur Metro Phase-1D, including Entry Exit S.NO. DRAWING NO. Dy.CE/CRE/JP PD/JP CLIENT:-Structures, Architectural finishing, water supply, Sanitary Installations, Drainage Works, Pre-Engineered Dy.CA JAIPUR METRO RAIL CORPORATION LTD. Sheet Roof Structure and Roof Sheeting Works for Jaipur Metro Phase-1C and Phase-1D at Jaipur CA/BD Dy.CE/Design JAIPUR METRO CE/DESIGN-I Dy.CEE/TR STATION NAME: AJMER ROAD CHAURAHA 215/15 GENERAL CONSULTANT:-Dy.CEE/E&M DELHI METRO RAIL CORPORATION LTD. JGM/Track DRAWING TITLE: ROOF LEVEL PLAN JGM/AFC चित्रात्मक पैमाना GRAPHICAL SCALE: 1:200 DATE: 28-04-23 REV:R0 STATUS: TED Dy.CSTE/Tel. DDC:-Ayesa India Private Limited पृष्ठ संख्या Dy.CSTE/Sig. चित्रांकन संख्या D 99, 3rd Floor, Sector 2, Noida -201301, Gautam SHEET NO: SHEET SIZE:

(*Definition OF TERMS NOC/APPROVAL to be read as per terms outlined in respective Contracts, Notice of no

objection from employer is being accorded for design principal only.)

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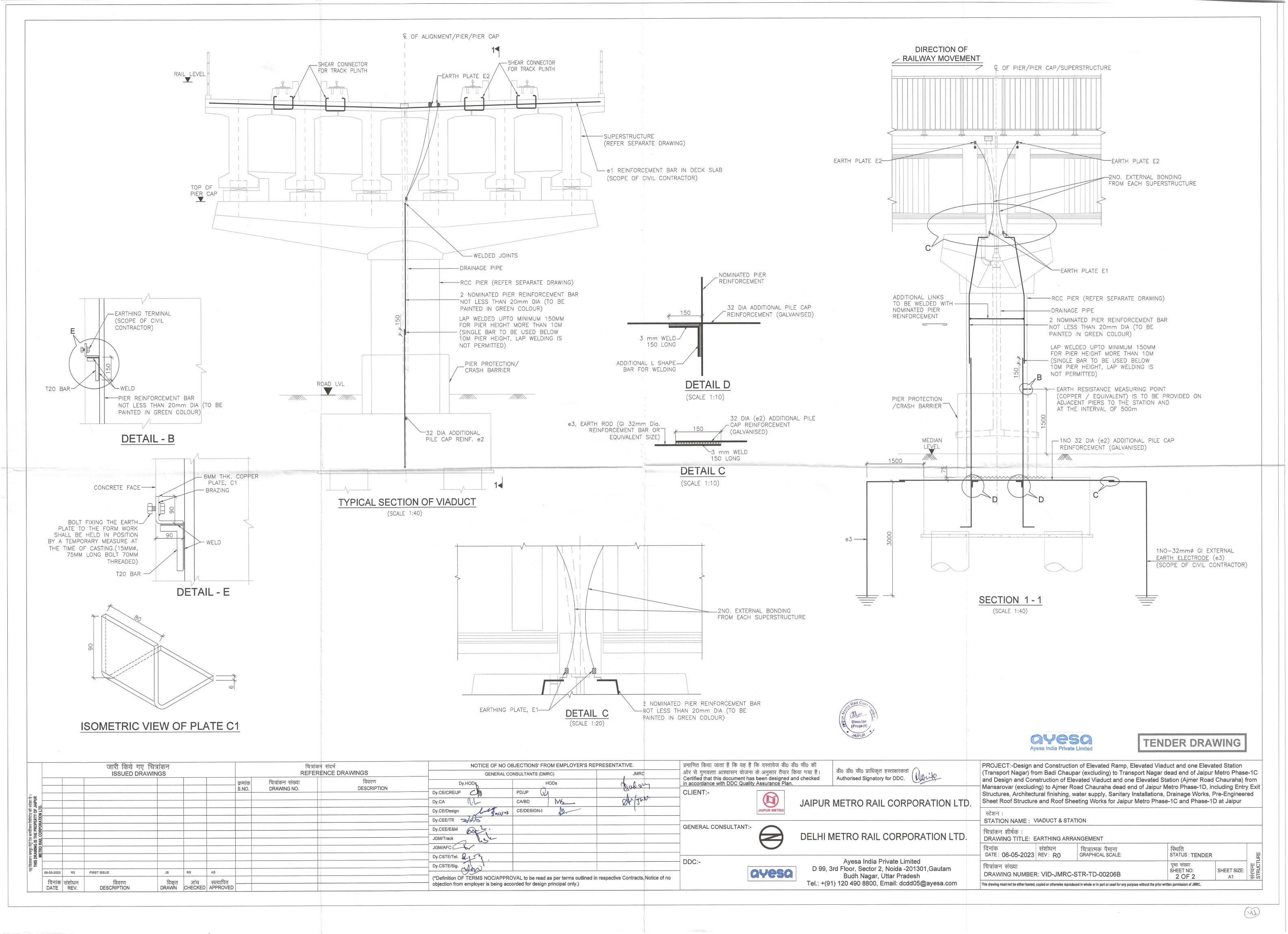
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DRAWING NUMBER: JMRC-STN-AJR-TED-ARP-11004

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CHAPTER 1 GENERAL

1.0 INTRODUCTION

The work for conducting "Geo-technical Investigation work for Extension of underground and elevated section E-W Corridor from Badi Chouper to Transport Nagar (2.85Km) Phase-1C and Mansarovar to Ajmer Road (Chauraha) (1.35 km) Phase-1D" of JAIPUR METRO RAIL CORPORATION at Jaipur" was awarded to CEG Test House & Research Centre Pvt. Ltd. (CEGTH) by M/s Jaipur Metro Rail Corporation Ltd. vide work order no. FN:7(C-430)/JMRC/Phase-1C&1D/Geo/2023/02 Dated 04.04.2023.

The objective of this detailed geotechnical investigation work is to assess the nature and strength characteristics of the sub strata and to evaluate the soil / Rock core parameters required for design of suitable foundations for various structures.

Field work including drilling of boreholes, conducting various other field tests and collection of soil samples was carried out in the presence of Engineer in charge. Laboratory tests were conducted on selected soil samples to determine the design parameters, conforming to relevant specifications and as per guidelines received from the client.

This report includes the detailed Methodology of Investigation, collection of soil samples, field test results, laboratory test results and analysis of results based on soil / rock core samples collected from the locations of 08 boreholes carried out at elevated section for metro project.

DETAILS OF SITE & GENERAL GEOLOGICAL HISTORY

The location of proposed site is situated in between Jhotwara and Bagru block of district Jaipur in the state of Rajasthan. As per IS 1893, the site falls under seismic zone II (Seismic intensity – Low), which corresponds to a Modified Mercalli Intensity of VI. In seismic design, Zone factor Z of 0.10 is recommended for Zone-II.

From Field Investigation study, it was observed that strata is in cohesionless in nature.

The strata observed at site is generally of medium dense to dense below EGL which becomes very dense as the depth increases.

Local Geology

The generalized geological sequence as observed in the field can be summarized as under:

Jaipur district is located in the eastern part of Rajasthan. It is bounded in the north by Sikar district, in the east by Alwar and Dausa districts, in the south by Tonk districts and in the west by Ajmer and Nagaur districts. It stretches between 26° 26' 08.11" to 27° 51' 52.11" north latitude and 74° 54'



Director (Project)

Geo-technical Investigation work for Extension of underground and elevated section E-W Corridor from Badi Chouper to Transport Nagar (2.85Km) Phase-1C and Mansarovar to Ajmer Road (Chauraha) (1.35 km) Phase-1D of Jaipur Metro Rail Corporation at Jaipur

- Atterberg's Limits
 - (a) Liquid limit
 - (b) Plastic limit
 - (c) Plastic Index
- Specific gravity
- Bulk and dry densities
- Consolidation tests
- Triaxial tests
- o Direct shear test
- Chemical tests on soil samples
- Submitting draft report including all field records and laboratory test results, graphs etc. all complete as per specification.

FIELD INVESTIGATION

For geotechnical investigation work, drilling rig was installed at the specified borehole location along with the required men & machineries for conducting the requisite field work. The location of borehole is shown vide location plan attached under **Appendix - A1**. The details of borehole locations are shown here in below:-

Table 1.1: Details of Borehole Locations

S. No.	Chainage (km)/Struct	BH No.	Depth of Water Table	Depth of Borehole below	Co-ordi	nates (m)
	ure		below EGL (m)	EGL (m)	E	N
1		BH-01		40	573927.000	2973284.000
2		BH-02		40	573809.000	2973346.000
3		AJC ST-01		40	573357.000	2974037.000
4	Elevated	BH-03	Not	40	573675.000	2973532.000
5	Section	BH-04	Encountered	40	573556.000	2973714.000
6		BH-05		40	573458.000	2973865.000
7		AJC ST-02		40	573307.000	2974162.000
8		BH-06		40	573182.000	2974356.000



FIELD INVESTIGATION IN SOIL STRATA

Following practices were followed at site:

The locations of 08 boreholes, were marked on the ground as per the layout given by the Engineer in charge. These locations are shown in **Appendix-A1** attached subsequently.



Geo-technical Investigation work for Extension of underground and elevated section E-W Corridor from Badi Chouper to Transport Nagar (2.85Km) Phase-1C and Mansarovar to Ajmer Road (Chauraha) (1.35 km) Phase-1D of Jaipur Metro Rail Corporation at Jaipur

- In soils, boreholes of 150mm dia. were drilled as per the standard procedure laid in IS: 1892 as per specifications
- ➤ Boreholes were properly cleaned before taking any sample in soil.
- > Standard Penetration Tests & collection of undisturbed / disturbed soil samples were conducted at the locations of various boreholes as per the specifications and at specified depths.

The detailed procedure adopted for conducting various field tests are described in the following paragraphs:

Standard Penetration Test

The Standard Penetration Test was conducted in boreholes at regular interval in depth as per IS 2131. The test was carried out using the standard split spoon sampler to measure the number of blows 'N'. Standard split spoon sampler was attached to an 'A' rod. It was driven from borehole bottom to a distance of 45 cm using a standard hammer of 63.5 kg falling freely from a height of 75 cm to the required depth. While driving, the number of blows required to penetrate every 15 cm are recorded. The total number of blows required for the last 30 cm is taken as 'N' value at that particular depth of the borehole. Wherever the total penetration was less than 45cm, the no. of blows & the depth penetrated is recorded in the respective bore logs.

SPT 'N' values were correlated with relative density of non-cohesive stratum and with consistency of cohesive stratum as given below:-

Table 1.2: Soil compactness as per SPT N values (cl. 9.7, table 9.3 & 9.4, page 330_text book of V.N.S. Murthy)

Correlation for C	lay / Plastic silt	Correlation for	Sand / Non-Plastic silt
Consistency	SPT 'N' Value	Compactness	SPT 'N' Value
Very Soft	0 - 2	Very Loose	0 - 4
Soft	2 - 4	Loose	4 - 10
Medium	4 - 8	Medium	10 - 30
Stiff	8 - 15	Dense	30 - 50
Very Stiff	15 - 30	Very Dense	> 50
Hard	> 30		

The field SPT N values were corrected as per the guidelines given in IS: 2131 as follows:

- (a) For overburden: The N value for cohesion less soil is corrected with the help of fig. 1 given in IS-2131.
- (b) Due to dilatancy: Wherever N values observed below water table in fine sand, silty sand or silt was greater than 15, then corrected N values were corrected as under:

$$N' = 15 + \frac{1}{2} (N-15)$$



Director (Project)

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National Plasticity Natural Mois Natural Mois	-acchinical Investigation work for Extension of E-W corridor from Badi per of Tanapach Chainage (Location Laskin) Phase-ID of Jaipur Metro Rail Corporation at Jaipur." 24-04-2023 to 29-04-2023 In front of DTDC (Left Side) Grain Size Distribution % wt retained	Date of Boring Chainage/Location 24-04-2023 to 29-04-2023 In front of DTDC (Left Grain Size Distribution % wt retained	Date of Boring Chainage/Location 24-04-2023 to 29-04-2023 In front of DTDC (Left Grain Size Distribution % wt retained	Date of Boring Chainage/Location 24-04-2023 to 29-04-2023 In front of DTDC (Left Side) Grain Size Distribution % wt retained	Date of Boring Chainage/Location 24-04-2023 to 29-04-2023 In front of DTDC (Left Grain Size Distribution % wt retained	Date of Boring Chainage/Location to 29-04-2023 In front of DTDC (Left Size Distribution % wt retained	Date of Boring Chainage/Location to 29-04-2023 In front of DTDC (Left Size Distribution % wt retained	Chainage/Location Side) Wat retained	Chainage/Location Side) Wat retained	inage/Location nt of DTDC (Left Side)				B.H. No. BH-04 Atterberg Limits		Depth of Water Table Not Encountered (inre)	untered after Tab		Termination Depth A0.00 m	572 She:	Cor 573556.000 m Shear Strength	dinates	297371	4.000		x 44	m olidation	.L. Ref. Code S865 m SR-837_23-24 Consolidation Parameters	ode 23-24 ers
0 NIN NP 164 745 153 265 DST 002 28	Depth from G. Observed Spr Corrected S Value (Nc Clay IS Symbo IS Chassificat IS Symbo Clay Silt Fine Medium Fine	(N) Corrected S Soil Description IS Symbo Clay Silt Sime Silt Silt Silt Silt Silt Silt Silt Silt	Soil Description IS Symbo Clay Silt Fine Fine	Clay Silt Fine	Clay Silt Fine Medium	Sirk Ping MulboM	Fine muibalV		Coarse		Fine	Coarse	timid biupid		хәриј	timi.I	SioM IsrutsN	Content (%	Specific Gra	Type of Test	(kg/cm²)	Friction (°)	(%)	(kg/cm²)	(598/m2) (69) oiteM bioV	Pressure		2-01 x ₂ M	Compression
1	0.00 Filled up soil	Filed up soil	Filled up soil		1	1	ı		i		ı	ı							•			•							•
No No No No No No No No	3.00 12 14	7						-										•	•	-		•					-	•	•
0 NII NP 1167 755 155 263 DST 0.02 28	4:00 - SP-5M 0 10 80 9 1	- SP-5M 0 10 80	SP-5M 0 10 80	0 10 80	10 80	10 80	08	9 1	1		0	0								DST	0.02	28							•
0 Nil NP 1 167 255 155 263 DST 0.02 28	4.50 15 16						•					ı	ı			•			•			•							•
1	61 61 00.9	61						1											•										
0 Nil NP 1 169 782 1.57 2.63 DST 0.03 29	7:00 - SP-SM 0 12 81 5 2	- SP-SM 0 12 81 5	SP-5M 0 112 81 5	0 12 81 5	12 81 5	12 81 5	81 5		2		0	0								DST	0.02	28							
0 - Nil NP - 160 782 1.57 2.63 DST 0.03 29	7.50 22 20	20			•	•	•				,								•	,									
0 Nil NP 1.69 782 1.57 2.63 DST 0.03 29	9.00 26 22	22																											
0 Nii NP 1.73 1.58 2.63 DST 0.04 29	00.00 m2-q2	88 8 0 WS-dS	88 8 0 WS-dS	88 0	88	88	88	3 1	1		0	0								DST	0.03	29							
0 Nil NP	10.50 30 24	24			•	•	,	•	•																				•
0 Nii NP 1.71 7.95 1.58 2.63 DST 0.04 29	12.00 34 26 Medium dense to dense, brownish	26 Medium dense to dense, brownish	Medium dense to dense, brownish		•	•	1	1	•											-									•
0 Nii NP 1.72 8.02 1.59 2.63 DST 0.04 30	13.00 poorly graded sand with silt SP-SM 0 11 83 4 2	poorty graded sand with silt SP-SM 0 111 83 4	poorly graded sand with silt SP-SM 0 111 83 4	SP-SM 0 11 83 4	11 83 4	11 83 4	83 4		2		0	0								DST	0.04	59							•
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0 Nii NP 1.72 8.02 1.59 2.63 DST 0.04 30	15.00 41 28			•	•	•	•	•	•			ı	ı	•					•			•							•
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٠	Jeo-tech	ınical Inve	vestigation	Geo-technical Investigation work for Extension of E-W corridor from Badi	dor from Bad			Date	Date of Boring			Chainage/Location	Location	B.1	B.H. No.	Depth	Depth of Water Table	r Table	Termination Depth	ation		Cor	Cordinates (E,N)	E,N)			R.L.		Ref. Code	de
Project C	houper t Chaurahz	to Transpo a) (1.35km	port Naga km) Phasa	Chouper to Transport Nagar (2,85km) Phase - IC and Mansarovar to Ajmer Road (Chauraha) (1,35km) Phase-1D of Jaipur Metro Rail Corporation at Jaipur."	ar to Ajmer R on at Jaipur."	oad	24-04-2023		to 2	29-04-2023		front of D Side	In front of DTDC (Left Side)		BH-04	No	Not Encountered	cred	40.00 m	m (5735.	573556.000 m		297371	2973714.000 m	±	(+)415.865 m		SR-837_23-24	23-24
ə					noi			Grain Siz	Grain Size Distribution %	ution % v	wt retained			Atterbei	Atterberg Limits	%	(_E mɔ/		(_E mɔ)	Ų.	Shear	Shear Strength						Consolidation Parameters	Paramete	rs
Sample Typ	I.O morth ttgs (I. T. T. A. S.	Observed SPT 7 (N) Corrected SI	Corrected SI Value (N _c)	Soil Description	IS Classificati	lodmy2 21	Clay	His	Fine	Medium d	Fine	Gravel Coarse	timid biupid	Plastic Limit	Plasticity XebnI	Shrinkage Limit	Bulk Density (g	Vatural Moist %) tnotno	Dry Density (g/	Specific Grav	Type of Test	Cohesion C (kg/cm²)	Angle of Friction (%)	Free Swell Ind (%) Swelling Press	(kg/cm²) Permeability	(ce) (cm/sec) (co) oita Ratio (co)	Pressure	С^ х 10-е (кВ\сш ₅₎	(cm ² /Sec) M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _c)
I sgn	19.00				•		-		•		•	•	•	•		ı	•	•	-							•	•	•	•	
SPT-12 19	19.50	56 3	33				ı			,	•	•	·	•		ı			,							•	•	•	ı	,
SPT-13 2	21.00	58 3	33								'	•														•	•	•		,
UDS-6 2	22.00				WSSW		0	6	82		0	0	•	Ī	Ř		1.73	8.14	1.60	2.63	DST	0.05	30			•	'	•		
SPT-14 27	22.50	61 3	33				ı				'	•			•											•	'	•		
SPT-15 2	24.00	99	35	Dense, brownish, Silty sand	ws		0	14	. 11	7 2	0	0		Nii	ďΝ		1.74	8.15	1971	2.63	DST+	0.00	30			'	•			
UDS* 2:	25.00						ı				•	•			•	1			ı							•	•	•		•
SPT-16 2:	> 25.50	>100					ı				'	•			•											'	'	•		
SPT-17 2	27.00 >	>100			WS		0	41	73	7 5	-	0		Ē	Ř		1.83	8.26	1.69	2.64	DST+	0.00	33			•	'	•		
UDS* 28	28.00										•	•	•						ı								•			
SPT-18 28	28.50	>100					-				•	•	•		•			-								•	-	•	•	•
SPT-19 30	30.00	>100					-			-	•	•	•	٠	٠	•	-	-	•		-	-			-	•	-	•	•	-
UDS* 3	31.00		i				•				•	ı	•	•	•		•	•	•				ı		•	•	•	1	i	r
SPT-20 3	31.50 >	>100	i		ws		0	14	69	9 6	2	0	•	Nil	NP		1.84	8.33	1.70	2.64	DST+	0.00	33		•	•	•	1	i	r
SPT-21 3:	33.00	>100		Very dense, brownish, Silty sand	-		-		•		•	•	•	•		ı	•	•	-							•	•	•	•	
NDS* 3	34.00						ı			'		•														•	•	1		•
SPT-22 3-	34.50	>100										•	•						ı								•			
SPT-23 36	36.00	>100	i	John Aren			•	1			'		•	•			•	1							'	'				r
				Rail Corporation of the Corporat	•																									

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le	-24		1	Compression Index (C _c)				
Ref. Code	SR-837_23-24	Consolidation Parameters		²⁻ 01 x ₂ M (g ^X / ² mo)				
	SR	tion Par		C _v x 10 ⁻⁴	ı			
	m 59	onsolida		Pressure (kg/cm ²⁾			ı	
R.L.	(+)415.865 m	ŭ	(0	o) oitaЯ bioV				
		,		Permeabil			,	
	2973714.000 m		(Swelling Pro (kg/cm ²				
(E,N)	29737			Free Swell I			ı	
Cordinates (E,N)			_	Angle of (°p) noitairT		33	•	
Con	573556.000 m	Shear Strength		(kg/cm²)		00.00		
	573550	Shear S		Type of Test		DST+		
								·
Termination Depth	40.00 m	, yii	V B	Specific Gr	'	2.64	•	•
Tern	04	(_E wo	/ B)	Dry Density (1.70		
r Table	ered			Matural Mo Content)	ı	8.48	ı	
Depth of Water Table	Not Encountered	(_E W3)	3)	Bulk Density		1.84	,	
Depth	10N	\o		Shrinkage Limit	ı	ı	ı	
No.	.04	Limits %		Plasticity xəbn1		NP		
B.H. No.	BH-04	Atterberg Limits %	1	Plastic Limid		ï.Z		
ıtion	(Left	¥	1	imid biupid				
Chainage/Location	In front of DTDC (Left Side)		vel	Coarse	,	0	,	
Chain	In front	wt retained	Fine Gravel			0	,	
	2023	% wt re		Coarse	ı	6.		,
S I	29-04-20	ibution	Sand	muibəM		10		
Date of Boring	to	Grain Size Distribution %		Fine		17		-
Date	2023	Grain S		ЭIIS		91		-
	24-04-2023			СІву		0		
3	I		Io	qws SI				•
or from Badi	n at Jaipur."	uo	its	IS Classific	•	WS		
"Geo-technical Investigation work for Extension of E-W corridor from Badi	11 uper Competio (Classical) Phase-To of Japan Metro Rail Corporation at Japan."			Soil Description				
nvestigat	sport ivag Skm) Pha.	Te		Corrected Value (N				,
chnical I	aha) (1.35			Observed SP (V)		>100	>100	>100
"Geo-te	(Chaura	(m) "	r	Depth from G	37.00	37.50	SPT-25 39.00 >100	5 40.00 >100
	35601	э	dλ	T əlqms2	NDS*	SPT-24	SPT-25	SPT-26



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Part	. 01	eo-techn	nical Investi	igation work for Extension of E-W corrido	r from Badi Ch	nouper		Date of B	Boring		Chaina	Chainage/Location		B.H. No.	Dep	Depth of Water Table	er Table		Termination Depth		Col	Cordinates (E,N)	(E,N)			R.L.		Ref. Code	
Marchine		ranspo 5km) P	ort Nagar (2. Phase-1D of	.SXm) frase - I C and Mansarovar to Ajm f Jaipur Metro Rail Corporation at Jaipur."	er Koad (Chau	rana)	28-04-202		30-04	-2024	In fron furniture	t of manik	(c) (a	BH-05	Z	lot Encoun	ntered	40.	m 00	5734	58.000 m		297386	5.000 m	÷			8-837_23	-24
1			Ld		noi		ũ	ain Size D	Distribution		tained		Atteri	berg Lim.		(_є шэ/			Ą1i.	Shea	Strengt			A			idation Pa	ırameter	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			(V) Corrected SI		IS Classificati	lodmy2 21			Medium Medium	Coarse	Pine Gray			Plasticity	Shrinkage	1			Specific Grav	Type of Test		Friction (p°)	(%)			Pressure	C, x 10 ⁻⁴		
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		0.00												<u>'</u>											'				
14. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1																									'	'			
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4	00:			WS				8	0	0					1.62	6.65	1.52	2.62	DST	0.00	59		'	'	'	'	,	
13 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 4															'	'								'	'	'		
24 House, the county, Style and State Levin Live State Le	9															'	'								'	'	'		
24 2 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	15	00:			WS				4	2	-					1.65		1.55	2.62	DST	0.00	30			'	'			
13. 2 Medium datuce, brownish, Stilly stand attractive, brownish, Still stand attractive, brownish	۲.															'	'								'	'			
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6					•																							
3 by 3 by 4 by 4 by 4 by 5 by 4 by 5 by 5 by 5	2	00.0			WS				9	2	2					1.70	7.55	1.58	2.62	DST	0.00	30			'	'	,		,
49 30 4 31 4 4 5 5 6 5 6 5 7 6 7 7 7 7 7 7 7 7 7 7 7 7	2																								-				
4. 3.4 4. 3.4 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4	2																												
48 3.3 4 4 5.3 4 5.4 4 5.4 5.4 5.4 5.4 5.4 5.4 5.4 5.4	2	3.00																											
48 33 34 4 5 5 5 6 7 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7	13																٠		-	-						-			
3 3 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	5								,								,	,							'		,		
35 36 39 37 Medium darse to dense, brownish. SM	91	5.00			WS	•			2	4	2					1.74		1.61	2.62	DST	0.00	31							
59 37	16			\$																									
Medium dense to dense, brownish, SIM sand Silty	- 8			_																									
64 38 Silty sand	19	00%			ws				4	2	1					1.76			2.62	DST	0.00	31			•	-	-		
	19																										-		





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V corridor from E	Froject (0. 18msport Nagar (2.85km) Priase-11- and Mansitovar (6.5)mer Koud (Linatrana) (1.35km) Phase-1D of Japur Metro Rail Corporation at Japur."	noi	IS Classificati	•	•	WS	•	•		WS	•				SW					<u> </u>
Badi Choupe	I (Ciraurana)		Is Symbolic to the control of the co		•	5	•	•		>		•			5			•		
н	<u> </u>		Сіау	-	-	0	-		-	0	-			-	0	-	-		-	
	28-04-2023	Grai	HIS			17	'	'		20		,			19		,			
Date of Bo	to	Grain Size Distribution % wt retained	Fine			74	,	'		73		,			76		,			
Boring	30-04-2024	tribution	Medium Medium			9				S					3					
	-2024	.% wt re	Coarse			3				2					-					
Chain	In fro furnitur	tained	Fine			0	,	,		0		,			1		,			
Chainage/Location	In front of manika furniture (right side)		Coarse			0				0					0					
ion	ika ide)	Atte	timi.1 biupi.1					,				,					,			
B.H. No.	BH-05	Atterberg Limits %	Plastic Limit			ijŽ				ijŽ					ijŽ					
		mits %	Plasticity Index Shrinkage			₫.	,			å.					Ž.					
Depth of Water Table	Not Enc		Limit			- 1.8				- 1.8					- 1.8					
/ater Tab	Not Encountered	nre	Bulk Density (g			1.83 8.14	'			1.84 8.22					1.85 8.89					
	4		Content (%) Dry Density (g/	'		4 1.69	'	'		2 1.70		'			9 1.70		'	'		
Termination Depth	40.00 m		Specific Grav	'		2.63	,	'		2.63	•	,	-		2.63	•	,			
	41	S	Type of Test	'		DST+	'	'		DST+					DST+		'			
	573458.000 m	Shear Strength	Cohesion C	'		0.00	,	'		00'00	•			•	0.00	•				
Cordinates (E,N)	m (ıgth	Angle of Friction (9°)		-	33		-		33		,			33		,			
es (E,N)	2973	хәр	Free Swell Inc (%)				,													
	2973865.000 m		Swelling Press (kg/cm²)	1		,	1	,				,					,			
		A	Permeability (cm/sec)																	
R.L.	(+)416.421	ပိ	Void Ratio (ea)																	
	21 m	nsolidati	Pressure (kg/cm ²⁾	,			,	,				,								
Ref	SR-8.	Consolidation Parameters	C _v x 10 ⁻⁴ (cm ² /Sec)				,	,				,					,			
Ref. Code	SR-837_23-24	neters	(cm ² /Kg)				,					,								



Abtreviations:DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated
Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

e e	1-24	s		Compression Index (C _c)			
Ref. Code	SR-837_23-24	rameter		² -01 x ₂ M (gM ² /Kg)			1
	IS	ation Pa		C _v x 10 ⁻⁴ (cm ² /Sec)			
R.L.	(+)416.421 m	Consolidation Parameters		Pressure (kg/cm ²⁾			1
N.	(+)416		(0	Void Ratio (e			
	m c	A		lidsəmvə¶ əs/mə)			
	2973865.000 m	nre		Swelling Pro mɔ/gɹ)			
Cordinates (E,N)	297	хәр	u	Free Swell (%)			,
ordinate	8	ų,	'	to əlgnΑ (°φ) noitəirA	33		,
0	573458.000 m	Shear Strength		Cohesion C (kg/cm²)	0.00		1
	573	She	-	Type of Test	DST+		1
mination Depth	40.00 m	Λij	ав	3 Specific Gr	2.63		1
Termination Depth	40.0	(cm ³)	/8)	Dry Density (1.70		
Table	red			oM letural Mo Content (9.02		1
Depth of Water Table	Not Encountered	(_E mɔ/	3)	Bulk Density	1.85		,
Depth	Not	,		Shrinkage Limit			
B.H. No.	BH-05	Limits		Plasticity Index	dN		
B.H.	BH	Atterberg Limits %	1	imid oiteste	Nii		
cation	anika t side)		3	imi.1 biupi.1			
Chainage/Location	In front of manika furniture (right side)		Gravel	Coarse	0	-	,
Chai	In fi furni	retained	5	Fine	0		,
	30-04-2024	Distribution % wt retained		Coarse	0		
f Boring	30-0	tributio	Sand	muibəM	2		
Date of Bo	2	Size Dis		Fine	78		,
Ď	28-04-2023	Grain Size		HIS.	20		
	28-04			Clay	0		
houper	паша		lo	dmys SI			
r from Badi C	Noad (Cita	noi	je	IS Classific	ws		
"Geo-technical Investigation work for Extension of E.W. corridor from Badic Chonger The control of School of School of Back 1 Control of School of	to transport raga (2.50km) russe-1 C and mansatovat to Apre (1.35km) Phase-1D of Jappur Metro Rail Corporation at Jaipur."		_	Soil Description			
nvestigati	ear (2.63) ID of Jai			Corrected (A) suls (A)			
echnical I	m) Phase-	9ule V	J	'QS bavrasdO (V)	100 (12cm)	100 (9cm)	100 (10cm)
"Geo-te	(1.35kg	(w)·	I.	Depth from C	4 37.50	39.00	6 40.00
-		ə	dÃ	T əlqms2	SPT-24	SPT-25	SPT-26



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de	2-23	r.s	Compression Index (C _c)			ı			ı	ı	ı			ı	ı	ı						
Ref. Code	SR-837_22-23	Consolidation Parameters	2-01 x M					٠	•			,	,	,		,	•				,	
	s	lation Pa	C _v x 10 ⁻⁴	·		i	į				ı	ı	ı	ı	i	ı	ı	ı		ı	ı	-
R.L.	7,555 m	Consolid	Pressure (kg/cm ²⁾	•		ı	ı				·		•			ı	,			·	ı	
×	(+)417.555		(09) oitaM bio\			į	į					ı	·	ı	ı	ı		ı				
	m c	Á	Permeability (298/m2)	ı			ı	·			ı	ı	ı	ı	ı	ı		ı		ı	ı	
	2974162.000 m	nre	Swelling Press (kg/cm²)					٠							ı							
Cordinates (E,N)	297	хәр	Free Swell Inc (%)	·		ı	į				ı	ı	·	ı	ı	į	ı	ı		ı	ı	
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Abbreviations:DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

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Response to Pre-Bid Queries-JP/EW/1C&1D(Eleveted)/02 Received up to 07.07.2023

Name of Work: Design and Construction of Elevated Ramp, Elevated Viaduct and one Elevated Station (Transport Nagar) from start of elevated ramp (CH:13040.00 m) to Transport Nagar dead end (CH:13996.00) of Jaipur Metro Phase-1C and Design and Construction of Elevated Viaduct and one Elevated Station (Ajmer Road Chauraha including loop line) from Mansarovar Dead end (CH:-1243.930) to Ajmer Road Chauraha dead end (CH:-2595.90) of Jaipur Metro Phase-1D, including Entry Exit Structures, Architectural finishing, water supply, Sanitary Installations, Drainage Works, Pre-Engineered Sheet Roof Structure and Roof Sheeting Works for Jaipur Metro Phase-1D at Jaipur, Rajasthan, India"

S. NO	CLAUSE NO./PAGE NO/SECTION etc.	Heading	Query of Probable Bidder	Clarification by Engineer
1		General	Being EPC tender, please provide Architectural Drawings in CAD format.	Not agreed
2			Please provide the complete set of drawings for detailed study purpose. Few drawings are missing and name of the stations are missing (eg: VOL 3,part 2)-need clarity	Tender drawings are already provided in volume 5. Two drawings having SNo. 17 and 41 which are not visible as per Index are addded. Please Refer SN-23 of Summary Sheet of Addendum-01.
3			Please provide overall site layout which is required to study further site details and condition.	Please refer tender drawings Vol-V drawing no. 23 to 27. please refer Drawing No GEN-JMRC-TD-001 "Sheet 01 of 01""List of Drawings for Elevated Stretch"; SN-23 to 27.
4			Any possibilities to modify the layouts based on egress calculation/circulation effictiveness and space management, please confirm	Preliminary designs are given. Bidder may propose modifications in layouts with better outlook, without any extra claim/variation. Designs shall be approved by Engineer along with requirements of involved stakeholders and concerned authorities.
5	DWG No:JMRC/STN-AJR-TED- ARP-15001	General	Shall the pump room/DG be relocated under staircase/Escalator- if the height permits.	Room allocation prevails as provided in Tender drawings.
6		General	Exterior 3D views required to understand the material finish and design patterns	Preliminary designs are given. Bidder may propose alternate finish and designs patterns with better outlook, without any extra claim/variation. Designs shall be approved by Employer with due recommendation from Engineer.
7		General	Please provide the Architectural drawings for Entry/Exit	Already provided in Tender drawings JMRC-STN-TRN-TED-ARP-15001&JMRC-STN-TRN-TED-ARP-15002 and JMRC-STN-AJR-TED-ARP-15001&JMRC-STN-AJR-TED-ARP-15002
8			Any possibilities of changing the façade design in allign to climatic conditions and on easy maintanance	Preliminary designs are given. Bidder may propose alternate façade designs/ patterns with better outlook without any extra claim/variation. Designs shall be approved by Employer
9	DWG No:JMRC/STN-TRN-TED- ARP11000		Any possibilities of changing the finishing materials interior based on the functional requirement	Preliminary designs are given. Bidder may propose alternate finishes with better outlook without any extra claim/variation. Designs shall be approved by Employer
10	JMRC/ICB No JP/EW/1C&1D(Elevated)/02/Vol:3		IGBC is in Contractor's scope? If so what is the expected rating (GOLD/SILVER/PLATINUM)	It is in contractor's scope & expected rating is Platinum, also refer Appendix-13 of Employers Requirements

S. NO	CLAUSE NO./PAGE NO/SECTION	Hooding	Quart of Brobable Bidder	Clarification by Engineer
5. NO	etc.	Heading	Query of Probable Bidder	Clarification by Engineer
11		General	Façade consultancy will be in Contractor's scope? Need clarity	Facade is an integral part of station building. Kindly refer Tender drawings. Hence it is in scope of Contractor and also refer Employer Requirements Functional clause 2.10 (xii)
12		General	Please provide Exterior finishes schedule.	Finishes schedule is already provided in Tender drawings.JMRC-STN-TRN-TED-ARP-11000&JMRC-STN-AJR-TED-ARP-11000
13		General	FOB will not have roof cover? Required clarity	All FOB's connecting to station building shall have roof cover.
14		General	Interior 3d rendering required	Preliminary Tender drawings are already provided.
15		General	Plumbing & Drainage Drawings required	Conceptual designs are shown in given Tender drawings volume V,VID-JMRC-STR-TD-00204A,VID-JMRC-STR-TD-00204C
16		General	Need Location of WTP Plant room	WTP shall be placed in pump room as per requirements during detail design development.
17		General	Need Location of STP	STP will be located as per sewage disposal scheme during detail design.
18		General	Need Domestic water demand calculation and foot fall for the station	Water tanks location and size are already shown in Architectural Tender drawings.
19		General	Need Details of Percolation pit for Rainwater Harvesting	IS 15797 2008 or latest version may be referred
20		General	Need Details of Storm Water Drain	The same shall be proposed by the contractor in detail design stage as per storm water drainage scheme and approved by Engineer.
21	Volume - IV / Part 1 - ODS Page No. 27	12.1	Please provide the junction details between existing line (pier with box segment vaiduct) and proposed new Twin U-Girder.(at connection area)	U girder is not mandatory. Any Precast girder like U/T/I-girder may be used. The junction details have to be developed by contractor's DDC based on loading and existing structure.
22		General	There is no private vacant land for casting yard, around 15 km of the ajmer station. We found some govt vacant land near ajmeer station. Whether we can use this free of cost or rental basis.	
23		General	Whether we can go with economical size for viaduct, Pier and Pier Cap as per our design OR we need to match with exixting / other. If so, please provide the details.	Any size may be adopted, as permissible within the tender conditions on approval of Engineer.
24		General	Please provide the typical drawing for pier.	Please refer tender drawings VID-JMRC-STR-TD-00101, VID-JMRC-STR-TD-00102 & VID-JMRC-STR-TD-00102
25		General	Please provide the typical drawing for pier cap.	Please refer tender drawings VID-JMRC-STR-TD-00101 & ,VID-JMRC-STR-TD-00103
26		General	Please provide the typical drawing for Crash Barrier	Please refer tender drawings VID-JMRC-STR-TD-00201

S. NO	CLAUSE NO./PAGE NO/SECTION etc.	Heading	Query of Probable Bidder	Clarification by Engineer
27			Wherever clear cover to longitudinal reinforcement exceeds 50mm, the value of of 50mm shall be used in the crack width calculation and this is in compliance with IRC 112-2020 clause 12.3.4 point number 3 equation 12.9. Since, this being latest code the issue related to clear cover used for crack width (confusion among design engineers) has been well addressed. The exposure condition and limiting crack width shall be as per IRS CBC. Clear cover used for crack width calculation shall be as per IRC 112-2020 clause 12.3.4. Kindly review and confirm	
28		General	Kindly extend the tender submission 4 weeks from scheduled tender submission (05.08.2023) or 3 weeks for Prebid Query response, whichever comes later.	Not agreed. Last date of the bid submission is 06.08.2023. Please Refer SN-1 of Summary Sheet of Addendum-01.
29	Cl. No. 4.2.4 Page No. 17 of GCC		Generally the Parent Company guarantee & undertakings is mandatory for the bidders who draw technical and financial credentials of the parent company and such guarantees are not required for the agencies who are bidding on their own individual credentials. The Bidder is participating in the bid process based on its own individual capacity (both financial & technical) and hence Parent Company guarantee & undertakings are not required. Kindly confirm.	governed as per GCC.
30	Cl. No. 11.2 Page No. 46 of GCC		The interest cost will be part of bidder's estimate, will increase the quoted price. We request you to amend the clause as follows. The Authority shall make an <i>Interest free mobilisation advance</i> , to ease the project cash flow. Also, Interest free advances are adopted by various metro rail clients.	Not agreed
31	Cl. No. 2.8 Page 28 Employer's Requirements/ Functional	Construction Depot & Dumping area	1 0 1	lead of 45km. Please Refer SN-21 of Summary Sheet of Addendum-01.
32	NIB Cl. 1.1.2 Page No. 3		The amount of bid security as given in the reference tender clause amounts to 5.21 crores i.e. 2% of the approximate cost of work which is unusual. Bidder requests to reduce the same to 1% of the project cost similar to other metros and Govt departments i.e. INR 2.6 crores	

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S. NO	CLAUSE NO./PAGE NO/SECTION etc.	Heading	Query of Probable Bidder	Clarification by Engineer
33	GCC/ FOB/ Employer's Requirements	GCC CI. 8.5 & FOB Appendix 1 & Employer's Requirements Appendix 2B	Bidder requests to issue an amendment stating "Delay Damages levied will be refunded if the other key dates or overall completion date is adhered to". Kindly consider the same.	As per GCC and Tender condition.
34	GCC Cl. 4.2	Performance Security Amount	Bidder requests to consider the performance security as five percent of the amount of work order in case of procurement of works.	Not agreed
35	Vol-III, Employer's Requirement - Functional	2.1.3	,	Bidder may propose its own design of the structure. It shall be approved by Engineer.
36	Vol-III, Employer's Requirement - Functional	2.1.1 Page no. 14 Scope Under Lumpsum Price	There seems discrepancy in both the reference specifications as in the Employer's Requirements the superstructure is mentioned as T/I Girder while it is given as Twin U-Girder in the ODS. Kindly clarify the exact type of superstructure. Bidder requests to ammend the clause in ODS to "The superstructure of the Viaduct may comprise of simply supported Twin U-Girder OR T/I-Girder."	U/T/I etcgirder may be used. The same shall be approved by Engineer
37	Vol-IV, ODS	12.1 Superstructure system of Viaduct Page no. 27 of ODS		
38	Vol-V, Tender Drawings (GAD)	GEN-JMRC-1D-ALG-TD-002 / 003 V		Yes, it is included in scope of work of the contractor. For total loop line length please refer Drawing No GEN-JMRC-TD-001 "Sheet 01 of 01""List of Drawings for Elevated Stretch"; SN-26 & 27.
39	Vol-IV, ODS	2. Outline design specifications for Viaduct	Bidder understands that Load combination shall be as per Table 12 of IRS-CBC. And point number 7 and 8 in Notes of Clause 7.1 shall be deleted or kindly clarify the combination to be considered.	No change in tender conditions.
40	Vol-5	Drg. No.VID-JMRC-ST-TD-00101	Please confirm that the reference drawing is for reference purpose only and the bidder can use any no. of girder in the standard I-girder superstructure. a Please confirm that bidder can use precast as well as cast-in situ I-girder and pier caps. Please confirm that elastomeric bearing is allowed in both standard and special spans.	No change in tender conditions.
41	Vol-5	Drg. No.VID-JMRC-ST-TD-00102	1.Please confirm whether cast-in-situ portals are allowed.	Bidder may propose his own structure. It shall be approved by Engineer.
42	Vol-3 Employer's Requirement Functional	2.1.3 Director (Project)	Since there are only 2 nos. of stations, pre-casting may not be economical. Therefore, we request you that bidder shall be allowed cast-in-situ structures also.	Bidder may propose his own structure. It shall be approved by Engineer.

S. NO	CLAUSE NO./PAGE NO/SECTION etc.	Heading	Query of Probable Bidder	Clarification by Engineer
				
43			Please provide AutoCAD drawing files for the proposed alignment, station architecture, structural plan and elevation drawings & Plan and profile	Not agreed
44	Volume V			Details shown are indicative. Contractor may change this during detailed design. The same shall be approved by Engineer.
45	Volume V		Kindly clarify whether the cross section of the elevated ramp should be as per the drawing or it can be varied by the contractor.	No change in tender conditions.
46	Volume V	Drawing number – GEN-JMRC-1C-ALG-TD-011 to 012 (sheet 1 to 2) Drawing number – GEN-JMRC-1D-ALG-TD-001 to 003 (sheet 1 to 3)		Shall be as per existing rules of Local Authority
47	Volume III/2.1.1 (ix) Volume V	Employer's Requirements – Functional Drawing number – GEN-JMRC-1C-ALG-TD-011 to 012 (sheet 1 to 2) Drawing number – GEN-JMRC-1D-ALG-TD-001 to 003 (sheet 1 to 3)		Span arrangement mentioned in GADs are indicative. Bidder may propose his own arrangement suitable as per site. It shall be approved by Engineer.
48	Volume VII	Drawing number – JMRC-BICP-TPN-00-DWG (Sheet 4 to 5)		Please refer drawing of Topoghraphy, else can be obtained by the site visit.
49	Volume V	Drawing number – GEN-JMRC-1D-ALG-TD-002 (sheet 2 of 3)		Pier shall be standard type i.e. concentric/cantilever pier
50	Volume IV/5.5		Kindly provide the ground water table data published by Central Ground water board, if available.	It is available on CGWB website
51	Volume VII		The data provided in these pages are not clearly visible. Kindly provide clear details for lab test reports of boreholes - 04, 05 and AJC ST-02	Clear scan copies shall be uploaded
52		General	Kindly provide the Key plan for the project alignment	Please refer Tender drawings (GAD)
53	Volume V	Drawing number – GEN-JMRC-1D-ALG-TD-003 (sheet 3 of 3)	Please specify the scope of the loop line diverting after Ajmer Road station.	Please refer Tender drawings vol v drawing 26
54	Volume IV	Outline Design Specifications – Viaduct – Clause 5.7 Outline Design Specifications – Geotechnical Works – Clause 1.1:		Clause 5.7 of ODS for Viaduct shall be followed.
55	ITB		We request employer to release the penalty amount once the key personnel concerned is deployed at Site.	As per Tender Condition.
56	Form of Bid Clause 8 , page 3		We request employer to delete this clause	Not agreed
57		3. We understand that some of the parameters have been assumed or taken from Geo-Technical report for design purpose. The Geo-Technical report is for general information only. We hereby confirm that all the design/methodologies shall be based on the detailed soil investigation to be carried out by us after award of work for which nothing extra shall be claimed by us.		Not agreed

S. NO	CLAUSE NO./PAGE NO/SECTION etc.	Heading	Query of Probable Bidder	Clarification by Engineer
58	Compliance with Statutes, Regulations and Laws Page 12	aspects with: a) the provision of any enactment in India as applicable from time to time b) the regulations or bye-laws of any local body and utilities.	We request employer to consider that the Contractor shall take care of Compliances with Statues, Regulations and Law connected with construction works with the assistance of Employer. The Employer shall be responsible for the Compliances and Law connected with the Project. Further, if the Contractor suffers delay and/or incurs Cost as a result of the Employer's delay or failure to obtain any permit, permission, license or approval, the Contractor shall be entitled to EOT and/or payment of such Cost + Profit.	Not agreed
59			We request employer to include the following clause: 1.12) If the Contractor finds an error, fault or defect in the Employer's Requirement, the Contractor shall give Notice to the Employer and/or Engineer. The Engineer shall clarify on the same and if the Contractor suffers delay and/or incurs Cost as a result of the error, fault or defect, the Contractor shall be entitled to EOT and/or Cost plus Profit.	Not agreed
60	GCC 2.2	, and the second	Please raise a PBQ to provide a schedule for handing over of "Right of Way". Further, if the Employer could not provide 'access to and possession of the Site', the Contractor shall be entitled for compensation of Cost + profit also.	Not agreed
	Employer Page 12	The Employer shall be fully entitled without the consent of the Contractor, to assign the benefit of the part thereof and any interest therein or thereunder to any third Party.	We request employer to delete this Clause	Not agreed
	Agreement Page 14		If either Party is dissatisfied with a determination of the Engineer, the dissatisfied Party may give a Notice of Dissatisfaction to the other Party, with a copy to the Engineer.	Not agreed
63	coordination with others. Page 19	The Contractor shall be deemed to have made adequate allowance in the Contract Price and in the Works Programme in respect of these obligations. If any act or omission of the Contractor whether directly or indirectly results in the delay in the execution of the Works of a Designated Contractor, the Contractor, in addition to his liability in respect of Liquidated Damages if they become due, shall pay to the Employer, or the Engineer may deduct from Interim Payment Certificates such amount as the Engineer shall have certified in respect of additional payments or costs to the Designated Contractor in respect of such delay.		Not agreed Rail Corrector (Project)

S. NO	CLAUSE NO./PAGE NO/SECTION etc.	Heading	Query of Probable Bidder	Clarification by Engineer
64	GCC 4.11 Access Route Page 21	[] The Employer will not be responsible for any claims which may arise from the use or otherwise of any access route. The Employer does not guarantee the suitability or availability of any particular access route, and will not entertain any claim for non-suitability, or non-availability for continuous use during construction of any such route.		Not agreed
65	GCC 4.25 Access Road and Way Leaves Page 25	Providing access roads / way leaves to the site will be Contractor's responsibility	We request employer to delete this Sub Clause	Not agreed
66	GCC 6.2 Rate of Wages and Conditions of Labour Page 32			Not agreed
67		The Employer shall bear the costs of attendance including travel by the Employer or his Representative for the purposes of Sub Clauses 7.4 and 7.5 above. The cost of attendance including travel by the Employer, Engineer or his Representative for the purpose of Sub clause 7.6 shall be borne by the Contractor.		Not agreed
68	GCC 8.3 Delay Page 39	Failure or delay by the Employer or the Engineer, to hand over to the Contractor the Site necessary for execution of Works, or any part of the Works, or to give necessary notice to commence the Works, or to provide necessary Drawings or instructions or clarifications or to supply any material, Plant or Machinery, which under the Contract, is the responsibility of the Employer, shall in no way affect or vitiate the Contract or alter the character thereof; or entitle the Contractor to damages or compensation thereof but in any such case, the Engineer shall extend the time period for the completion of the Contract, as in his opinion is/are reasonable.		It will be as per the tender condition.

S. NO	CLAUSE NO./PAGE NO/SECTION etc.	Heading	Query of Probable Bidder	Clarification by Engineer
69	39	 b) The Contractor's work held up for not being given possession of or access to the Site in accordance with the Contract c) Instruction of the Engineer to suspend the Works and the Contractor not being in default as to reasons of suspension. 	b. unforeseeable shortages in the availability of personnel or Goods (or Employer Supplied Materials, if any) caused by epidemic or government actions; or c. any delay, impediment or prevention caused by or attributable to the Employer, the Employer's Personnel, or the Employer's other contractors on the Site.	
	GCC 8.4.1 Extension of Time Page 39 to 40	However, the Contractor shall not be entitled to any extension of time where the instructions or acts of the Employer or the	c) inclement weather conditions, and d) the Contractor not fulfilling his obligations under Sub-clause 4.4	Not agreed
	Delay Page 40	of the total Contract value which will be recoverable from the Contractor as Liquidated Damages for delay in completion of the Works or in	 a) The Total amount of Liquidated Damages in respect of the Works in all stages shall be limited to 5% of the Contract Value b) There shall be no recovery of damages with regard to Designated Contractors. The total ceiling limit shall be 5% of the Contract value and no further damages shall be recovered by the Employer from the account of the Contractor 	



S. NO	CLAUSE NO./PAGE NO/SECTION etc.	Heading	Query of Probable Bidder	Clarification by Engineer
72	Damages for Delay Page 40	The Liquidated Damages are recovered by the Employer from the Contractor for delay and not as penalty. The Parties agree that amount of Liquidated Damages leviable under the Contract are the genuine pre-estimate of the loss suffered by the Employer because of which the Liquidated Damages have been levied on the Contractor. The Liquidated Damages may be recovered from any amount of money due from the Contractor under the Contract or any other Contract which the Contractor has with the Employer. The Liquidated Damages may also be recovered from the amount of Performance Security and in that case the Contractor would be liable to replenish the amount of Performance Security.		Not agreed
73	GCC Clause 8.5 Liquidated Damages for Delay Page 41		We request employer requesting the Employer to release the LD amount once the subsequent Key Dates are achieved on time or as per the EOT.	Will be dealt as per the contract condition.
74	GCC Clause 8.5 Liquidated Damages for Delay Page 41	At any time after the Employer has become entitled to Liquidated Damages, the Engineer may give notice to the Contractor under Subclause 13.1, requiring the Contractor to complete the Works within a specified reasonable time. Such action shall not prejudice the Employer's entitlements to recovery of Liquidated Damages, under this Sub-clause and to terminate under Sub-clause 13.2. The decision of the Engineer as to the Liquidated Damages payable by the Contractor under this Clause shall be final and binding.		Not agreed
75	GCC Clause 8.6 Rate of Progress Page 41	If any steps taken by the Contractor in meeting his obligations under this Sub-Clause cause the Employer to incur additional costs, such costs shall be recoverable from the Contractor by the Employer, and shall be deducted by the Employer from any sum due, or to become due, to the Contractor. If, in the opinion of the Engineer, the steps taken by the Contractor to expedite the progress are not adequate, the Engineer may take a recourse as per Clause 13.2.4 of this GCC.		Not agreed
76	GCC Clause 8.8 Consequences of Suspension Page 41	The Contractor shall not be entitled to extra cost (if any), incurred by him, during the period of suspension of Work., if such suspension is a) provided for in the Contract, or b) necessary for proper execution of Woks or by reasons of weather condition or by some default on the part of the Contractor, or c) necessary for the safety of Works or any part thereof or d) necessary for the safety of adjoining public or other property or safety of the public or workmen or those who have to be at the site or e) to ensure safety and to avoid disruption of traffic and utilities, as also to permit fast repairs and restoration of any damaged utilities, or f) due to instructions of NGT/ state pollution control board or any other statutory authority on account of high pollution.	a), b), c), d), e) and f) and request to add if such suspension is arising out from the request of Contractor for any valid reasons.	Not agreed

S. NO	CLAUSE NO./PAGE NO/SECTION etc.	Heading	Query of Probable Bidder	Clarification by Engineer
77	GCC Clause 11.4.1 Application for Interim Payment Certificates Page 49	If any Milestone is not achieved by the end of the month in which it is scheduled to be achieved, the Engineer shall suspend the payment relating to the Cost Centre in which the Milestone is included. Payments suspended under this Clause shall be resumed by being included in the next application for interim payment made after the Milestone is achieved.		Not agreed
78	Vouchers Page 51	The Contractor shall, whenever required by the Engineer, produce or cause to be produced for examination by the Engineer, any quotation, invoice, cost or other account books, vouchers, receipts, letters, memoranda or any copy of or extract from any such documents and also furnish information and returns, as may be required, relating to the execution of this Contract or relevant for verifying or ascertaining the cost of execution of this Contract or ascertaining the Materials supplied by the Contractor are in accordance with the Specifications laid down in the Contract. The Engineer's decision on the question of relevancy of any documents, information or returns shall be final and binding on the Parties.		Not agreed
79		The Contractor's Risks are all risks other than the Employer's Risks given in the sub-clause 14.3	Please make note of this Clause.	Noted
80	Page 59	Except as provided otherwise in these Conditions, neither Party shall be liable to the other Party for loss of use of any Works, loss of profit, loss of any Contract or any other indirect or consequential loss or damage which may be suffered by the other Party in connection with the Contract. The total liability of the Contractor to the Employer under the Contract shall not exceed the Contract Price. Except that this Sub-clause shall not limit the liability of the Contractor: a) under Sub-clauses 4.18, 4.19, 5. 7, 8.6, and Clauses 7.1 O and 7.11 b) under any other provisions of the Contract which expressly impose a greater liability, c) in cases of fraud, wilful misconduct or illegal or unlawful acts, or d) in cases of acts or omissions of the Contractor which are contrary to the most elementary rules of diligence which a conscientious Contractor would have followed in similar circumstances.		Not agreed
81			We request employer to request that "The Conciliator shall be jointly nominated by both parties and not from a panel of Conciliators maintained by the Employer"	As per Tender Condition.
82	Procedure Page 63		We request employer to request that "The Conciliator shall be jointly nominated by both parties and not from a panel of Conciliators maintained by the Employer"	As per Tender Condition.

S. NO	CLAUSE NO./PAGE NO/SECTION etc.	Heading	Query of Probable Bidder	Clarification by Engineer
83	Variation Page 13		"As base price index is considered for the year Oct' 2012, any change in price index which is expected shortly should be implemented using "Linking Factor" formulae"	As per Tender Condition.
84		a) Notice Inviting Bid (NIB) b) Instructions to Bidders (ITB)(Including Annexures) c) Special Conditions of Contract (SCC) d) General Conditions of Contract (GCC) e) Conditions of contract on Safety & Health & Environment (SHE). f) Outline Design Specifications g) Outline Construction Specification for Civil Works h) Technical Specification for Architecture & Finishing Works i) Bid Drawings j) Bill of Quantities k) Form of Bid with Appendix l) Letter of acceptance (LOA) m) Contractor's proposal submitted along with the bid n) Any other item as applicable		As Pre bid queries and its clarifications are part of Addendums and adendums are made part of contract agreement hence Pre bid queries and its clarifications issued through addendums shall form the part of contract agreement.
85	Vol 02 Part 5 Conditions of Contract on SHE Part V Penalty and Awards Page 159	Health and Environment violation (unsafe act / unsafe condition) and charges to be recovered from contractors: SL. NO TOPIC UNSAFE ACT/UNSAFE CONDITION Not complying to the minimum manpower requirements as mentioned in clause 6.1.1.1 Appendix no. 04 in respect of Key personnel of Safety & Health Organization Health and Environment violation (unsafe act / unsafe ac		Not agreed
86	Vol 02 Part 5 Conditions of Contract on SHE Part V Penalty and Awards Page 168		We request employer to consider 0.1% of the Contract Price as the maximum ceiling limit.	Not agreed

S. NO	CLAUSE NO./PAGE NO/SECTION etc.	Heading	Query of Probable Bidder	Clarification by Engineer
87	Appendix 2A Work Area	The Employer will provide the work areas of approx. 20,000sqm. Within 25km from work site as per availability for batching plant, structural elements of elevated sections and stacking depot.		35000 sqm casting yard area shall be provided within lead of 45km. Please Refer SN-21 of Summary Sheet of Addendum-01.
88	Drg. VID-JMRC-STR-TD- 00102		Please clarify whether contractor shall design / detail based on his construction methodology.	The arrangement shown in the drawing is indicative, the shape and detailing may be changed by contractor during detailed design, with prior approval of Engineer.
89	Drg. VID-JMRC-STR-TD- 00103	Precast RCC / PSC piercap is indicated, with aesthetic detailing.	Please clarify whether contractor shall design / detail based on his construction methodology.	The arrangement shown in the drawing is indicative, the shape and detailing may be changed by contractor during detailed design, with prior approval of Engineer.
90	General	-	Please provide the ROW details for at Transport Nagar and Ajmer Road Stations.	Shall be as per existing rules of Local Authority
91	General	-	Please provide AutoCAD drawing files for the proposed alignment.	Not agreed
92	General	-	Please provide the ROW for the proposed Alignment, at Ramp location and Viaduct.	Shall be as per existing rules of Local Authority
93	General	-	Please provide the searchable tender documents.	Not agreed
94	Vol1ITBElevated	F5.1 The Performance Security required in accordance with Clause 4.2 of the GCC shall be for 10% of the Contract Price from the Scheduled commercial Bank (including Scheduled Commercial Foreign Banks) in India in the currency in which the Contract Price is payable.		Not agreed
95	10.2	modified to the extent that the actual axial load shall be	Wherever clear cover to longitudinal reinforcement exceeds 50mm, the value of of 50mm shall be used in the crack width calculation and this is in compliance with IRC	No change in tender conditions.
96	2.1.5 Note III	Structural Steel E250 B0 E350 B0	Kindly note BO grade steel is generally required for snow region. Jaipur is not come under snow region. Also, BR and BO are same grade steel Only the difference is Charpy impact test conducted at room temperature in the case of BR, in the case of BO it is conducted at 0 degree. Generally, BR grade are produced by the supplier in regular basis. in the case of BO, it should be special order and this will have impact on the delivery schedule. Considering the above factor please review and confirm is it allowed to use BR grade instead of BO.	from B0 to BR shall be approved by Engineer based on market availability.

S. NO	CLAUSE NO./PAGE NO/SECTION etc.	Heading	Query of Probable Bidder	Clarification by Engineer
97		5.1 III Cement As per clause 4.1 of IRS CBC	Cement shall be compliance with as per clause 4.1 of IRC CBC. In concrete mix design fly ash or other cementitious content shall be added to OPC cement within prescribed percentage as allowed by the code. Kindly confirm	For use of fly ash, please refer section S.03 of OCS.
98		2.1.1 Cement For PSC structure clause 5.1of IS 1343 shall be used	Cement shall be compliance with as per clause 5.1 of IS 1343. In concrete mix design fly ash or other cementitious content shall be added to OPC cement within prescribed percentage as allowed by the code. Kindly confirm	For use of fly ash, please refer section S.03 of OCS.
99		2.7.7 Temperature Load (TL) As per clause 19.5 of IS 456. Temperature gradient shall be considered as per clause 215 of IRC 6, if applicable	IRC 6 is applicable for open bridge structure. In our case station building come under covered roof. Hence, temperature gradient as stated in IRC 6 is not applicable for the structural elements covered under roof. Hence, IRC 6 temperature gradient is not applicable for station building structure. Kindly review and confirm,	No change in tender conditions.
100	2.10.2	IS 2911 shall be followed for design of pile , load capacity etc	In the case of pile on rock IRC 78 shall be followed for load capacity calculation in addition to IS 2911. Minimum rock socketing length shall be as per IS14593 Kindly review and confirm.	The bidder's clarification is confirmed. The pile capacity in rock may be calculated using IRC 78 And IS 14593.
101	2.10.2 n		As per clause 15.9.4.1 of IRS CBC the minimum area of main reinforcement shall not be less than 0.2%. In the case of pile cap and isolated footing the main reinforcements are at the bottom. The bottom reinforcement shall be calculated as per the design forces and if minimum steel governs the design it shall be provided with 0.2% in each direction or as per the design. In the case of top reinforcement (pile cap & isolated footing) they are secondary reinforcement. Top reinforcement shall be calculated as per the design forces. If minimum reinforcement as per clause 15.9.4.2 of IRS CBC (0.12% bd) govern the design it shall be provided or as per the design. Kindly review and confirm	No change in tender conditions.
102	2.7.4	Earthquake Loads Damping factor 5 % for steel structure	As per IS 1893 damping factor for steel structure is 2%. Kindly review and confirm	No change in tender conditions.
103	12.4.2		Soil stiffness shall be ascertained through lateral pile load test and tested value shall be used to arrive the lateral pile capacity and dept of fixity rather than using the arbitrary value as per soil classification. Kindly note as per clause 4.2.4 of IRS seismic code only if the bridge foundations (deep foundation) are laid in soft soil the soil structure interaction to be analysed. In the case of foundation laid in other soil such as medium, good and weathered/soft/hard rock and IGM the soil structure interaction analysis is not required. Kindly review and confirm	No change in tender conditions. Director (Project)

S. NO	CLAUSE NO./PAGE NO/SECTION etc.	Heading	Query of Probable Bidder	Clarification by Engineer
104		Pile foundation Structural Design c) Pile cap shall be designed based on clause 15.8.3.1of IRS CBC 1997.No support from soil below soil cap shall be considered		No change in tender conditions.
105	4.2	Performance Security	We request you to consider 5% performance security, instead of 10%.	Not agreed
106	11.2.1	Mobilization advance	We request you to provide the interest free mobilization advance.	Not agreed
107			Hence the project duration is 28 months, kindly allow the price variation clause. Normally this clause will be applicable for all metro projects.	Refer SCC CI. 20
108		General		35000 sqm casting yard area shall be provided within lead of 45km. Please Refer SN-21 of Summary Sheet of Addendum-01.

