Price Rs. 1180/-

## JAIPUR METRO RAIL CORPORATION LTD.

NIB No.: 01/JMRC/Project/2022-23

"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.

# OPEN E-BID WORKS CONTRACT TWO PART BID DOCUMENT



## Jaipur Metro Rail Corporation Ltd.

Office of General Manager (Project Coordination), Jaipur Metro Rail Corporation Ltd., 1<sup>st</sup> Floor, A-Wing, Admin Building, Bhrigu Path, Mansarovar Metro Depot, Jaipur-302020

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## JAIPUR METRO RAIL CORPORATION LIMITED NIB No.: 01/JMRC/Project/2022-23

#### **GENERAL:-**

- (i) Jaipur Metro Rail Corporation invites open bids from interested and eligible agencies for Geo-technical Investigation work for Extension of 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. This bid is invited under RTPP Act-2012, and RTPP Rules, 2013 (Complied up to date).
- (ii) The complete bid document can be downloaded from the state e-procurement website <a href="https://eproc.rajasthan.gov.in">https://eproc.rajasthan.gov.in</a> and interested bidders will have to submit their offer in electronic formats both for technical and financial proposal on this website with their digital signatures. The complete bid document can also be seen on Corporation's website <a href="https://transport.rajasthan.gov.in/jmrc">https://transport.rajasthan.gov.in/jmrc</a> and state procurement portal i.e., <a href="https://sppp.rajasthan.gov.in">https://sppp.rajasthan.gov.in</a>.
- (iii) Bidders who wish to participate in this bidding process must register on https://eproc.rajasthan.gov.in. To participate in online Bids, as per Information Technology Act, 2000, Bidders will have to obtain Digital Signature Certificate (DSC) from any agency approved by Controller of Certifying Authorities (CCA). Bidders who already have a Valid Digital Signature Certificate need not to obtain a new Digital Signature Certificate. This DSC will be used by the bidder to digitally sign the bids before its online submission on E-Proc Portal.

1.0 NOTICE INVITING BID (NIB) FOR OPEN ONLINE BID:- (KEY DETAILS)

(a) `	Name & Address of the Procuring Entry	Office of General Manager (Project Coordination),
		Jaipur Metro Rail Corporation Ltd., 1 <sup>st</sup> Floor, A-Wing, Admin Building, Bhrigu Path, Mansarovar Metro Depot, Jaipur-302020
(b)	Subject Matter of Procurement.  (Name of Work)	Geo-technical Investigation work for Extension of 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.
(c)	Time Period	45 Days from the date of LOA or as per the directions contained in the LOA.
(d)	Defect Liability Period	06 months from the date of issue of taken over certificate by JMRCL [Refer Clause-09 of GCC].
(e)	Bid Procedure	Two Stage (Technical Bid & Financial Bid), Online Open Bid Procedure.
(f)	Bid Evaluation Criteria	Technically Qualified and Lowest Rated Bidder ( L-01)
(g)	Website for downloading Bidding Document, Corrigendum's, Addendums, etc.	https://eproc.rajasthan.gov.in; https://sppp.rajasthan.gov.in;

(h)	Cost of Bid Form	For participating in the bid, the bidder has to pay cost of bid
	(Non-Refundable)	form as below:-(a) Cost of Bid Form: - Rs. 1000+ GST@18%= <b>Rs 1180/-</b> Rupees. (DD/BC of scheduled bank payable in favour of Jaipur Metro Rail Corporation Limited).
(i)	Estimated cost	INR 40,54,344.75/- (Inclusive of all taxes & other charges)
(j)	Bid Security Deposit (EMD) (Refundable to unsuccessful Bidder)	Amount (INR): 02% ( <b>Rs.81,087/-</b> ) of Estimated Procurement Cost.(DD/BC of scheduled bank payable in favour of Jaipur Metro Rail Corporation Limited or as per RTPPR-2013)
(k)	E-Bid Processing Fee (Non Refundable)	Rs.590/- (Including GST @ 18%) (Rs. Five Hundred Ninety Only) by Demand Draft / Bankers Cheque, payable in favour of "Managing Director, RISL, Jaipur"
(1)	Venue of Physical Submission of Cost of Bid Form, Bid Security and E-Bid Processing Fee and original hardcopy of same as uploaded on E-Proc website by the bidder.	At Office of General Manager (Project Coordination), Jaipur Metro Rail Corporation Ltd., 1 <sup>st</sup> Floor, A- Wing, Admin Building, Bhrigu Path, Mansarovar Metro Depot, Jaipur-302020. Mobile No-: +91-9650992378; 7728895359; Tel:-0141-2822786/788 Up to Date:18.03.2023; Time:-15:00 Hrs
(m)	Publishing Date on E-Proc Portal, SPPP Portal and JMRC Website.	Date:08.03.2023; Time:-10:00 Hrs
(n)	Document Sale/ Download/ Cost of Bid Form deposition period.	From Date:08.03.2023; Time:-10:00 Hrs To Date:18.03.2023; Time:-15:00 Hrs
(0)	Online Bid Submission Period on E- Proc Portal of Rajasthan Government.	From Date:08.03.2023; Time:-10:00 Hrs To Date:18.03.2023; Time:-15:00 Hrs
(b)	Online Technical Bid Opening Date and Time	Date:18.03.2023; Time:-15:30 Hrs
(q)	Bid Validity	90 days from the bid submission dead line.
(r)	Bidders Eligibility: -	Documents required to be submitted: -
	(i) Cost of Bid Form, Bid Security Deposit and E-Bid Processing Fee	(i) As per Clause 1.0 (h), Clause 1.0 (j) and Clause 1.0 (k) in original to JMRC before the due date and time for the bid submission as per Clause 1.0 (l) & (o) of NIB of Bid Document.
	(ii) Similar Work: -  The bidder firm should have experience of Execution of Geotechnical Investigation work in India for state/Central Government Bodies etc.  Experience of having satisfactorily completed similar works during the period of last 05 Years reckoned from the date of last date of bid submission should be either of the following:	(ii) Self certified copies of Certificates for satisfactory completion of similar works (Completed during the period of last 05 Years reckoned from the date of last date of bid submission) issued by the authorized person of the department/institution not below the rank of Executive Engineer.

Three similar\* completed works as mentioned below, each costing not less than the amount equal to Rs. **16.22lakh** (40% of the estimated cost Rs. 40.54lakh) Or

Two similar completed works each costing not less than the amount equal to Rs. **20.27lakh** (50% of the estimated cost. Rs. 40.54lakh) Or

One similar completed work each costing not less than the amount equal to Rs. **32.43lakh** (80% of the estimated cost. Rs. 40.54lakh)

Definition of Similar Work will be treated as: Geotechnical investigation, which essentially comprising drilling bore hole in various types of strata, conducting various soil/rock tests including laboratory tests and analyzing and submission of geotechnical data.

Each substantial partner in case of JV/Consortium shall have experience of executing at least one "similar work" of minimum 40% of NIB value in last 05 years.

- (iii) The bidder firm maybe: -
  - -Company registered under "Companies Act-1956/2013"; OR
  - Registered Sole proprietor; OR
  - -Registered Partnership/Joint Venture Firm. And must be in existence for the execution of similar works for minimum period of 03 Years reckoned from the last day of previous month to the month in which NIB was called. Detailed conditions on participation of JV, please refer clause 1.1 of NIB
- (iii) Self-attested copy of registration document as proof of registered firm for the similar work. (Copy of Registration certification of the firm / Partnership deed / Certificate of incorporation, Copy of Articles of Association & Memorandum of Association (if applicable) etc.).
- (iv) The bidder should have "Annual Turn Over" of Rs 32.43 Lakhs (80% of Estimated Cost of Work) in any one of the last 03 Financial Years 2019-20 to 2021-22. If the statement for Year 2021-22 is not available then statement for the duration of Financial Year 2018-19 to 2020-21 may be submitted.

The average annual turnover of JV will be based on percentage participation of each member.

Example:- Let the member-1 has percentage participation = M and member-2 has =N. Let the average annual turnover of member-1 is "A" and member-2 is "B", then average annual turnover of JV will be: (AM+BN)/100

(iv) Self-Certified Certificate issued by Chartered Accountant (CA) for the "Annual Turn Over" of the Bidder. OR

Self-certified Income Tax Return Documents (ITRs) & Audited Balance Sheets (Certified by Chartered Accountant (CA).

- (v) Mandatory Registrations of the bidder such as "Goods & Service Tax (GST)" and Income Tax Registration along with Statement of Bank Account of bidding firm.
- Self-Certified Copy of:-
- -GST Registration mentioning GST number in name of Bidding Firm.
- -Copy of PAN Card.
- -Self certified copy of the statement of Bank Account for the Last Six Months in the name of bidding firm.

#### Note:-

- (a) For point no. (iii) above, in case of bidder is JV/consortium; the above documents shall be mandatorily submitted for all the constituent members. Only the value of contract as executed by the bidder in his own name should be indicated and shall be considered. Where a work is undertaken by a group (Joint Venture), only that portion of the work which is undertaken by the concerned bidder shall be considered and the remaining done by the other partners of the group shall be excluded. This is to be substantiated with a specific certificate from the Employer who have awarded this work. In case specific division of works undertaken by the group partners is not stated in the submitted documents, then the percentage participation of the bidder in the group as stated in the submitted documents (JV/ agreement or Client certificate) shall be considered as the value of the work done by the bidder/partner of JV.
- (b) The bidder is required to get its firm registered for EPF, ESI and Contract Labor license within 15 days of issuance of LOA. If the bidder does not get registered with these Statutory Authorities then its 1st Running Account (R/A) payment shall not be released till it get registered with these Authorities. Firm is required to submit an undertaking in this regard on its letter head.

## (s) SUBMISSION OF BIDS:-

Online bids will have to be digitally stamped and signed by the authorized signatory of bidder firm and submitted in a time stamped electronic sealed box on http://eproc.rajasthan.gov.in in the manner as below. The Bidder shall submit his signed and stamped bid online in two parts:-

- (i) First Part:- Technical Bid with all necessary documents in .pdf format (Self Certified/Signed by authorized Signatory of Firm) as per Clause 1.0 (r) of NIB, Scanned Copy of financial instruments such as Cost of Bid Form, E-Bid Processing Fee and Bid Security as per Clause 1.0 (h, j, k & l) of NIB, complete bid document as per Clause 1.1.1 of ITB of Bid Document (Except Schedule-G/Price Bid/BoQ) and;
- (ii) **Second Part**:-Financial Bid in electronic format. (.xls Format), Online through E-Proc Portal for Rajasthan Government to procuring entity of JMRC as per Clause 1.0 of NIB of Bid Document on or before the last date of bid submission.

## Note:

- (i) Original Copy of DD/BC for Cost of Bid Form, E-bid Processing Fee & Bid Security as uploaded on E-Proc website may also be submitted at the office of JMRCL before the due date of submission as per Clause-1.0 (I) of NIB Document.
- (ii) The bidders have to take utmost care that the Financial Bid is to be submitted separately in Second Part of Bid i.e Financial Bid on E-Proc website only. If any details of Financial Bid whether intentionally/ unintentionally/ by mistake are mentioned in First Part i.e Technical Bid by the bidder; then its bid shall not be considered by JMRC. No correspondence in such matter shall be entertained by JMRC.

## (t) POINTS TO BE NOTED:

- (i) Bidder (authorized signatory) shall submit their Two Part Bid (First Part:-Technical Bid and Second Part:-Financial Bid) online on E-Proc website i.e. https://eproc.rajasthan.gov.in both for technical and financial proposals separately for each.
- (ii) In case, any of the bidders fails to pay the **Cost of Bid form, E-Bid Processing Fee** and **Bid Security** to JMRC, its Bid shall not be considered and shall be rejected.
- (iii) JMRC will not be responsible for delay in Bid submission due to any reason.
- (iv) The procuring entity reserves the complete right to cancel the bid process and reject any or all of the Bids.
- (v) Conditional Bid shall be summarily rejected by JMRC.

- (vi) No contractual obligation whatsoever shall arise from the bidding document/ bidding process unless and until formal contract is signed and executed between the procuring entity and the successful bidder.
- (vii) All Bidders are hereby cautioned that Bids containing any material deviation or reservation as described in–Form-B and /or minor deviation without quoting the cost of withdrawal shall be considered as non responsive and shall be summarily rejected.
- (viii) Any Bid received with unattested cutting/ overwriting shall be rejected.
- (ix) Procurement entity disclaims any factual/ or other errors in the bidding document (the onus is purely on the individual bidders to verify such information) and the information provided therein are intended only for the help the bidders to prepare a logical bid-proposal.
- (x) The provisions of RTPP Act 2012 and RTPPR-2013 Rules thereto shall be applicable for this procurement. Furthermore, in case of any inconsistency in any of the provisions of this bidding document with the RTPP Act 2012 and RTPPR-2013 Rules thereto, the later shall prevail.
- (xi) Approved GCC and SHE is uploaded and available on the JMRC website, by signing the Bid Document, firm agrees to accept the GCC & SHE. While framing the contract with the successful Bidder, the bidder shall sign the complete GCC & SHE document and submit it to the JMRC.

## 1.1 Eligible Applicants:

i. The bid for this contract 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 1.0 (r) 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 MOU/JV agreement submitted by the Bidder in terms of clause 1.1 (v) d.

Performance of each JV/consortium 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:

- a. At their own, if they have adequate technical competence to the satisfaction of Employer.
- By subcontracting such scope of work of defaulting member(s) to technically competent agency with the consent of Employer & without any financial implication to the Employer.
   In such cases, the limit of subcontracting the works up to 50% of total scope of work shall not apply.
- c. By induction of new member having adequate technical competence and meeting the original bid eligibility conditions, acceptable to the Employer in JV/Consortium replacing the default members(s)& without any financial implication to the Employer. The new member(s) shall be jointly and severally liable for the performance of the whole contract and also shall submit the Performance Security from their bank account for an amount equivalent to the amount of forfeited amount of Performance Security of defaulting member.

In case of (a) and (b) above, forfeited amount of Performance Security (ies) of the defaulting member(s) shall be submitted by other member(s) of the JV/Consortium.

Further, the performance of each of JV/Consortium member may also be specifically stated in the Work experience Certificate / performance Certificates which may be issued to the bidder during or after execution of Work for their Business Development purposes(s).

In this regard, an undertaking by JV/Consortium members is required to be submitted as per the format Form E of Form of Bid.

- ii. a) Only Indian bidders permitted to bid, either individually as a bidder oras a partner of JV. Joint venture or consortium arrangement is permitted only with firms that are registered or incorporated in India having minimum participation interest of 20% in this bid.
  - b) A bidder shall submit only one bid in the same bidding process, either individually as a bidder or as a partner of a JV/Consortium. A bidder who submits or participates in, more than one bid will cause all of the proposals in which the bidder has participated to be disqualified. No bidder can be a subcontractor while submitting a bid individually or as a partner of a JV/Consortium in the same bidding process. A bidder, if acting in the capacity of subcontractor in any bid, may participate in more than one bid, but only in that capacity.

## iii. Conflict of Interest:

- (1) A conflict of interest for procuring entity or its personnel and bidders is considered to be a situation in which a party has interests that could improperly influence that party's performance of official duties or responsibilities, contractual obligations, or compliance with applicable laws and regulations.
- (2) The situations in which a procuring entity or its personnel may be considered to be in conflict of interest includes, but not limited to, following:-
- (a) A conflict of interest occurs when procuring entity's personnel's private interests, such as outside professional or other relationships or personal financial assets, interfere or appear to interfere with the proper performance of its professional functions or obligations as a procurement official.
- (b) Within the procurement environment, a conflict of interest may arise in connection with such private interests as personal investments and assets, political or other outside activities and affiliations while in the service of the procuring entity, employment after retirement from the procuring entity's service or the receipt of a gift that may place the procuring entity's personnel in a position of obligation.
- (c) A conflict of interest also includes the use of procuring entity's assets, including human, financial and material assets, or the use of procuring entity's office or knowledge gained from official functions for private gain or to prejudice the position of someone procuring entity's personnel does not favour.
- (d) A conflict of interest may also arise in situations where procuring entity's personnel is seen to benefit, directly or indirectly, or allow a third party, including family, friends or someone they favour, to benefit from procuring entity's personnel's actions or decisions.
- (3) A Bidder may be considered to be in conflict of interest with one or more parties in a bidding process if, including but not limited to:-
- (a) They have controlling partners in common;
- (b) They receives or have received any direct or indirect subsidy from any of them;

- (c) They have the same legal representative for purposes of the bid;
- (d) They have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another;
- (e) A bidder participates in more than one bid in the same bidding process. However, this does not limit the inclusion of the same sub-contractor, not otherwise participating as a bidder, in more than one bid; or
- (f) A bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the subject matter of procurement of the bidding process. All bidders shall provide in Qualification Criteria and Biding Forms, a statement that the bidder is neither associated nor has been associated directly or indirectly, with the consultant or any other entity that has prepared the design, specifications and other documents for the subject matter of procurement or being proposed as Project Manager for the contract.
- iv If the Bidder or any of the constituent JV/Consortium member(s) does not meet the criteria stated as per Clause 1.1 of NIB, including the constituent JV/Consortium member(s) shall be considered ineligible for participation in bid process and they shall be considered ineligible applicants.

#### V. LEAD PARTNER/ NON SUBSTANTIAL PARTNERS/ CHANGE IN JV/ CONSORTIUM

- a) In case of JV/Consortium of Indian contractor:
- i. Lead partner must be a substantial partner in the JV/Consortium i.e. having a minimum of 26% participation in the JV/Consortium. Each substantial partner in case of JV/Consortium shall have experience of executing at least one "similar work" of minimum 40% of NIB value in last 05 years.
- b) Each non-substantial partner should have a minimum of 20% participation in the JV/Consortium. Partners having less than 26% participation will be termed as non-substantial partner and will not be considered for evaluation which means that their financial soundness and work experience shall not be considered for evaluation of JV/Consortium. In the bid for similar/civil work, a joint venture/Consortium to qualify, each of its non-substantial partner must have experience of executing at least one similar work of minimum 20% of NIB value in last 10 years.
- c) In case of JV/Consortium, change in constitution or percentage participation shall not be permitted at any stage after their submission of application otherwise the applicant shall be treated as non-responsive.
- d) The bidder, in case of JV/Consortium, shall clearly and unambiguously define the role and responsibilities for each substantial/ non-substantial partner particularly with reference to financial, technical and other obligations in the JV agreement/MOU acceptable to the Employer, providing clearly that any abrogation/subsequent reassignment of any responsibility by any substantive/non-substantive partner of JV/Consortium in favour of other JV/Consortium (without written approval of Employer) from the one given in JV agreement/ MOU at bid stage, will be treated, as breach of contract conditions and/or 'concealment of facts' (as the case may be), vide GCC clause 4.33.1 [a (ii) and (iii)] and acted accordingly.

Note: - The MOU may stipulate mandatory information to be provided. However, bidder can include additional details/arrangements finalized between the members in

this MOU provided these additional details/arrangements should not be in contravention of Employer's interest as per terms and conditions of Contract. Bidder may further note that no separate MOU/JV agreement should be executed for the sake of working arrangement amongst the partners other than the MOU/JV agreement accepted by the employer. In case, it comes to the notice of JMRC either during or even after completion of Work that JV/ Consortium members have either altered / modified the MOU / JV agreement with respect to the MOU submitted at biding stage or entered a separate MOU/ agreement or made any other arrangement akin to a contract without the specific approval of Employer in writing, it shall be treated as a fraudulent practice under GCC clause 4.33.1 (a) (ii) of this bid for which every constituent of the JV/Consortia is liable to be debarred for a period up to three years along with such other legal actions as may be permissible under the law.

The Employer in such cases, may in its discretion take action under clause4.33.1 (b) and / or under clause 4.33.1 (c) of GCC against any member(s) for failure in bidder's obligation and declare that member(s) of JV/Consortium ineligible for award of any bid in JMRC or take action to terminate the contract in part or whole under clause 13 of GCC as the situation may demand and recover the cost/damages as provided in contract.

- (vi) A bidder debarred under section 46 of Rajasthan Transparency in Public Procurement Act, 2012 shall not be eligible to participate in any procurement process undertaken by JMRC,-
  - (a) any procuring entity, if debarred by the State Government; and
  - (b) a procuring entity if debarred by JMRC or any other Metro Organization.

General Manager (Project Coordination)

Jaipur Metro Rail Corporation Limited, Jaipur

## **SCOPE OF WORK**

## 2.1 GENERAL

The work mainly comprises of Geo-Technical Investigation Work from Badi Chouper to Transport Nagar (2.85Km) Phase 1C and Mansarovar to Ajmer Road (Chauraha) (1.35 km) Phase -D" of JAIPUR METRO RAIL CORPORATION at Jaipur.

**Site Familiarization Certificate:** The Bidder, at the Bidder's own responsibility and risk, is encouraged to visit and examine the site of works and its surroundings and obtain all information that may be necessary for preparing the Bid and entering into a contract for execution of the works. The costs of visiting the site shall be at the Bidder's own expense. The bidders should visit the work site, acquaint themselves with site conditions, approach roads, availability of materials, lead of materials, etc.

The contractor is required to execute the work in stretches/areas as per alignment plan given in tender documents. Contractor shall have no claim if the stretches/area is not available for execution due to traffic constraints etc., Also no extra time shall be permitted on this account.

## 2.2 BRIEF SCOPE:-

The above work shall cover the following:

- a) The contractor shall submit Programmes and Progress Reports of works as per Clause-4.13 and Clause 4.14 of General Conditions of Contract (GCC) available on JMRC's website for bidder's reference. The GCC Document shall also be a part of bid document and contract for this work.
- b) Provision of all necessary labours, construction equipment, instruments and appliances in connection with all above mentioned work as specified or as directed by Employer/Engineer.
- c) Conducting Standard Penetration Tests in bore holes at regular intervals of 1.5m as per I.S. Code of practice and also in-situ tests as per Schedule.
- d) Deleted.
- e) CONTRACTOR TO KEEP SITE CLEAR:- Clearing site after completion of work and handing over of all the works, as specified and directed by Engineer-In-Charge. During the progress of Works, the Contractor shall keep the Site free from obstructions and shall store neatly any construction plant and surplus materials and clear away and remove from site any rubbish or temporary works no longer required. On completion of the works, the Contractor shall clear away and remove from site all constructional plant, surplus material and temporary works. He should leave the whole of the site and Works in a clean, tidy and workman like condition to the satisfaction of the Engineer. Bentonite slurry, mud, water shall not be allowed to spill on to the pavements.

Packing of the boreholes with suitable concrete works etc as per the Directions of Engineer-In-Charge for making the work site safe for public must be ensured by the Contractor before leaving the work site. No extra cost shall be payable for such works.

- f) Damage caused to the properties, if any, during execution of above work shall be rectified by the bidder at his cost failing which the cost of rectification shall be recovered at market cost of such items from any R/A Bill / Final Bill of the bidder.
- The work shall be carried out as and when required by Engineer/Employer. with all safety precautions. The bidder shall ensure all his workers shall have Personal Protective Equipment's (PPE's) at his own cost and ensure safety of site by providing Barricades (if required) for restricting movement of public to work area. The barricade arrangement (if required) shall be approved by Engineer-In-Charge keeping in view the overall circulating pattern of the commuters at the work site
- h) Time Period is forty five days from the stipulated date of commencement/LOA of work as per clause 1.0 (c.) of NIB.
- i) Deleted.

- j) Deleted.
- k) Deleted.
- I) Deleted.
- m) Deleted.
- n) Ancillary Building near Station Building:- The required investigations and testing at the location shall be covered under the scope of work of contractor as per the directions of Engineer-In-Charge if required.
- **o)** Required testing, sampling and submission of report for the existing wells (If any) located near/along the alignment shall be covered under the scope of work.

## 2.3 MATERIALS, CODES AND STANDARDS:- Quality

All materials used in the works shall be of the best quality of their respective kinds as specified herein, obtained from sources and suppliers approved by the Engineer and shall comply strictly with the tests prescribed in the Technical Specifications / Code of Practice (RPWD/CPWD/IRC/IS Codes etc) as per the directions of Engineer-In-Charge. Drilling of boreholes sampling and other investigations are required to be carried out in accordance with specifications of relevant codes of Bureau of Indian Standards as given below:

IS:1080 Code of practice for design and construction of simple spread foundations

IS:1498 Classification and identification of soils for general engineering purposes

IS:1892 Code of practice for subsurface Investigation for foundation.

IS:1904 Code of practice for design and construction of foundations in soils: General requirements.

IS:2131 Method of standard penetration test for soils

IS:2132 Code of practice for thin walled tube sampling of soils

IS:2720 Method of test for soils (Relevant parts)

IS:2809 Glossary of terms relating to soil dynamics

IS:2911 Code of practice for design and construction of pile foundations (Relevant parts)

IS:2950 Code of practice for design and construction of raft foundation (Part-I)

IS:4078 Code of practice for indexing and storage of drill cores

IS:8009 Code of practice for calculation of settlement of foundation (Part-I&II)

IS:8763 Guide for undisturbed sampling of sand

IS:8764 Method for determination of point load strength index of rocks

IS:9143 Method for determination of unconfined compressive strength of rock materials.

IS:9179 Method for preparation of rock specimen for laboratory testing.

IS:9640 Specifications for split spoon sampler

IS:4453 Code of practice for exploration by pits, trenches, drifts and shafts

IS:4464 Code of practice for presentation of drilling information and core description in foundation investigation

IS:5249 Method of test for determination of in-situ dynamic properties of soil

IS:5313 Guide for core drilling observations

IS:6403 Code of practice for determination of allowable bearing pressure shallow foundation

IS:6935 Method of determination of water level in a bore hole

IS:11229 Specifications for shear box testing of soils

IS:12070 Code of practice for design and construction of shallow foundations on rocks

IS:2720 Part-IV Grain size Distribution

IS:2720 Part-V Atterberg Limits

IS:2720 Part Natural Moisture Content

IS:2720 Part-II Natural Dry Density

IS:2720 Part-XI Shear Parameters

IS:2720 Part-XV Consolidation Characteristics.

IS:4078 Code of practice for indexing & storage of drill cores.

IS:2131 Method for standard penetration test.

IS:1892 Code of practice for sub surface investigation for foundations

IS:6926 Diamond core drilling site investigation for river valley projects

IS:5313 Guide for core drilling observation.

IS:4464 Code of practice for presentation of drilling information and core description in foundation investigation.

IS: 5529 (Part-I & Part-II) Code of practice for in-situ permeability tests in overburdened rock respectively.

BIS: 6926 Diamond core drilling site investigation for river valley projects.

BIS: 2113 for Rock drilling.

## 2.3.1 Rejection

Any materials that have been found not to conform to the specifications will be rejected forthwith and shall be removed from the site by the bidder at its own cost within 15 days

Any work not to the satisfaction of the engineer or his representative will be rejected and same shall be rectified, or removed and replaced with work of required standard of workmanship at no extra cost.

## 2.4 TIME SCHEDULE:

The contract period for execution of the above mentioned work is **forty five days** from date of commencement/LOA of work.

## 2.5 VARIATION INQUANTITIES

Quantities provided in BOQ are tentative, variation shall be considered in accordance to clause 12 of GCC and as per latest provisions of Rule-73 of RTPPR-2013 with prior approval of Employer.

## 2.6 CONTRACTOR'S PROJECT ORGANIZATION.

The Contractor shall have a competent team of Managers, Geologist, Geotechnical Engineers, Technical staff and Safety officer etc so as to complete the work satisfactory as per various requirements of the contract.

PROVISION OF EFFICIENT AND COMPETENT STAFF:- The Contractor shall employ and keep on the works at all times efficient and competent staff to give necessary directives to his workers to see that they execute works in a safe and proper manner. He will provide the details of such staff comprising names, qualification, experience etc. The Contractor shall employ only such supervisors and workmen as are capable, careful, and skilled in their trade and calling. The Engineer shall be at liberty to object to and require the Contractor to remove forthwith from the works, any person employed by the Contractor in or for the execution of works or maintenance of works, who, in the opinion of the Engineer, misconducts himself or is incompetent or negligent in the proper performance of his duties or whose employment is otherwise considered by the Engineer to be undesirable and such person shall not be employed again in the works without the written permission of the Engineer. Any person so removed from the works shall be replaced by a competent substitute immediately.

**WORKS DURING NIGHT:-** Unless specifically provided in the Special Conditions of Contract, the Contractor shall carry out all works including during night subjected to restriction imposed by local authorities/police. Contractor shall make his own arrangement for sufficient illumination at site. Nothing extra will be paid for doing works at night.

### 2.7 TECHNICAL SPECIFICATIONS:-

2.7.1 RPWD Specifications/CPWD Specifications/IRC/IS Code etc and provisions of Codes/Specifications/ Manual are applicable for these works and work should be carried out as per these specifications and manual and other particular technical specifications given in the bid documents. Crane or Hydra if required to be used for various works at height in JMRC premises shall be of 1<sup>st</sup> Generation or equivalent category as per the directions of Engineer-In-Charge

**2.7.2** The frequency of work to be carried out as under:-

	The headeney of work to be earned out as ander.		
SNo	Description	Frequency	
1	Under Ground Section	@100M Staggered	
2	Elevated Section	@200M	
3	Under Ground Station	4 Nos.	
4	Elevated station	2nos.	

- **2.7.3** Drilling of 150mm diameter bore holes upto maximum depth of 40 meters in soil (upto N=100) and minimum 4 meter below the proposed rail levels for rocky strata using hydraulic / calyx rig by wash boring method as per the directions of Engineer-in-charge and as detailed in Technical Specifications and Schedule.
- **2.7.4** Conducting Standard Penetration Tests in bore holes at regular intervals of 1.5m as per I.S. Code of practice and also in-situ tests as per Schedule.
- **2.7.5** Collecting undisturbed soil samples (minimum of two per bore hole) from every bore hole as per I.S. Code of practice.
- **2.7.6** Recording of water table level in the bore holes after completion of boring.
- **2.7.7** Drilling bore holes up to a maximum depth of 5 meters in intact Hard Rock (RQD >50%) or 10 m in weathered rock (RQD up to 50%) or 40 meters in soil (up to N=100) using hydraulic / calyx rig by wash boring method as per the directions of Engineer-in-charge and as detailed in Technical Specifications and Schedule.
- **2.7.8** Conducting in-situ permeability tests in Rocky strata and tests in labs in all other types of soils.
- **2.7.9** Collecting rock core samples from bore holes and record the RQD.
- **2.7.10** Conduct all necessary laboratory tests on samples collected as per Schedule and Technical Specifications.
- **2.7.11** Survey of bore holes for elevation and plotting of bore hole locations in alignment plan.

**2.7.12** Preparation of report summarizing the details of soil / rock classifications, analysis of test data and recommending the type of foundations to be adopted with design calculations for the proposed Elevated corridor duly highlighting the design criteria and design methodology and different groups of soil strata encountered.

## 2.7.13 Soil investigation (boreholes)

a) Boreholes shall be sunk at specified locations to obtain information about the subsurface soil, and to collect soil and rock samples for strata identification and laboratory testing. The minimum diameter of borehole shall be 150 mm in soil and NX size(75 mm dia.) in rock and the boring shall be carried out in accordance with the provisions of IS 1892 and as per specification. Bore holes shall be advanced using water or bentonite. No slush should be allowed to flow on the road. If any slush is there, the same should be cleaned during and after completion of boring. Casing may be necessary to maintain the sides of the boreholes in a stable condition. Rock boring shall be carried out using a double core barrel / triple tube having a diamond bit to get higher core recovery. Necessary barricading with 2.4mx1.8m metallic/wooden boards with necessary fixing / supporting arrangements shall be made around the work area. The barricades shall be provided with wheels for easy shifting and movement. The barricading panels shall be light/movable and shall be as per Sketch No. 1 of JMRC enclosed. The cost of providing, maintaining, shifting etc. of barricading shall be borne by the agency.

All boreholes shall be extend upto depths of 40 m in soil (upto N>=100) or 10 m in weathered rock (RQD <=50%) or 5 m in hard rock (RQD>50%) unless otherwise directed by the Engineer. However the maximum depth of bore hole does not exceed40m. If strata having a standard Penetration Test value greater than 100 with characteristics of rock, is met with earlier, the borehole shall be advanced further by boring with approval of the Engineer. When the boreholes are to be terminated in soil strata, the Standard Penetration Test shall be carried out at the termination depth and recorded.

Packing of the boreholes with suitable concrete works etc as per the Directions of Engineer-In-Charge for making the work site safe for public must be ensured by the Contractor before leaving the work site. No extra cost shall be payable for such works.

- b) Casing shall be used in the boreholes to support its sides, if required. When casing is used it shall be ensured that its bottom end is, at all times, less than 150 mm above the bottom of the borehole. In case of cohesion less soil, the advancement of the casing shall be such that it does not disturb the soil to be tested or sampled. The casing shall be advanced by slowly turning the casing pipe and not by driving. Casing can be withdrawn after inspection of bore hole by the Engineer with his approval. No extra payment shall be made for providing the casing.
- c) In-situ tests shall be conducted and undisturbed samples shall be obtained at specified intervals in the boreholes. Representative disturbed samples shall be preserved for conducting various identification tests in the laboratory. Water level shall be determined in the boreholes and shall be carefully recorded on the drilling log.
- d) The borehole shall be cleaned, using suitable tools up to the depth of testing or sampling, ensuring that there is minimum disturbance of the soil at the bottom of the borehole. The process of letting through an open tube sample shall not be permitted. In cohesive soils, the borehole may be cleaned by using a bailer with a check valve.

#### 2.7.14 Rotary drilling

Rotary method can be used in all types of soil below water table. In this method, boring shall be done by rotating the bit fixed at the bottom of the drill rod. Proper care shall be taken to maintain contact between the bit and the bottom of the borehole at all times. Use of percussion tool shall be permitted in hard clays and dense sandy deposits.

#### 2.7.15 Water level measurement

The water level in the borehole shall be carefully recorded and reported, when first encountered whilst drilling the water level shall be measured every morning before recommencement of the drilling activities.

## 2.8 IN-SITUTESTS

#### 2.8.1 Standard Penetration Tests:

SPT tests shall be conducted in all types of deposits at 1.5m intervals or as per direction of engineer in charge. The tests shall be carried out by driving a standard split spoon by means of 63.5kg hammer (140 lbs) having a free fall of 76 cms (30 inches). Detailed procedure for testing as specified in IS 2131 shall be followed. The samples obtained in this split spoon shall be placed in an airtight jar or equivalent, levelled and preserved for identification tests in the laboratory.

## 2.8.2 Water samples

- a) Samples of ground water shall be obtained from each bore hole when first encountered or unless specified otherwise.
- b) At the specified depth, water shall be pumped out so that fresh ground water flows into the borehole. Care shall be taken in avoiding any contamination with surface water at any time. Water samples shall be collected in 5 litre polythene or glass container and labelled properly.

## 2.8.3 Field Permeability Tests:

Field Permeability Tests shall be conducted, if required to determine the water percolation capacity of overburden soil. The specifications of the equipment required for the tests and the procedure of testing shall be in accordance with IS 5529 Part-1.

## a) Constant Head Method

This test shall be conducted in boreholes where soils have high permeability. Water shall be allowed into the borehole through metering system ensuring gravity flow constant head so as to maintain a steady water level in the borehole and reference mark shall be done at a convenient level, which can be easily seen in the casing pipe to note down the fluctuations of water level. The fluctuations shall be counteracted by varying the quantity of water flowing into the borehole. The evaluation of water shall be observed at every 5 minute interval. When 3 consecutive readings show constant value, the necessary observations such as flow rate, evaluation of water surface above test depth, diameter of casing pipe etc. shall be made and recorded as per the proforma recommended in IS: 5529 Part-1Appendix-A.

## b) Falling Head Method

This method shall be adopted for soils of low permeability and which can stand without casing. The test section shall be sealed at the bottom of borehole and a packer at the top of the test section. If the test has to be conducted at an intermediate section of a borehole, then double packers shall be used. Access to the test section through the packers shall be by means of a pipe, which shall extend to above the ground level. Water shall be filled in the pipe up to the level marked just below the top of the pipe and water allowed to drain into the test section. The water level in the pipe shall be recorded at regular intervals as mentioned in IS: 5529 Part-1 appendix-B. The test shall be repeated till constant records of water level are achieved.

## 2.8.4 Resistivity Tests:

The electrical resistivity shall be conducted to determine the subsurface resistivity by making measurements on the ground surface. The measurement of electrical resistivity shall be conducted using four electrodes placed in contact with the surface material. The geometry, separation of the electrode array and spacing are to be selected on the basis of the application and required depth of investigation. The specifications of the equipment required for the tests, the procedure of testing and electrode array geometry shall be in accordance with IS 15736.

#### 2.8.5 Plate Load Tests:

The deformation modulus (Ev2) shall be conducted to check the suitability of various components of the Formation layer (blanket, sub grade) and of subsoil for laying tracks. The test shall be done as per RDSO Specification No. RDSO/2020/GE: IRS-0004 & DIN 18134 – April 2012.

#### 2.8.6 Seismic Refraction Test:

- A. Conducting Seismic Refraction Test on site including mobilization, site preparation and carrying out the tests.
- B. Analysis of SRT data and submission of interpretative test report in 3 copies, along with correlation with the existing borehole data.

## 2.9 SAMPLING AND TESTING

## 2.9.1 General

- 1. The bidder will bear all expenses for sampling and testing, whether at the manufacturer's premises at source, at site or at any testing laboratory or institution as directed by the Engineer at his own cost. All soil & rock testing shall be conducted by bidder at his own cost in a valid NABL approved lab having accreditation under ISO 17025:2017. The testing charges shall be borne by bidder.
- 2. Samples provided to the Engineer are to be labelled in boxes suitable for storage. Materials or workmanship, not corresponding in character and quality with approved samples, will be rejected by the Engineer.
- 3. Samples required for approval and testing must be intimated to Employer/Engineer at least 2 days in advance to allow for testing and approval. Delay to the works arising from the late submission of samples will not be acceptable as a reason for delay in completion of the works.
- 4. Sufficient number of soil samples shall be collected. Disturbed soil samples shall be collected for field identification and conducting tests such as sieve analysis, Index properties, i.e. Plastic & Liquid limits, chemical analysis etc. Undisturbed samples shall be collected to estimate moisture content, density, the physical strength and settlement properties of the soil.
- **5.** All accessories required for sampling and the methods of sampling shall conform to IS 2132 and IS1892.
- **6.** All disturbed and undisturbed samples shall be collected at site as per IS: 1498/1970.
- 7. All samples shall be identified with date, borehole number, depth of sample etc. The tube samples shall be properly trimmed at the ends, waxed and suitably capped. Soil samples shall be transported to the laboratory at the end of each working day with proper protection against loss and damage.

## 2.9.2 Disturbed Soil Samples

Disturbed soil samples shall be collected in boreholes at regular intervals. Samples, weighing approximately 1 kg shall be collected in boreholes at 1.5m intervals starting from a depth of 0.5m below ground level and at every identifiable change of strata to supplement the boring records. Samples shall be immediately stored in air-tight containers or equivalent and which shall be filled to capacity as much as possible.

## 2.9.3 Undisturbed Soil Samples

In each borehole, undisturbed soil samples shall be collected at every change of strata subject to a minimum of two as follows. Undisturbed samples shall be of 100m dia and 450 mm length. Samples shall be collected in such a manner that the structure of the soil and the moisture content do not get altered. The specifications for the accessories required for sampling and the sampling procedure shall conform to IS: 1892 and IS: 2132. The undisturbed sample shall be immediately followed by SPT test, after the borehole has been cleaned.

## 2.9.4 Undisturbed sampling in cohesive soil

- undisturbed samples in soft to stiff cohesive soils shall be obtained using a thinwalled sampler. In order to reduce the wall friction, suitable precautions, such as oiling the surfaces, shall be taken.
- b) Undisturbed samples in very loose saturated sandy and silty soils and very soft clays shall be obtained by using a piston sampler, consisting of a sampling cylinder and piston system. In soft clays and silty clays, with water standing in casing pipe, piston sampler shall be used to collect undisturbed samples. During this method of sampling, expert supervision is called for.

Accurate measurements of the depth of sampling, height of sampler, stroke and length of sample recovered shall be recorded on the field log. After the sampler is pushed to the required depth, both the sampler cylinder and piston system shall be drawn up together, ensuring that there shall not be any disturbance to the sample which shall then be protected from changes in moisture content. The ends of the tubes will be waxed and provided with caps. All samples must be transported to the laboratory at the end of each working day. The tubes shall be clearly marked to indicate the type of the sample.

#### 2.9.5 Chemical Tests

Chemical test shall be conducted on soils and water samples as per relevant BIS (latest revisions) to report the following:

- a) pH
- b) Chlorides in ppm & percentage
- c) Sulphates in ppm and percentage and expressed as SO3 & SO4.

## 2.10 PRESENTATION OF DRILLING INFORMATION AND CORE DESCRIPTION

- a) Daily drilling reports confirming to Appendix –A, IS: 4464 shall be prepared and submitted to the Engineer.
- b) Within 24 hours of completion of each borehole a field borehole log shall be prepared by a competent engineering geologist or geotechnical engineer. The log will include descriptions of the materials encountered and shall include the observations made during drilling including the samples obtained along with the depth, SPT, N-value and relevant information. The Engineer will comment on

the log and provide comments to be incorporated for the final report. This shall conform to Appendix-B of IS: 4464 and shall be submitted in triplicate to the Engineer-in-charge. The Contractor must seek the approval of the Engineer for the bore hole log format.

c) On completion of all drilling and test, a factual report shall be prepared (see clause 3.10).

#### 2.11 ROCKINVESTIGATION

## **2.11.1 Drilling**

Rotary core drilling shall be adopted by open holing through soft materials, or by drilling ahead in soft ground boring which has already been made. The substrata to be cored, may be soft, or may contain mixture of hard rock and soft weathered rocks. The drilling equipment used shall have an adequate capacity so as to ensure that required depths are reached and good quality rock core is recovered. The drilling equipment shall be hydraulically operated. The equipment, method and the procedure for drilling shall conform to IS: 1892.

Drilling shall be carried out using NX / EX size diamond tipped drill bits, a double core barrel with core catchers shall be used to ensure continuous and good core recovery. Core barrels and core catchers shall be used for breaking off the core and retaining it when the rods are withdrawn, double tube core barrels shall only be permitted. Water shall be circulated continuously down the hollow rods and the washings at the surface shall be collected. A very high recovery ratio shall be aimed at in order to get a satisfactory undisturbed sample. Core of 1.5m length shall be aimed at. If the Engineer determines that poor core recovery is due to the inability of the drilling crew a new borehole will be drilled at no cost to the client.

- **A.** No drilling run shall exceed 1.5 m in length. If the core recovery is less than 80 % in any run, the Engineer shall be informed and the length of the subsequent run shall be reduced to 0.75 m.
- **B.** Prior to commencement of the drilling operations, the rig shall be properly weighted down, or anchored, so as to minimize vibrations and ensure maximum core recovery.
- **C.** Full observations in respect of the colours and nature of the return drill water, water loss and permeability, speed of drilling, core loss and other relevant details, shall be described as per relevant IS codes.
  - a) The colour of return water at regular intervals, the depth at which any change of colour of return water is observed, the depth of occurrence and amount of flow of hot water, if encountered, shall be recorded.
  - b) The depth through which a uniform rate of penetration was maintained, the depth at which marked change in rate of penetration of sudden fall of drill rod occurs, the depth at which any blockage of drill bit causing core loss, if any, shall be recorded.
  - **c)** Any heavy vibration or torque noticed during drilling should be recorded together with the depth of occurrence.
  - d) Special conditions, like the depth at which grouting was done during drilling, presence of artesian conditions, loss of drilling fluid, observations of gas discharge with return water etc., shall also be observed and reported.

#### 2.12 EXTRACTION AND STORING OF CORESAMPLES

- **A.** Core samples shall be extracted by the application of a continuous pressure at one end of the core with the barrel held horizontally without vibration. Friable cores shall be extracted from the barrel directly into a suitable sized half round plastic channel section. Core shall be taken to maintain the direction of extrusion of sample same as while coring.
- **B.** Immediately after withdrawal from the core barrel, the cores shall be placed in a tray and transferred to boxes specially prepared for the purpose. The boxes with a sturdy cover shall be made from seasoned timber or any other suitable material and shall be indexed on top of the lid as per IS: 4078. The cores shall be numbered serially and arranged in the boxes in a sequential order. The description of the core samples shall be recorded as per IS: 4464 when core is recovered, it shall be recorded as specified in the standard and the engineer should be informed so that remedial measures can be implemented. Continuous record of core recovery and RQD to be mentioned in the log as per IS: 11315, Part-II. All core boxes shall be transported and handed over to the Engineer on completion of each bore hole. All core boxes shall be photographed and the photos attached to the report. The photographs shall show the rock core box clearly labelled indicating project name, borehole number, and depth stored in the core box and the serial number of the box for the bore hole (e.g. box 2 ofn).

#### 2.13 LABORATORYTESTING

- 2.13.1 At the completion of the borehole the field log should be transmitted to the engineer within 24 hours. The engineer will assign a laboratory test programme for the samples of that borehole within 3 working days after receipt of the field log.
- 2.13.2 These boreholes are to be conducted for confirmation of data available and for finding out the depth of rock profile at certain locations. As such the testing of samples has to be carried out in a meticulous manner. Availability of testing facilities as directed is a must and a visit to the laboratory may be made by a representative of JMRCJMRC LTD. before accepting any offer submitted by any BIDDER.
- **2.13.3** The Engineer may visit to observe tests of soil as well as rock in the laboratory.
- **2.13.4** Necessary laboratory tests shall be conducted on selected samples in consultation with the Engineer-in-charge. For this purpose, all undisturbed samples shall be entered on the proforma shown in relevant IS Codes and submitted, in triplicate, to the Engineer with records of the field bore logs.
- **2.13.5** All tests shall be performed as per IS: 2720 and as per the directions of the Engineer-in-Charge as directed.

## 2.13.6 Testing of Rock Samples

Selected core samples shall be tested in the laboratory for hardness / crushing and shear strength, test samples shall be chosen so as to include joints, fissures etc. as far as possible

#### 2.13.7 Point Load Test on rock Cores

Intact samples of minimum 50 mm diameter and length equal to 1.5 times the diameter should be tested on a Point Load Tester and its point load index shall be determined. The Uniaxial Compressive Strength (UCS) of the sample should be calculated from the point load index. The index as well as the UGS should be reported.

Uniaxial Compressive Strength of Intact Rock Samples Intact rock cores of minimum NX/EX size and length 2.5 to 3 times the diameter should be tested for its uniaxial compressive strength. This test should be conducted on perfectly cylindrical samples, which shall be polished and conform to Indian Standard Code of practice. The UCS of the sample should be reported along with the diameter and length of the sample.

## 2.13.8 Laboratory Tests

Tests as indicated in the specification and as called for by the Engineer, shall be conducted as per the Schedule of Quantity.

Direct shear and triaxial tests shall both be conducted at same depth for same material obtained from one sampler at least at two locations in each bore hole to find out the values of cohesion and the angle of shearing resistance. The tests shall be carried out, for all conditions and their specific engineering significance should be maintained. However, conditions of test i.e., unconsolidated undrained, consolidated drained etc. shall be as per specific instructions from Engineer.

Type and location of other tests shall be decided by the Engineer. It shall be the duty of the contractor to obtain details of locations and type of tests from the Engineer before starting boring for a particular bore hole. The Engineer shall however, be free to change these locations if so warranted by site conditions.

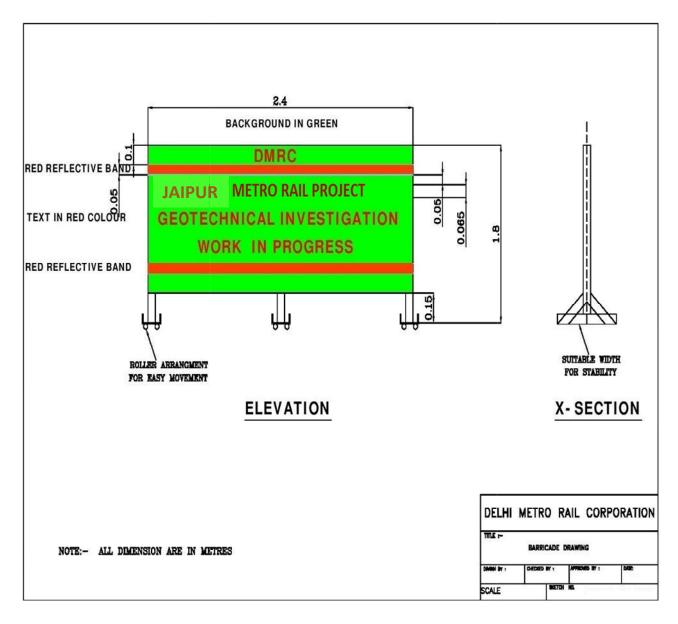
The analysis of above data shall include calculations for self standing height, dewatering requirements including capacity of pumps and number of pumps and shall be included in report in detail.

All soil testing as directed by Engineer shall be conducted by Laboratory holding current accreditation under Inter-national Standard Organisation / Bureau of Indian Standards.

#### 2.14 REPORT

- **2.14.1** On completion of field and laboratory work, for every km, a draft factual report in triplicate, shall be submitted incorporating the following:
  - A complete description of the soils and rocks encountered, along with in-situ test results and the samples type and depths.
  - b) Procedure of investigation employed.
  - c) Detailed bore hole logs, laboratory and field test results, both in tabular as well as in graphical form, and a plot plan showing locations and reduced levels of bore holes and other tests.
  - d) Soil classification curves including Table indicating D-10, D-30, D-60 size, uniformity coefficient etc. These figures should be made on Auto Cad and submitted to JMRC LTD. on CDs/DVDs
  - e) Mohr's circle diagrams drawn on the basis of data obtained from shear strength tests shall be enclosed.
  - f) Aggressiveness of soil and soil water to concrete, steel and other building material.
  - g) Any other information of special significance encountered during investigations and likely to have a bearing on design and construction.
  - h) Reduced levels and coordinates of bore holes shall be tabulated. The depth of water table with respect to ground shall also be given.

- i) Detailed report giving recommendations for type of foundation, analysis of bore logs & tests results along with SBC values.
- **2.14.2** Final report shall be submitted only after incorporation of comments by the Engineer.
- 2.14.3 Four copies of report for every km including all figures shall be given to JMRC LTD. Computer diskettes /CDs for this report and figures shall be submitted by contractor to JMRC LTD. Any data supplied by JMRC LTD. shall not be used for any other purpose other than it is meant for.
- **2.14.4** The data, reports and figures generated out of this assignment shall be the sole property and the contractor shall give an undertaking that he shall not use this for any other purpose. No computer back-ups shall be kept by him.
- 2.14.5 All the locations of bore hole points shall be marked on drawing and give horizontal, Coordinates and reduced levels. The Reduced Levels of the top of Bore holes shall be interlinked with the GTS Bench Marks in Co-ordination with the Agency doing the detailed topographical Survey.



Words/Text to be replaced with:-

- (i) "DMRC" with "JMRC".
- (ii) "Delhi metro Rail Corporation" with "Jaipur Metro Rail Corporation"
- (iii) Logo of JMRC is to be incorporated on the visible face of barricade panel.

## JAIPUR METRO RAIL CORPORATION LIMITED, JAIPUR SCHEDULE AND SPECIFICATIONS

## 3.0 CONTENTS OF BID DOCUMENT:-

Documents as listed below (Except SN-3.7; Schedule-G, Price Bid) are to be attached separately with Notice Inviting Bid (NIB) in dully filled, stamped and signed form as applicable to the bidder with the First Part of Online Bid i.e. Technical Bid.

## 3.1 SCHEDULE -A:- NIB & SCOPE OF WORK:

The bidder should see the site and fully understand the conditions of the work site before bidding and include all lead, lifts etc. for the material in his item rate/ percentage to be quoted on the rates as given in the SCHEDULE –G/Price Bid/Second Part: Financial Bid. Then work shall be carried out to the entire satisfaction of the Engineer- In- Charge of the work. The brief scope of work is given in Clause-2.0 of NIB Document.

- **3.2 SCHEDULE-B:-** INSTRUCTIONS TO BIDERS:- Attached Separately.
- **3.3 SCHEDULE-C-** SPECIAL CONDITIONS OF CONTRACT:-Attached Separately.
- 3.4 SCHEDULE -D:- GENERAL CONDITIONS OF CONTRACT & SAFETY HEALTH AND ENVIRONMENT (SHE) MANUAL: Approved GCC & SHE MANUAL is uploaded and available on the JMRC website, by signing the Bid Document, firm agrees to accept the GCC & SHE MANUAL. While framing the contract with the successful Bidder, the bidder shall sign the complete GCC & SHE MANUAL document and submit it to the JMRC.
- 3.5 **SCHEDULE-E**:- ANNEXURE:
  - (i) Annexure A1: Compliance with the code of Integrity and No Conflict of Interest.
  - (ii) Annexure B1: Declaration by the Bidder regarding Qualifications.
  - (iii) Annexure C1: Grievance Redressal during Procurement Process.
  - (iv) Annexure D: Additional Conditions of Contract.
  - (v) Annexure E: Initial filter criteria of applicant.
  - (vi) Annexure F: Certificate by the Bidder to be appended with Annexure-E.
  - (vii) Annexure G:- Undertaking by bidder regarding registration for EPF, ESIC and Contract Labour License etc. as per Clause-1.0 (r) Note (b) of NIB.
  - (viii) Annexure X:- Certificate By Bidder with each Bill.

## 3.6 **SCHEDULE-F:**-FORMS:-

- (i) FORM-A:- Form of Bid with Appendix.
- (ii) FORM-B:- Performa for Statement of Deviations.
- (iii) FORM-C:- Form of Performance Security (Form of Bank Guarantee) by Bank.
- (iv) FORM-D:- Form of Agreement.
- (v) FORM-E:- General Information.
- (vi) FORM -F:- Bank Details.
- (vii) FORM-G:- Power of Attorney.
- (viii) FORM-H:-Indemnity certificate and obligation/ Compliance to be ensured by the Bidder.
  - (ix) FORM-I:- Obligations/Compliances to be ensured by Bidder.

## 3.7 SCHEDULE-G:-PRICE BID/FINANCIAL BID (SECOND PART):-

Attached separately (Non Scheduled Items)

**3.8 SCHEDULE-H**:- Check list for bid Evaluation/Submission.

SIGNATURE OF CONTRACTOR

General Manager (Project Coordination)

With full address & Mobile No.:

Jaipur Metro Rail Corporation Ltd., Jaipur

## SCHEDULE-B: INSTRUCTIONS TO BIDDERS (ITB)

#### 1.1 GENERAL INFORMATION

1.1.1 Digitally Signed Online Bids are invited for the NIB No.: 01/JMRC/Project/2022-23 towards"Geo-technical Investigation work for Extension of E-W Corridor from Badi Chouper to Transport Nagar (2.85Km) Phase-1C and Mansarovar to Ajmer Road (Chauraha) (1.35 km) Phase-1D"byJaipur Metro Rail Corporation Limited, hereinafter called the 'Employer', for Works in accordance with this Bid Package. The Bid consist of the following documents, along with their Tables, appendices, addenda, corrigenda and errata if any.

## **CONTENTS OF BID DOCUMENT:-**

- (i) Notice Inviting Bid (NIB)- (Schedule-A)
- (ii) Instructions To Bidder (ITB)-(Schedule-B)
- (iii) Special Conditions of Contract (SCC) -(Schedule-C)
- (iv) General Conditions of Contract (GCC) &Safety, Health and Environment (SHE) Manual (Schedule-D)
- (v) Annexure (s) -(Schedule-E)
- (vi) Forms-(Schedule-F)
- (vii) Price Bid Bill of Quantities (BOQ) -(Schedule-G)

Bids shall be prepared and submitted in accordance with the instructions given herein. This bid is under the RTPP Act 2012 & RTPP Rules, 2013, complied up to date.

1.1.2 Relevant address for correspondence relating to this Bid is given below:

Office of General Manager (Project Coordination),

Jaipur Metro Rail Corporation Ltd.,

1<sup>st</sup> Floor, A-Wing, Admin Building,

Bhrigu Path, Mansarovar Metro Depot, Jaipur-302020 Mobile No-: +91-9650992378; 7728895359; Tel:-0141-2822786/788;

Email: gmpc@jaipurmetrorail.in; jgmc@jaipurmetrorail.in

## 1.2 SUBMISSION OF BIDS

## 1.2.1 COST OF BID DOCUMENT

- 1.2.1.1 The BID should be submitted in the prescribed Bid document, which may be purchased as per Clause 1.0 (h) of NIB of Bid Document.
- 1.2.1.2 The complete bid document can be downloaded from the website <a href="https://eproc.rajasthan.gov.in">https://eproc.rajasthan.gov.in</a>; <a href="https://sppp.rajasthan.gov.in">https://sppp.rajasthan.gov.in</a> or <a href="https://transport.rajasthan.gov.in/jmrc">https://sppp.rajasthan.gov.in</a> or <a href="https://sppp.rajasthan.gov.in">https://sppp.rajasthan.gov.in</a> or <a href="https://sppp.rajasthan.gov.in">https://sppp.rajasthan.gov.in</a> or <a href="https://sppp.rajasthan.gov.in">https://sppp.rajasthan.gov.in</a> or submitted in the form of DD/ Banker's Cheque etc as per Clause 1.0 (h& I) of NIB.

## 1.2.2 **SEALING AND MARKING OF BIDS**

1.2.2.1 Online bids will have to be digitally stamped and signed by the authorized signatory of bidder firm and submitted in a time stamped electronic sealed box on https://eproc.rajasthan.gov.in in the manner as described in Clause 1.0 (s) of NIB.

#### 1.2.3 **EVALUATION OF BID**

The Employer will, keeping in view the Rule 63 & 65 of RTPPR Rules 2013 complied up to date, will carry out technical evaluation of submitted technical proposals to determine that the bidder has a full comprehension of the work of the contract. Where a Bidder's technical submittal has a major inadequacy, his Bid will be considered to be non-compliant and will be rejected. Refer Clause 1.0 (r) of NIB, Clause 1.1.1 of ITB of Bid Document, Forms as per Schedule-F and Annexure (s) as per Schedule-F of Bid Document.

- 1.2.3.2 All technically acceptable bids will be eligible for consideration of their financial proposals. The Firms who get technically qualified will be intimated by the JMRC through online procurement portals i.e E-Procurement and SPP Portals. The financial proposal of the technically qualified firms shall be evaluated to determine the lowest bidder.
- 1.2.3.3 For price evaluation of Bid, the Total Overall Cost as quoted for "Geo-technical Investigation work for Extension of 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 will be considered.
- 1.2.3.4 All offers shall be evaluated and marked L1, L2, L3 etc., L1 being the offer which is the least expensive offer.

## 1.2.4 **NEGOTIATIONS**

- 1.2.4.1 Subjected to Section 15 of RTPP Act and Rule 69 of RTPP Rules the procuring entity reserves the right to negotiate with the lowest and most advantageous bidder.
- 1.2.4.2 **CORRECTION OF ERRORS:-**
- 1.2.4.3 Bids determined to be technically acceptable after technical evaluation will be checked by the Engineer/ Employer for any arithmetical errors in computation and summation during financial evaluation. Errors will be corrected by the Employer.
- 1.2.4.4 If a Bidder does not accept the correction of errors as outlined above, his Bid may be rejected and the Bid security shall be forfeited.

## 1.3 AWARD OF CONTRACT

- 1.3.1 **AWARD CRITERIA**
- 1.3.1.1 Employer will award, the Contract to the Bidder, whose Bid has been determined to be substantially responsive, technically & financially suitable, complete and in accordance with the Bid documents and <a href="https://www.whose.evaluated.com/whose.evaluated.
- 1.3.1.2 The "Letter of acceptance" will be uploaded on websites as per Clause 1.0 (g) of NIB, sent through E-Mail/Speed Post to the successful Bidder, who will return one copy to the Employer duly acknowledged and signed by the authorized signatory, within seven days of receipt of the same by him. No correspondence will be entertained by the Employer from the unsuccessful Bidder.

## 1.4 SIGNING OF AGREEMENT

- 1.4.1 The contractor shall prepare the Agreement on non-judicial stamp as per Rajasthan stamp act, in the Performa (Form D of Schedule-F) included in this Document, duly incorporating all the terms of agreement between the two parties. Within 15days from the date of issue of the letter of acceptance, the successful Bidder will be required to execute the Contract Agreement. The performance security should be submitted immediately after issue of letter of acceptance but not later than the agreement is signed between the parties. One copy of the Agreement duly signed by the Employer and the contractor through their authorized signatories, will be supplied by the Employer to the Contractor.
- 1.4.2 Prior to signing of the Contract Agreement, the successful bidder shall submit the following documents within a period of 15 days from the date of issue of the Letter of Acceptance:
  - a. Performance Security as per Clause 1.5 of ITB.
  - b. Power of Attorney (If Required)
  - c. Detailed Consortium or Joint Venture Agreement (duly signed and executed) incorporating :
    - i. Percentage Participation of each member/partner.
    - ii. Joint and several liability of the partners.

## 1.5 PERFORMANCE SECURITY (Rule-75 of RTPPR-2013)

- 1.5.1 The successful bidder shall furnish to the Employer a performance security in the form of a Bank Guarantee (BG)/ Bank Draft or Banker's Cheque (BC) of Scheduled Bank/Demand Draft (DD) or Fixed Deposit Receipt (FDR) in the name of "Jaipur Metro Rail Corporation Limited" for an amount equal to 03% of the total Contract Price, in accordance with Clause 4.2 of the General Conditions of Contract. The validity of BG (If submitted) shall be beyond 60 days after the expiry of all contractual obligations. The Bank Guarantee has to be from a scheduled Commercial Bank based in India and the Form of Performance Security (Form C-Schedule-F) provided in this document shall be used. The Performance Security shall be furnished within the time limit specified in Clause 1.4.2 of ITB. Performance security shall be discharged after completion of bidder's performance obligations including warranty/maintenance and Defect Liability Period obligations under the contract.
- 1.5.2 Alternatively, on request application of option for deduction of performance security of successful Bidder, Employer may allow the Bidder (As per Rule 75 (3) (f) of the RTPPR-2013) to submit the performance security amount (i.e equal to 03% of the total contract price) in form of deduction from his each running and final Bill @ 03% of amount of Bill, till the total amount of performance security is deposited.
- 1.5.3 Bank guarantee/s of a scheduled bank shall be got verified from the issuing bank. Other conditions regarding bank guarantee shall be same as mentioned in the bid document for bid security.
- 1.5.4 Fixed Deposit Receipt (FDR) of a scheduled bank:- It shall be in the name of procuring entity 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 procuring entity 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.
- 1.5.5 Additional Performance Security:-In addition to Performance Security as specified in rule 75 of RTPPR-2013, 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 Draft, Banker's Cheque, or Bank Guarantee in favour of "Jaipur Metro Rail Corporation Limited".

Explanation: For the purpose of this rule:-

- (i) 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.
- The Additional Performance Security shall be refunded to the contractor after satisfactory completion of the entire work. The Additional Performance Security shall be forfeited by the Procuring Entity when work is not completed within stipulated period by the contractor.
- 1.5.6 Failure of the successful bidder to lodge the required Performance Security shall constitute sufficient grounds for the annulment of the Award of Contract and forfeiture of the bid security. In case successful Bidder fails to commence the work (for whatsoever reasons) as per terms and conditions of Bid after issuance of LOA then the LOA shall be cancelled and the Bid Security &Performance Security shall be forfeited.

## 1.6 OTHER TERMS & CONDITIONS:-

## 1.6.1 **PAYMENT:**

- 1.6.1.1 Payment will be made on actual work executed after satisfactory completion of works as per the directions of the Engineer under the contract. On submission of each bill, 80% of the bill amount shall be paid on certification of actual work done as per the BOQ specifications or relevant IS Code by the Engineer and the balance 20% amount shall be released with next bill OR after verification of works done in terms of Material Testing Certificates, Testing Certificates (If Required) by NABL accredited testing lab, NOC from the other concerned departments (If required), cleaning of site in all aspects i.e no man, material and equipment and after Successful Testing and Commissioning of the works as per the details submitted by the contractor to JMRCL through the Engineer.
- 1.6.1.2 No advance is payable.
- 1.6.1.3 GST-Invoice/Bills, correct in all respect, shall be submitted in the favor of Jaipur Metro, Jaipur with bank details in duplicate along with the acceptance certificate and relevant documents, if any, for arranging payment.
- 1.6.1.4 Necessary and applicable statutory deductions from the bill/invoice amount shall be done by JMRCL on account of Labour Welfare Cess as per BOCW Welfare Cess Act-1996 (Minimum 01% on bill amount and maximum upto 02% of bill amount as per latest guidelines issued by Govt. of Rajasthan) and TDS etc.

## 1.6.2 **OTHER CONDITIONS:**

- 1.6.2.1 Prices are inclusive of Manpower, Material, Tools, Transportation, all taxes & duties etc.
- 1.6.2.2 No tools and Plants shall be issued to contractor by JMRC.
- 1.6.2.3 Only authorized staff of contractor having proper identity card issued by the contractor/firm shall be permitted to enter in JMRC Site Premises.
- 1.6.2.4 The work should be carried without causing any hindrance to the users.
- 1.6.2.5 If the contractor fails to perform/executed the work satisfactorily, the contract may be terminated at any time without assigning any reason to the contractor.
- 1.6.2.6 The JMRC shall have the right to make minor alterations/additions/substitution in the scope of work or issue instructions that may be deemed necessary during the period of the contract and contractor shall carry out the work in accordance with the instructions which may be given to him by authorized JMRC's representative.

SCHEDULE-C:- SPECIAL CONDITIONS OF CONTRACT (SCC)(CONTENTS)

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#### **PART-1**

## SPECIAL CONDITIONS OF CONTRACT

## 1.0 SPECIAL ATTENTION

The Contract will be awarded as per RTPP Act-2012 and RTPP Rules, 2013, to the Bidder whose responsive bid is determined to be eligible and lowest rated as per the terms and conditions of bid document.

## 2.0 RIGHT OF WAY

Right of way (within JMRC land) to the work site will be provided to the Bidder by the Engineer-In-Charge.

## 3.0 COORDINATION WITH OTHER BIDDERS

The bidder for this package shall plan and execute work in coordination and in Cooperation with other bidders working for adjacent/other packages, under intimation to the Engineer-In-Charge.

## 4.0 SUFFICIENCY OF BID

- 4.1 The Bidder shall be entirely responsible for sufficiency of rates quoted by him in his
- 4.2 The Bidder (Successful Bidder) shall be paid for only at quoted/accepted rates.

## 5.0 NOTICES AND INSTRUCTIONS

5.1 The Bidder shall furnish to the Employer/Engineer the postal address of his office at Jaipur and working E-Mail address. Any notice or instructions to be given to the Bidder under the terms of the contract shall be deemed to have been served on him if it has been delivered to his authorized agent or representative at site or if it has been sent by registered post to the office, or to the address of the firm last furnished by the Bidder or if conveyed by the E-Mail from the authorized email.

## 6.0 SUPPLY OF MATERIALS TOOLS, AND EQUIPMENT BY THE EMPLOYER

No material, tools, and equipment shall be supplied by the Employer. The Bidder has to arrange all tools, equipment, materials etc. required for the work. The Bidder shall have to identify sources for supply of all materials and get them approved by the Engineer-In-Charge before the use. The Bidder shall submit the sample to the Engineer-In-Charge and shall use only after the sample is approved. Nothing extra shall be payable to the Bidder on this account.

## 7.0 USE AND CARE OF SITE

- 7.1 The Bidder shall not demolish, remove or alter structures or other facilities on the site without prior approval of the Engineer-In-Charge.
- 7.2 All garbage/debris shall be removed from site daily or as they accumulate. All garbage/debris shall be disposed to the approved locations in covered position. The necessary materials required i.e. cartoons/ dustbins etc to be provided by the bidder at his cost. The transportation for disposing the debris shall also be arranged by the bidder.

- 7.3 All surrounding surface and sub-soil drains shall be maintained in a clean, sound and satisfactory state of performance.
- 7.4 Necessary permissions/approval of the Employer's representative shall be obtained before carryout the work.
- **7.5 ACCIDENTS:** It shall be the entire responsibility of the bidder to adopt all the safety measures and deploy the personnel who are adequately trained in safety. If any accident occurs within the JMRC jurisdiction while carrying out the works or due to negligence on the part of the bidder's personnel, it shall be the full responsibility of the bidder.

## 8.0 DUTIES, TAXES, OCTROI, ROYALTY ETC

- 8.1 The rates quoted by the Bidder for all materials, required to be purchased for the satisfactory performance of this contract, shall be deemed to be inclusive of all duties, taxes, octroi, royalties, rentals etc.
- 8.2 The Bidder shall ensure full compliance with tax laws of India with regard to this contract and shall be solely responsible for the same. He 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 Bidder's in respect thereof, which may arise.

#### 9.0 GST REGISTRATION CERTIFICATE

9.1 If the Bidder is a GST assessee, he should produce a valid GST Registration Certificate; otherwise, payment to the Bidder will be with held.

## 10.0 HOUSING FACILITIES (Supplemental to Clause 6.6 of "General Conditions of Contract")

The Bidder shall have to make his own arrangements for housing facilities for his staff.

## 10.0 ACCESS ROADS AND HAUL ROADS

- 11.1 Existing roads and other public roads may be used by the Bidder to carry out works with prior approval of the competent authority. The Bidder shall pay the statutory vehicle license and permit fees for use of public roads.
- 11.2 The Bidder shall repair any damage to the road or bear the cost thereof due to movement of bidder's plants and equipment, vehicles etc. to the specifications and satisfaction of road authorities as well as of Engineer.

#### 12.0 DEDUCTIONS TO BE MADE FROM BIDDER'S BILL

- 12.1 Tax deduction at source (TDS) from each on account progress bill shall be made by the Employer as per the provisions of the statutes/ acts of statutory bodies/ local authorities.
- Necessary and applicable statutory deductions from the bill/invoice amount shall be done by JMRCL on account of Labour Welfare Cess as per BOCW Welfare Cess Act-1996. (Minimum 01% on bill amount and maximum upto 02% of bill amount as per latest guidelines issued by Govt. of Rajasthan)

## 13.0 PROGRAM OF WORKS

- 13.1 The period of contract is as per Clause1.0 (c.) of NIB from the date of commencement of work. However the work should be started immediately after issue of LOA or as per the directions contained in LOA.
- 13.2 The bidder should work round the clock if required. The major activities, which are affecting the traffic are to be done at the non-operational hours i.e. in night shift.

#### 13.3 **PENALTY**

- 13.3.1 Penalty for non-attending the works within the minimum specified time as mentioned for the different works after issue of instructions by the competent authority or for the poor quality of works will be levied upto the rate of 10% of Contract Value as decided by the Employer. Repeated failure by the bidder to attend to the works within specified time period may lead to termination of contract. The penalty shall be preceded with proper show cause notice. The penalty once levied may be reviewed by the authority next higher to the authority who has levied penalty on written submission by the bidder within 15 days of levy of penalty.
- 13.3.2 This penalty shall not relieve the bidder from his obligation to execute the works or from any other of his obligations and liabilities under the contract.
- 13.3.3 The Bidder shall co-ordinate his programme to the extent feasible with the programmes of other bidders to be engaged at the site or in the vicinity of the site, as furnished by the Engineer so that the works can be carryout as per the overall program.

#### 14.0 SECURITY MEASURES

- 14.1 Security arrangements for the work shall be in accordance with general requirements and the Bidder shall confirm to such requirements and shall be held responsible for the action or inaction on the part of his staff, employees.
- 14.2 Bidders' employees and representatives shall wear Identification Badges or ID Cards, helmets, gum boots, approved uniform and other safety/protection wear as directed by incharge, and to be provided by the Bidder. Badges shall identify the Bidder and show the employee's name and number and shall be worn at all times while at site.
- 14.3 All vehicles used by the Bidder shall be clearly marked with the Bidder's name or identification mark.

## 14.4 ROADS AND WATER COURSES, OTHER UTILITIES ACCESS TO PREMISES AND SAFETY OF PUBLIC

- i. Existing road or water courses shall not be blocked, cut through, altered, diverted or obstructed in anyway by the Contractor, except with the permission of the Engineer. All compensation claimed for any unauthorized closure, cutting through, alteration, diversion or obstruction to such roads or water courses by the Contractor or his agent or his staff shall be recoverable from the Contractor by deduction from any sums which may become payable to him in terms of the Contract, or otherwise according to law.
- ii. During progress of work in any street or thoroughfare, the Contractor shall make adequate provision for the passage of traffic, for securing safe access to all premises approached from such street or thoroughfare and for any drainage, water supply or means of lighting which may be interrupted by reason of execution of works and shall erect and maintain at his own cost barriers, lights

and other safeguards as prescribed by the Engineer for the regulation of traffic, and provide watchman necessary to prevent accidents. The Works shall in such cases be executed day and night if so ordered by the Engineer and with such vigour that the traffic is impeded for as short a time as possible.

- iii. The Contractor shall be responsible for taking all precautions to ensure safety of the public, whether on public or Employer's property and shall post such lookout men as may, in the opinion of the Engineer, be necessary to comply with the regulations appertaining to the work and to ensure safety.
- iv. The work site shall be properly barricaded with reflective stickers and be provided with series / rope light indicators to glow during night. The barricading shall be as per the drawing given along with tender or as directed by the engineer.

#### 15.0 ECOLOGICAL BALANCE

- 15.1 The Bidder shall maintain ecological balance by preventing deforestation, water pollution and defacing of natural landscape. The Bidder shall, so conduct his works activities, as to prevent any avoidable destruction, scarring or defacing of natural surrounding in the vicinity of work. In respect of ecological balance, the Bidder shall observe the following instructions.
- (a) Where destruction, scarring, damage or defacing may occur as a result of operations relating to works activities, the same shall be repaired, replanted or otherwise corrected at Bidder's expenses. All work areas shall be smoothened and graded in a manner to confirm to natural appearance of the landscape as directed by the Engineer.
- (b) All trees/plants and shrubbery, which are not specifically required to be cleared or removed for works purposes, shall be preserved and shall be protected from any damage that may be caused by Bidder's maintenance activities. The removal of trees/plants or shrubs will be permitted only after prior approval by the Engineer-In-Charge. Trees/plants shall not be used for anchorage. The Bidder shall be responsible for injuries to trees/plants and shrubs caused by his operations. The term "injury" shall include, without limitation, bruising, scarring, tearing and breaking of roots, trunks or branches etc. All injured trees and shrubs shall be restored as nearly as practicable, without delay, to their original condition at Bidder's expenses.
- (c) In the conduct of works activities and operation of equipment, the Bidder shall utilize such practicable methods and devices as are reasonably available to control prevent and otherwise minimize air/noise pollution.
- 15.2 Separate payment shall not be made for complying with provisions of this clause and all cost shall be deemed to have been included in the price in the Bill of Ouantities.

## 16.0 BRIEF SCOPE OF WORK

Brief scope of work is included in Clause-2.0 of Notice Inviting Bid, Schedule-A & G of Bid document.

## 17.0 PAYMENT

- 17.1 For the purpose of On-account payment, the bidder shall submit detailed activities carried out as per Work orders recorded in Measurement sheets, Abstract sheets along with recorded bill for the item actually executed for checking and payment. Payment will be based on unit rates as approved in the Bill of Quantities.
- 17.2 The bidder have to submit self certified copies of vouchers showing quantity of materials brought to site for in charge's record.
- 17.3 If any activities not carried out as per the work order the applicable amount will be deducted from the payable bill amount or performance security/bid security etc. If the work carried out through other agency under the intimation to the bidder and the

charges incurred on it will be deducted from the bidder's bill. In addition the applicable penalty will be levied as per Clause 13.3 of SCC.

- Payment will be made on actual work executed after satisfactory completion of works as per the directions of the Engineer under the contract. On submission of each bill, 80% of the bill amount shall be paid on certification of actual work done as per the BOQ specifications or relevant IS Code by the Engineer and the balance 20% amount shall be released with next bill OR after verification of works done in terms of Material Testing Certificates, Testing Certificates (If Required) by NABL accredited testing lab, NOC from the other concerned departments (If required), cleaning of site in all aspects i.e no man, material and equipment and after Successful Testing and Commissioning of the works as per the details submitted by the contractor to JMRCL through the Engineer.
- 17.5 The percentage quoted above /below the rates in BOQ by the bidders will remain firm till completion of the entire work and include all transit insurance, etc. of Central, State, Local bodies, etc. and charges for materials, labor, all lead, lift, ascent, descent, crossing of road/railway line including to and fro cost of transportation of soil boring/rock drilling instruments from any place to geotechnical investigation site.

## 18.0 DELETED

## 19.0 NOISE AND DISTURBANCE/POLLUTION:-

- 19.1 All works shall be carried out without unreasonable noise and disturbance. The Bidder shall indemnify and keep indemnified the Employer from and against any liability for damages on account of noise or other disturbance created while carrying out the work, and from and against all claims, demands, proceedings, damages, costs, charges, and expenses, whatsoever, in regard or in relation to such liability.
- 19.2 Subject and without prejudice to any other provision of the Contract and the law of the land and its obligation as applicable, the Bidder shall take all reasonable precautions.

## 20.0 ADVANCES

No advances shall be paid to the Bidder.

## 21.0 PRICE VARIATION CLAUSE

Price variations clause is not applicable in this contract.

#### 22.0 DELETED

## 23.0 COMPLIANCES TO VARIOUS PROVISIONS OF ACTS:-

The bidder shall comply with all the provisions of the Minimum Wages Act, 1948, The Building and Other Construction Workers (Regulation of Employment and Condition of Service) Act 1996 and Contract Labour (Regulation and Abolition) Act, 1970, EPF act, ESI Act etc as applicable and amended from time to time and rules framed there-under and other labour laws affecting contract labour that may be brought into force from time to time.

## 24.0 RIGHT TO VARY QUANTITY (As per latest provisions of RTPPR, 2013)

Bidder is to carry out their self-assessment in respect of their capacity in terms of manpower, machinery, materials and finance. He is to indicate separate set of manpower, machinery, materials in different bids. Once a bid is accepted, resources required for its execution shall not be considered for assessment of other bid. The bidder is required to consider right of JMRC to vary quantities as per latest provisions of RTPPR 2013 (Rule-73) as amended from time to time as under:

- (i) 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.
- (ii) Repeat orders for extra items or additional quantities may be placed, on the rates and conditions given in the contract. Delivery or completion period may also be proportionately increased. The limits of repeat order 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.
  - (b) 50% of the value of goods or services of the original contract.

He should be able to take up such variation in quantities at short notice at the accepted rate for which he is to indicate his required resources.

#### 25.0 DELETED

## 26.0 DELETED

## 27.0 MANDATORY REGISTRATION OF BIDDER

The bidder should get registered under Rajasthan BUILDING AND OTHER CONSTRUCTION WORKERS (REGULATION OF EMPLOYMENT AND CONDITIONS OF SERVICE) RULES, 2002 before commencement of the Work, if applicable.

## 28.0 WORK NOT TO BE SUBLET

Subletting of any of the works is not permitted under this contract.

## 29.0 SCHEDULE OF INSPECTIONS

## [INSPECTION BY ENGINEER'S/EMPLOYER'S REPRESENTATIVE]

Engineer's/Employer's representative shall have the right at all times of supervise the contractor's work and instruct the contractor and the contractor shall execute the work as per the instructions without any lapse of time. The field records for the preliminary and detailed exploration shall contain the date when the boring was made, the location of the boring with reference to a permanent system of coordinates and the reduced level of the ground surface with respect to a permanent bench mark per bore logs should also include elevation at which the water table and the upper boundary of each of the successive soil/rock strata were encountered. The measurement shall be recorded from the reduced level of boreholes up to the depth of boring/drilling. No payment shall be made for the depth of penetration of SPT sampler beyond the last boring rod. All boreholes shall be terminated only in presence of Engineer's representative. The Engineer's representative posted at site should sign the bore logs and the contractor or his authorized representative must sign on the same as a token of his acceptance of the entries made care shall be taken in handling and labeling of samples so that they are received in a fit state for that

examination and testing and can be correctly identified as obtained from a specified trial pit or boring. Color Photographs (in soft copy) of the rock core obtained shall be taken after stacking the same in the wooden boxes specially made for the purpose with proper identification. The photographs in two copies are to be submitted along with the bore log. No extra payment will be made for the photographs and core boxes. All the works shall confirm to the standard specification of IS/IRS/IRC as will be applicable, specification. All laboratory instruments should have valid calibration certificate and should be NABL certified.

#### 30.0 Deleted.

## 31.0 TRAFFIC MANAGEMENT PLAN:-

The Contractor shall develop a detailed Traffic Management Plan for the work under the contract. The purpose is to develop a Traffic Management Plan to cope with the traffic disruption as a result of soil investigation activities by identifying strategies for traffic management on the roads and neighborhoods impacted by the geotechnical activities. The Contractor shall implement the Traffic Management Plan throughout the whole period of the Contract. The Contractor shall manage the vehicular and pedestrian right of way during the period of Soil investigation. The Contractor shall take account of the need to maintain essential traffic requirements, as these may influence the process. Where it becomes necessary to close a road or intersection, or supplementary lanes are required to satisfy the traffic demands, traffic diversion schemes to adjacent roadways shall be developed with quantitative justifications. The Contractor shall co-ordinate with all relevant authorities.

#### Annexure A1: Compliance with the Code of Integrity and No Conflict of Interest

Any person participating in a procurement process shall -

- (a) Not offer any bribe, reward or gift or any material benefit either directly or indirectly in exchange for an unfair advantage in procurement process or to otherwise influence the procurement process;
- (b) Not misrepresent or omit that misleads or attempts to mislead so as to obtain a financial or other benefit or avoid an obligation;
- (c) Not indulge in any collusion, Bid rigging or anti-competitive behavior to impair the transparency, fairness and progress of the procurement process;
- (d) Not misuse any information shared between the procuring Entity and the Bidders with an intent to gain unfair advantage in the procurement process;
- (e) Not indulge in any coercion including impairing or harming or threatening to do the same, directly or indirectly, to any party or to its property to influence the procurement process;
- (f) Not obstruct any investigation or audit of a procurement process;
- (g) Disclose conflict of interest, if any; and
- (h) Disclose any previous transgressions with any Entity in India or any other country during the last three years or any debarment by any other procuring entity.

#### **Conflict of Interest:-**

The Bidder participating in a bidding process must not have a Conflict of Interest. A Conflict of Interest is considered to be a situation in which a party has interests that could improperly influence that party's performance of official duties or responsibilities, contractual obligations, or compliance with applicable laws and regulations.

- i. A Bidder may be considered to be in Conflict of Interest with one or more parties in a bidding process if, including but not limited to:
  - a. have controlling partners/ shareholders in common; or
  - b. receive or have received any direct or indirect subsidy from any of them; or
  - c. have the same legal representative for purposes of the Bid; or
  - d. have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the Bid of another Bidder, or influence the decisions of the Procuring Entity regarding the bidding process; or
  - e. the Bidder participates in more than one Bid in a bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all Bids in which the Bidder is involved. However, this does not limit the inclusion of the same subcontractor, not otherwise participating as a Bidder, in more than one Bid; or
  - f. the Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the Goods, Works or Services that are the subject of the Bid; or
  - g. Bidder or any of its affiliates has been hired (or is proposed to be hired) by the Procuring Entity as engineer-in-charge/consultant for the contract.

#### **Annexure B1: Declaration by the Bidder regarding Qualifications**

#### **Declaration by the Bidder (On bidder's letter head)**

In relation	ation to my/our Bid submitted to Inviting Bids No					
declar	e under Section 7 of Rajasthan Transparency in Pub	lic Procurement Act, 2012, that:				
1.	I/we possess 1the necessary professional, tecresources and competence required by the Bidding Entity;					
2.	I/we have fulfilled my/our obligation to pay such of the State Government or any local authority as spec	• •				
3.	I/we are not insolvent, in receivership, bankrupt or being wound up, not have my/our affairs administered by a court or a judicial officer, not have my/our business activities suspended and not the subject of legal proceedings for any of the foregoing reasons;					
4.	I/we do not have, and our directors and officers criminal offence related to my/our professional statements or misrepresentations as to my/our procurement contract within a period of three year this procurement process, or not have been of debarment proceedings.	conduct or the making of false ur qualifications to enter into a s preceding the commencement of				
5.	I/we do not have a conflict of interest as specified Document, which materially affects fair competition;					
	Date:	Signature of bidder				
	Place:	Name				
		Designation:				
		Address:				

#### **Annexure C1: Grievance Redressal during Procurement Process**

The designation and address of the First Appellate Authority is **General Manager** (**Project Coordination**).

The designation and address of the Second Appellate Authority is **Executive Director** (Civil).

#### (1) Filing an appeal

If any Bidder or prospective bidder is aggrieved that any decision, action or omission of the Procuring Entity is in contravention to the provisions of the Act or the Rules or the Guidelines issued there under, he may file an appeal to First Appellate Authority, as specified in the Bidding Document within a period of ten days from the date of such decision or action, omission, as the case may be, clearly giving the specific ground or grounds on which he feels aggrieved:

Provided that after the declaration of a Bidder as successful the appeal may be filed only by a Bidder who has participated in procurement proceedings:

Provided further that in case a Procuring Entity evaluates the Technical Bids before the opening of the Financial Bids, an appeal related to the matter of Financial Bids may be filed only by a Bidder whose Technical Bid is found to be acceptable.

- (2) The officer to whom an appeal is filed under para(I) shall deal with the appeal as expeditiously as possible and shall endeavour to dispose it of within thirty days from the date of the appeal.
- (3) If the officer designated under para (1) fails to dispose of the appeal filed within the period specified in para (2), or if the Bidder or prospective bidder or the Procuring Entity is aggrieved by the order passed by the First Appellate Authority, the Bidder or prospective bidder or the Procuring Entity, as the case may be, may file a second appeal to Second Appellate Authority specified in the Bidding Document in this behalf within fifteen days from the expiry of the period specified in para (2) or of the date of receipt of the order passed by the First Appellate Authority, as the case may be.

#### (4) Appeal not to be in certain cases

No appeal shall lie against any decision of the Procuring Entity relating to the following matters, namely:-

- (a) determination of need of procurement;
- (b) provisions limiting participation of Bidders in the Bid process;
- (c) the decision of whether or not to enter into negotiations;
- (d) cancellation of a procurement process;
- (e) applicability of the provisions of confidentiality.

#### (5) Form of Appeal

- (a) An appeal under para (I) or (3) above shall be in the annexed Form along with as many copies as there are respondents in the appeal.
- (b) Every appeal shall be accompanied by an order appealed against, if any, affidavit verifying the facts stated in the appeal and proof of payment of fee.
- (c) Every appeal may be presented to First Appellate Authority or Second Appellate Authority, as the case may be, in person or through registered post or authorized representative.

#### (6) Fee for filing appeal

- (a) Fee for first appeal shall be rupees two thousand five hundred and for second appeal shall be rupees ten thousand, which shall be non-refundable.
- (b) The fee shall be paid in the form of bank demand draft or banker's cheque of a Scheduled Bank in India payable in the name of Appellate Authority concerned.

#### (7) Procedure for disposal of appeal

- (a) The First Appellate Authority or Second Appellate Authority, as the case may be, upon filing of appeal, shall issue notice accompanied by copy of appeal, affidavit and documents, if any, to the respondents and fix date of hearing.
- (b) On the date fixed for hearing, the First Appellate Authority or Second Appellate Authority, as the case may be, shall,-
  - (i) Hear all the parties to appeal present before him; and
  - (ii) Peruse or inspect documents, relevant records or copies thereof relating to the matter.
- (c) After hearing the parties, perusal or inspection of documents and relevant records or copies thereof relating to the matter, the Appellate Authority concerned shall pass an order in writing and provide the copy of order to the parties to appeal free of cost.
- (d) The order passed under sub-clause (c) above shall also be placed on the State Public Procurement Portal.

#### FORM No. 1

[See rule 83]

## Memorandum of Appeal under the Rajasthan Transparency in Public Procurement Act, 2012

	Appeal No of
	Before the(First / Second Appellate Authority)
1.	Particulars of appellant:
	(i) Name of the appellant
	(ii) Official address, if any:
	(iii) Residential address:
2.	Name and address of the respondent
	(i)
	(ii)
	(iii)
3.	Number and date of the order appealed against and name and designation of the officer / authority who passed the order (enclose copy), or a statement of a decision, action or omission of the Procuring Entity in contravention to the provisions of the Act by which the appellant is aggrieved:
4.	If the Appellant proposes to be represented by a representative, the name and postal address of the representative:
5.	Number of affidavits and documents enclosed with the appeal:
6.	Grounds of appeal:
	(Supported by an affidavit).
7.	
	Prayer:
	Place
Date	
Annell	ant's Signature

#### **Annexure D: Additional Conditions of Contract**

#### 1. Correction of arithmetical errors (Rule-64 of RTPPR-2013)

Provided that the Financial Bid is substantially responsive, the Procuring Entity will correct arithmetical errors during evaluation of Financial Bids on the following basis:

- i. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected, unless in the option of the Procuring Entity there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price shall be corrected;
- ii. If there is an error in total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
- iii. If there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subjected to (i) and (ii) above

If the Bidder that submitted the lowest evaluated Bid does not accepted the correction of errors, its Bid shall be disqualified and its Bid Security shall be forfeited or its Bid Securing Declaration shall be executed.

#### 2. Procuring Entity's Right to Vary Quantities (Rule-73 of RTPPR-2013)

- i. At the time of award of contract, the quantity of Goods, works or services originally specified in the Bidding Document may be increased or decreased by a specified percentage, but such increase or decrease shall not exceed fifty percent, of the quantity specified in Bidding Document. It shall be without any change in the unit prices or other terms and conditions of the Bid and the conditions of contract.
- ii. If the Procuring Entity does not procure any subject matter of procurement or procures less than the quantity specified in the Bidding Document due to change in circumstances, the Bidder shall not be entitled for any claim or compensation except otherwise provided in the Conditions of Contract.
- iii. In case of procurement of Goods or services, additional quantity may be procured by placing a repeat order on the rates and conditions of the original order. However, the additional quantity shall not be more than 50% of the value of Goods or services of the original contract. If the Supplier fails to do so, the Procuring Entity shall be free to arrange for the balance supply by limited Bidding or otherwise and the extra cost uncured shall be recovered from the Supplier.

### 3. Dividing quantities among more than one Bidder at the time of award (In case of procurement of Goods) (Rule-74 of RTPPR-2013)

As a general rule all the quantities of the subject matter of procurement shall be procured from the Bidder, whose Bid is accepted. However, when it is considered that the quantity of the subject matter of procurement to be procured is very large and it may not be in the capacity of the Bidder, whose Bid is accepted, to deliver the entire quantity or when it is considered that the subject matter of procurement to be procured is of critical and vital nature, in such cases, the quantity may be divided between the Bidder, whose Bid is accepted and the second lowest Bidder or even more Bidders in that order, in a fair, transparent and equitable manner at the rates of the Bidder, whose Bid is accepted.

#### Annexure - E

#### (INITIAL FILTER CRITERIA OF APPLICANT)

[ON COMPANY'S LETTER HEAD (	EACH MEMBER IN CASE OF CONSORTIUM)	
-----------------------------	------------------------------------	--

Name of	the Applicant:		
S/N	Criteria	Yes	No
1.	Has the Applicant abandoned any work in the last 03 years?		
2.	Has the Bidder contract with any organization ever been terminated due to poor performance or non-attending the works in minimum specified time period in contract?		
3.	Has the Bidder Security Deposit for any contract ever been forfeited by any Govt./ Semi Govt./ PSU/ MRTS/ Corporate houses?		
4.	Has the Applicant been involved in frequent litigations in the last three years?		
5.	Has the Applicant suffered bankruptcy / insolvency in the last three years?		
6.	Has the Applicant been blacklisted/ debarred from bidding by any organization?		
7.	Has any misleading information been given in the application?		
8.	Is the Applicant financially not sound to perform the work?		
9.	Is the Applicant's Net Worth negative?		
10.*	Has the applicant failed to certify that no agent / middleman has been or will be engaged or that any agency or commission has been or will be paid?		
11.*	Do the documents submitted by the applicant reveal that agency commission has been or will be paid?		

NOTE: -

"YES" answer to any of the questions from 1 to 11 will disqualify the Applicant.

\* A blank Pro-forma of the Certificate is there at Annexure-F. The same should be completed and submitted along with the bid submission.

Signature of the Bidder
or his Authorized signatory
with seal of the Firm

Dated

#### Annexure - F

#### [ON COMPANY'S LETTER HEAD (EACH MEMBER IN CASE OF CONSORTIUM)]

A.

I,	Mr./Ms.							(Authori	zed	Si	gnat	ory)	* c	on	beha	lf	of
									(C	omp	oany	's N	lam	e)	havin	g i	ts
regis	tered office	at									,	her	eby	C	onfirm	ar	nd
decla	are that no a	gent,	middle	∍mar	n or a	any inte	rmedia	ary has	beer	1, o	r will	l be	eng	age	ed by	me	to
provi	ide any servi	ices, d	or any	othe	er ite	m or wo	ork rela	ated to	the a	awa	rd a	nd p	erfo	rma	ance o	of th	is
conti	ract. I further	confi	rm and	d de	clare	that no	agen	cy comr	nissi	on	or ar	ту ра	aym	ent	which	n ma	зу
be co	onstrued as a	an ag	ency c	omn	nissio	on has b	been,	or will b	e pai	id b	y me	e and	d tha	at tl	he bid	prio	се
will r	ot include an	ny suc	h amo	ount.													
							(Si	gnature)	)								
							Na	me of s	ignat	ory							_
							_	.,									
							Ca	pacity o	t sigi	nato	ory _						

Should be supported by authorized Power of Attorney in favour of authorized signatory

along with their copy of Board Resolution.

#### **Annexure - G**

#### **UNDERTAKING**

(Ref: Clause 1.0 (r) Note (b) of NIB)

1.	I/we M/s	. hereby submit that presently my/ our firm is not
_	registered with any or all of the auth	norities as mentioned below:-

S. No	Registration For	Registered or Not registered
(a)	Employees Provident Fund	
(b)	Employee State Insurance	
(c)	Contract Labor License under contract Labor Regulation and Abolition Act 1970	

2. I hereby undertake that within 15 days of issuance of LOA by JMRC, we shall get registered with the authorities concerned for above mentioned registrations please.

Signature of Authorized Signatory with Seal

#### Annexure - 'X'

ele Ma CO NI	Name of Work:- "Geo-technical Investigation work for Extension of underground and elevated section E-W Corridor from Badi Chouper to Transport Nagar (2.85Km) and Mansarovar to Ajmer Road (Chauraha)(1.35 km)" of JAIPUR METRO RAIL CORPORATION at Jaipur at Jaipur.  NIB No Dated: Dated:						
	ON ACCOL	JNT OF WORK EXECUTED FOR CERTIFICATE BY CONTRACTO					
1.	In compliance of latest provision of the Minimum Wages Act, 1948 and rules made there under in respect of any employee engaged by us, I/We declare that laborer engaged by me/us have been fully paid for. In the event of any outstanding due to be payable to any labor/laborers the corporation is entitled to recover the same from any money due to or occurring to the contractor in consideration payment to such laborer.						
2.	Certified that all valid insurance policies as per GCC Clause are available.						
3.	Certified that EPF, Payment of Wages Act, 1948, Workman Compensation Act-1923, contract Labor Act-1938, BOCW Welfare Cess Act 1996 and Factories Act-1948 have been given compliance.						
4.	Certified that we accept the measurement recorded at site as per Measurement Sheets _MB No at Page No enclosed are correct and final under the work order and shall have no claim whatsoever later against the work done so far.						
Name of Contractor							
Ful	l Postal Address:						
Da	te:						
Pla	ce:	JAIPUR					

SIGNATURE & STAMP OF THE CONTRACTOR

SCHEDULE-F:-FORMS

FORM A PAGE 1 OF 3

#### **FORM OF BID**

Note: i. The Appendix and forms are part of the Bid

ii. Bidders are required to fill up all the blank spaces in this Form of Bid and Appendix.

Name of Work:- As in the NIB clause No. 1.0 (b)

To General Manager (Project Coordination), Jaipur Metro Rail Corporation Ltd., 1<sup>st</sup> Floor, A-Wing, Admin Building, Bhrigu Path, Mansarovar Metro Depot, Jaipur-302020

- 1. Having visited the site and examined the General Conditions of Contract as well as Special Conditions of Contract, Specifications, Instructions to Bidders, for the execution of above named works, we the undersigned, offer to execute and complete such works and remedy defects therein in conformity with the said Conditions of Contract, Specifications, and Addenda for the sum as mentioned in the BOQ or such other sum as may be ascertained in accordance with the said conditions.
- 2. We acknowledge that the Appendix forms an integral part of the Bid.
- **3.** We undertake, if our Bid is accepted, to commence the works within as per Letter of Acceptance to complete the whole of the Works comprised in the Contract.
- **4.** If our Bid is accepted, we will furnish at our option a Bank Guarantee for Performance as security for the due performance of the Contract. The amount and form of such guarantee or bond will be in accordance with Clause 4.2 of the General Conditions of the Contract and as indicated in the Appendix.
- **5.** We have independently considered the amount shown Clause 8.5 of the General Conditions of Contract as liquidated damages and agree that they represent a fair estimate of the damages likely to be suffered by you in the event of the work not being completed in time.
- **6.** We agree to abide by this Bid for a minimum period of 90 days from the date fixed for receiving the same and it shall remain binding upon us and may be accepted at any time before the expiry of that period or any extended period mutually agreed to.
- **7.** Unless and until a formal Agreement is prepared and executed, this Bid, together with your written acceptance thereof, shall constitute a binding contract between us.
- 8. We declare that the submission of this Bid confirms that no agent, middleman or any intermediary has been, or will be engaged to provide any services, or any other item of work related to the award and performance of this Contract. We further confirm and declare that no agency commission or any payment, which may be construed as an agency commission has been, or will be, paid and that the bid price does not include any such amount.
- 9. We acknowledge the right of the Employer, if he finds to the contrary, to declare our Bid to be non-compliant and if the Contract has been awarded to declare the Contract null and void.
- 10. We understand that you are not bound to accept the lowest or any bid you may receive.

SCHEDULE-F:- FORMS

FORM A PAGE 2 OF 3

11. If our Bid is accepted we understand that we are to be held solely responsible for the due performance of the Contract.

Dated thisday of 2023
Signature
Name in the capacity of
Duly authorized to sign Bids for and on behalf of
Address
Witness – Signature
Name
Address
Occupation

**SCHEDULE-F:- FORMS** 

FORM A PAGE 3 OF 3

#### (APPENDIX TO FORM OF BID)

S.No	Details	Clause No.	Condition of Contract
I	Amount of Performance Security	1.5 of Instructions to Bidders Document	03 percent of the Contract Price.
II	Minimum amount of Third Party Insurance	15.3 of General Conditions of Contract	Rs.0.5 lakh for any one incident, with no of incidents unlimited.
III	Liquidated Damages	Clause 8.5 of the GCC	<ul> <li>(i) 0.015% of contract price per day of delay in completion of work as per time period of completion mentioned in work orders.</li> </ul>
			(ii)Total maximum limit of LD including sums payable by the employer to designated contractors is 15% as mentioned in GCC.
IV	Defects Liability Period' for the whole of the Works	Clause-09 of GCC, Clause-1.0 (d) of NIB	06 months from the date of issue of taken over certificate by JMRCL.
V	Period for commencement of work from the date of issue of work orders	1.0 (c) of Notice Inviting Bid	As per the directions contained in LOA.
VI	Contract Period from the date of commencement of work	1.0 (c) of Notice Inviting Bid	45 Days from issuance of LoA
VII	Penalty for Non completion of work or poor quality or work as decided by the engineer.	Clause-13.0 of Special Conditions of Contract (SCC).	Up to 10% of Contract Value as per LOA for poor quality or non-attending the works in minimum specified time period in contract.
VIII	Penalty for violating the safety norms or for causing any accident or causing any interference in Train operation due to Contract's works.	Applicable Clauses of General Conditions of Contract (GCC), Safety Health Environmental Manual (SHE) and Special Conditions of Contract (SCC).	Shall be levied as worked out by the JMRC. In addition to this necessary legal actions can be also taken as per the statutory Rules & Laws applicable.

Signature of authorized Signatory on behalf	of Bidder
Date	Name
Place	Address

SCHEDULE-F:- FORMS

FORM B PAGE 1 OF 1

#### Certificate Of Conformity/No Deviation (to be filled by the Bidder)

To,

General Manager (Project Coordination), Jaipur Metro Rail Corporation Ltd., 1<sup>st</sup> Floor, A-Wing, Admin Building, Bhrigu Path, Mansarovar Metro Depot, Jaipur-302020

#### **CERTIFICATE**

This is to certify that, the specifications of Services / Items which I/ We have mentioned in the Technical bid, and which I/ We shall supply if I/ We am/ are awarded with the work, are in conformity with the minimum specifications of the bidding document and that there are no deviations of any kind from the requirement specifications.

Also, I/ we have thoroughly read the bidding document and by signing this certificate, we hereby submit our token of unconditional acceptance to all the terms & conditions of the bidding document without any deviations.

I/ We also certify that the price I/ we have quoted is inclusive of all the cost factors involved in the end-to-end implementation and execution of the project, to meet the desired Standards set out in the bidding Document.

Thanking you,
Name of the Bidder: -
Authorized Signatory: -
Seal of the Organization: -
Date:
Place:

SCHEDULE-F:- FORMS

FORM C PAGE 1 OF 2

#### FORM OF PERFORMANCE SECURITY (GUARANTEE) BY BANK

1.	This deed of Guarantee made this day of between Bank of (hereinafter called the "Bank") of the one part, and Jaipur Metro Rail Corporation Limited (hereinafter called "the Employer") of the other part.
2.	Whereas Jaipur Metro Rail Corporation limited has awarded the contract for "Geo-technical Investigation work for Extension of 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. Contract for ———————————————————————————————————
3.	AND WHEREAS the Bidder 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 figures and Words) as stated above.
5.	After the Bidder has signed the aforementioned Contract with the Employer, the Bank is engaged to pay the Employer, any amount up to and inclusive of the aforementioned full amount upon written order from the Employer without assigning any reason. The Bank will deliver the money required by the Employer immediately on demand without delay without reference to the Bidder and without the necessity of a previous notice or of judicial or administrative procedures and without it being necessary to prove to the Bank the liability or damages resulting from any defects or shortcomings or debts of the Bidder. The Bank shall pay to the Employer any money so demanded notwithstanding any dispute/disputes raised by the Bidder 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 for a period of 60 Days beyond the completion of all contractual obligations.
7.	At any time during the period in which this Guarantee is still valid, if the Employer agrees to grant a time extension to the Bidder or if the Bidder fails to complete 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

The Guarantee hereinbefore contained shall not be affected by any change in the

and at the cost of the Bidder.

Constitution of the Bank or of the Bidder.

8.

SCHEDULE-F:- FORMS

FORM C PAGE 2 OF 2

9.	The neglect or forbearance of the Employer in enforcement of payment of any moneys, the payment whereof is intended to be hereby secured or the giving of time by the Employer for the payment hereof shall in no way relieve the bank of their liability under this deed.				
10.	The expressions "the Employer", "the Bank" and "the Bidder" hereinbefore used shall include their respective successors and assigns.				
	In witness whereof I/We of the bank have signed and sealed this guarantee on theday of (Month) 2023 being herewith duly authorized.				
For ar	nd on behalf of				
the	Bank.				
•	ture of authorized Bank official				
Name	:				
Desig	nation:				
I.D. No	o.:				
Stamp/Seal of the Bank :					
Signe	d, sealed and delivered				
for and	d on behalf of the Bank				
by the	above named				
In the	presence of :				
Witnes	ss 1.				
Signat	ture				
Name					
Addre	ss				
Witnes	ss 2.				
Signat	ture				
Name					

Address .....

SCHEDULE-F:- FORMS

FORM D PAGE 1 OF 2

## FORM OF AGREEMENT (On Rs 1000/- stamp paper of Rajasthan State Govt.)

Metro	greement is made on the day of2023 Between Jaipur Rail Corporation Limited, Administrative Building, Depot of Jaipur Metro, Bhrigu Path, irovar, Jaipur-302020 hereinafter called "the Employer" of the one part and (Name and Address of Bidder) hereinafter
called	"the Bidder" of the other part.
technic Nagar of JAII accept	has the Employer is desirous that certain Works should be executed, viz "Geocal Investigation work for Extension of E-W Corridor from Badi Chouper to Transport (2.85Km) Phase-1C and Mansarovar to Ajmer Road (Chauraha) (1.35 km) Phase-1D" PUR METRO RAIL CORPORATION at Jaipur, hereinafter called "the Works" and has seed a Bid by the Bidder for the execution and completion of such works and the ying of defects therein.
	greement is signed between Mr(for and on behalf of the employer) r (for and on behalf of the contractor)
NOW	THIS AGREEMENT WITNESS 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.
2.	The following documents shall be deemed to form and be read and construed as part of this Agreement, viz:  (a) Letter of acceptance.  (b) Bill of Quantities.  (c) Addendums, if any  (d) Bid Document.  (e) Form of Bid with Appendix.  (f) General Conditions of Contract (GCC) and Safety Health & Environment Manual (SHE) (Available on JMRC's website)  (g) Other Conditions agreed to and documented as listed below:  i.Bidder's Work Schedule as amended if required.  ii.Statement of deviations (If applicable)  iii.Any other item as applicable.
3.	In consideration of the payments to be made by the Employer to the Bidder as hereinafter mentioned, the Bidder 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 Bidder in consideration of the execution and completion of the works and the remedying of defects therein, the Contract Price of **Rs 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.

SCHEDULE-F:- FORMS

FORM D PAGE 2 OF 2

#### 5. OBLIGATION OF THE BIDDER

The Bidder shall ensure full compliance with tax laws of India with regard to this contract and shall be solely responsible for the same. The Bidder 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 Bidder in respect thereof, which may arise.

The staff/labour recruited by the Bidder for "Geo-technical Investigation work for Extension of 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, will be the sole responsibility of the Bidder and JMRC will not be involved in it in any way. The staff / labour so recruited by the Bidder will not have any right whatsoever at any stage to claim employment in JMRC.

#### 6. JURISDICTION OF COURT

The Courts at Jaipur 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 Bidder			For and on behalf of the Employer
	Signature of the authorized			
	official		S	ignature of the authorized official
	Name of the official		Nan	ne of the official
	Stamp/Seal of the Bidder		Star	mp/Seal of the Employer
SIGN	ED, SEALED AND DELIVERED			
By said		the	By the said	
Name	9			Name
prese Witne	chalf of the Bidder in the ence of:		on behalf of the present Witness	of the Employer in se of:
Addre	ess		Name	
			Address	

SCHEDULE-F:- FORMS

#### 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

SCHEDULE-F:- FORMS

FORM E PAGE 1 OF 2

#### **GENERAL INFORMATION**

Λ	lotes	
IΝ	ししてい	١.

otes	:				
I.	Attach an attested photocopy of Certificate of Registration and ownership as well as of Constitution and legal status.				
II. 			tium, attach an attested photocopy of Agreement esponsibilities among the members / constituents.		
1	Bidder	r Company details (in case o	f consortium, details of Lead Partner)		
	(a)	Name of Bidder Company:			
	(b)	Address of the corporate India:	headquarters and its branch office(s), if any, in		
	(c)	Date of incorporation and/	or commencement of business:		
2	(a) (b)	ulars of the Authorised Signa ) Name: ) Designation: ) Address:	itory of the Applicant:		
		) Phone Number: ) Fax Number:			
3	PAN N	Number (Attach photocopy):			
4	GST F	Registration No. (attach copy	of the registration certificate):		
5	In the	case of a consortium:			
	а.	Names of participating men (a) (b) (c)	nbers / constituents		
	b.	Address, telephone, Tele-fa	ax and email of each members / constituent.		
		Registered Office	Office for correspondence		

(a) \_\_\_\_\_ (b) \_\_\_\_\_ (c) \_\_\_\_\_

SCHEDULE-F:- FORMS

FORM E PAGE 2 OF 2

- c. Distribution of responsibilities among partners / constituents. (Among other details, specify the sub-items of works for which each of the partners / constituents would be responsible).
- d. Date and place of joint Venture/ Consortium Agreement.
- e. Names and Addresses of Bankers to the Joint Venture/ Consortium.
- f. Names and Addresses of Associated Companies to be involved in the Project and whether Parent / subsidiary/ others.
- g. If the company is subsidiary, what involvement, if any, will the Parent Company have in the Project?

SCHEDULE-F:- FORMS

FORM F PAGE 1 OF 1

#### **BANK DETAILS FOR E-PAYMENT**

Mobile alert:  k Details:  Bank Name:  Branch Name and Address:	
Line-2:  District/City:  Pin Code:  Mobile alert:  k Details:  Bank Name:  Branch Name and Address:	
Line-2:  District/City:  Pin Code:  Mobile alert:  k Details:  Bank Name:  Branch Name and Address:	
District/City: Sta Pin Code: Te Mobile alert:  k Details:  Bank Name: Branch Name and Address:	
Pin Code: Te  Mobile alert:  k Details:  Bank Name:  Branch Name and Address:	
Mobile alert:  k Details:  Bank Name:  Branch Name and Address:	e:
k Details:  Bank Name:  Branch Name and Address:	e/Fax:
Bank Name: Branch Name and Address:	
Bank Name: Branch Name and Address:	
Branch Name and Address:	
Beneficiary A/C No.	
	eficiary A/C Type ( Saving/Current):
Beneficiary A/c Name:	
Nine - Digit branch MICR Code:	
IFSC Code of the branch:	

Note:- Bidders may also enclose self certified copy of cancelled cheque in name of bidding firm.

SCHEDULE-F:- FORMS

FORM G PAGE 1 OF 1

#### 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 irrevocably constitute, nominate, appoint and authorize
Mr./Ms.(name) Son/daughter/wife of
and presently residing at, who is presently
employed with us and holding the position
ofas our true and lawful attorney (hereinafter referred to as the
"Attorney")to do in our name and on our behalf, all such acts, deeds and things as are
necessary or required in connection with or incidental to submission of our NIB No.
01/JMRC/Project/2022-23 for qualification and submission of our Bid for the works "Geo-
technical Investigation work for Extension of 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, including but
not limited to signing and submission of all Bids, bids and other documents and writings
and other conferences and providing information/ responses to JMRC, representing us in
all matters before JMRC, signing and execution of all contracts including the Contract and
undertakings consequent to acceptance of our bids, and generally dealing with the JMRC
in all matters in connection with or relating to or arising out of our Bid for the said Projects
and/or upon award thereof thousand /or till the entering into of the Contracts with JMRC.
AND we hereby agree to ratify and confirm and do hereby ratify and confirm all acts
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. IN WITNESS WHEREOF WE
THE ABOVE NAMED PRINCIPAL HAVE EXECUTED
THIS POWER OF ATTORNEY ON THISDAY OF2023.
THIS FOWER OF ATTORNET ON THISDAT OF,2023.
For (Signature)
Tor (digitator)
(Name, Title and Address) Witnesses
Accepted
Signature
(Name, Title and Address of the Attorney)
(Notarized)
Notes:

#### 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 charter 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 charter 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.

**SCHEDULE-F:- FORMS** 

FORM-H PAGE 1 OF 2

#### **INDEMNITY**

#### (To be filled by Bidder)

I on behalf of M/sher	eby agree and undertake that I
have understood all the safety rules and procedures and allwill abide by all safety rules andwill be responsible for any safety violation/ be responsible in case of any accident and will not comper M/sdeclare that all the claim raised by	procedures. I declare that I M/s accident etc. and JMRC will not nsate financially or otherwise. I
borne by me only.	
I hereby declare that I am sole responsible on behalf of M/s such declaration.	s for giving
Name of Indemnifier	Signature of Indemnifier

Stamp/seal of the Indemnifier/Bidder

SCHEDULE-F:- FORMS

FORM-H PAGE 2 OF 2

#### **INDEMNITY**

(To be filled by Bidder staff individually)

I hereby agree and undertake that I have understood all the safety rules and procedures and I will abide by all safety rules and procedures. I declare that I will be responsible for any safety violations/accident etc. and JMRC will not be responsible in case of any accident/incident and will not compensate financially or otherwise. I shall not raise any claim against JMRC.

Name of Indemnifier	Signature of Indemnifier
NAME OF BIDDER	SIGNATURE OF BIDDER

SCHEDULE-F:- FORMS

FORM-I PAGE 3 OF 3

#### Obligation/Compliance to be ensured by Bidder

SI. No.	Items	Compliance of Bidder (To be filled by Bidder)	
		Yes	No
1	License for employing contract labour		
2	Compliance of minimum wages Act by payment of wage on 7 <sup>th</sup> of every month through Bank or in the presence of nominated representative of Engineer/Employer.		
3 (a)	Compliance of provision of ESI & EPF.		
3 (b)	Ensure treatment in ESI hospital in case of accident/injuries suffered in performance of work and compensation under ESI Act.		
4	Send Accident report to Regional Labour Commissioner (RLC) & ESI authorities.		
5	Observance of working hours, weekly rest and overtime payments as per minimum wages Act-1948.		
6	Other statutory requirement pertaining to this bid.		

Note:- A Non- filling or 'No' by Bidder will lead to non-eligibility for Bidder in further bidding process.

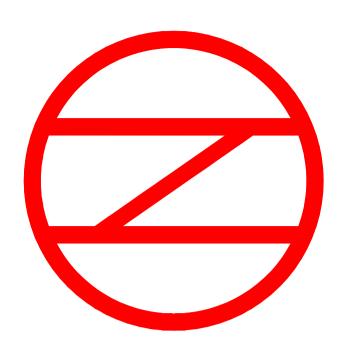
Signature with seal of Bidder/Proprietor

### SCHEDULE-H CHECK LIST FOR BID EVALUATION/BID SUBMISSION

S/N	Item	Bid Stipulations (if any)	Submission/ Compliance Requirement	Remarks
1.0	Details of (i) Cost of Bid Form/Document (ii) Bid Security/EMD (iii) E-Bid Processing Fee			
1.1	Detail of Financial Instruments in the form of DD/BC.	1.0 (h, j, k) of NIB		
1.2	Name of Issuing Bank and Branch			
1.3	DD/BC No.			
1.4	DD/BC Date			
1.5	Value of DD/BC			
2.0	TECHNICAL SUITABILITY:- Eligibility and Qualification of Bidder:-			
2.1	Bid is from a Company: Firm registration certificate in Govt. departments for Similar Works etc.	Clause 1.0 (r) of (NIB)		
2.2	Necessary Documents for Technical Qualification/ Responsiveness of Bidder.	Clause 1.0 (r) of (NIB)		
2.3	Complete Bid Document, NIB, ITB, SCC, and necessary supporting documents for technical and financial eligibility etc.	(Clause-1.0 (r & s) of NIB		
2.4	Various Annexure (s) under Schedule-E	As per Bid Document- SCHEDULE -E		
2.5	Various Forms under Schedule-F	As per Bid Document- SCHEDULE-F		
3.0	PRICE BID: Whether Online Commercial Bid/BOQ submitted by the bidder.	SCHEDULE-G		
4.0	Check List of submitted documents in Technical and Financial Bid.	Schedule-H		

#### Note:-

- (i) <u>Original Copy of DD/BC for Cost of Bid Form, E-bid Processing Fee & Bid Security as uploaded</u> on E-Proc website may also be submitted at the office of JMRCL before the due date of submission as per Clause-1.0 (l) of NIB Document.
- (ii) The bidders have to take utmost care that the Financial Bid is to be submitted separately in Second Part of Bid i.e Financial Bid on E-Proc website only. If any details of Financial Bid whether intentionally/ unintentionally/ by mistake are mentioned in First Part i.e Technical Bid by the bidder; then its bid shall not be considered by JMRC. No correspondence in such matter shall be entertained by JMRC.



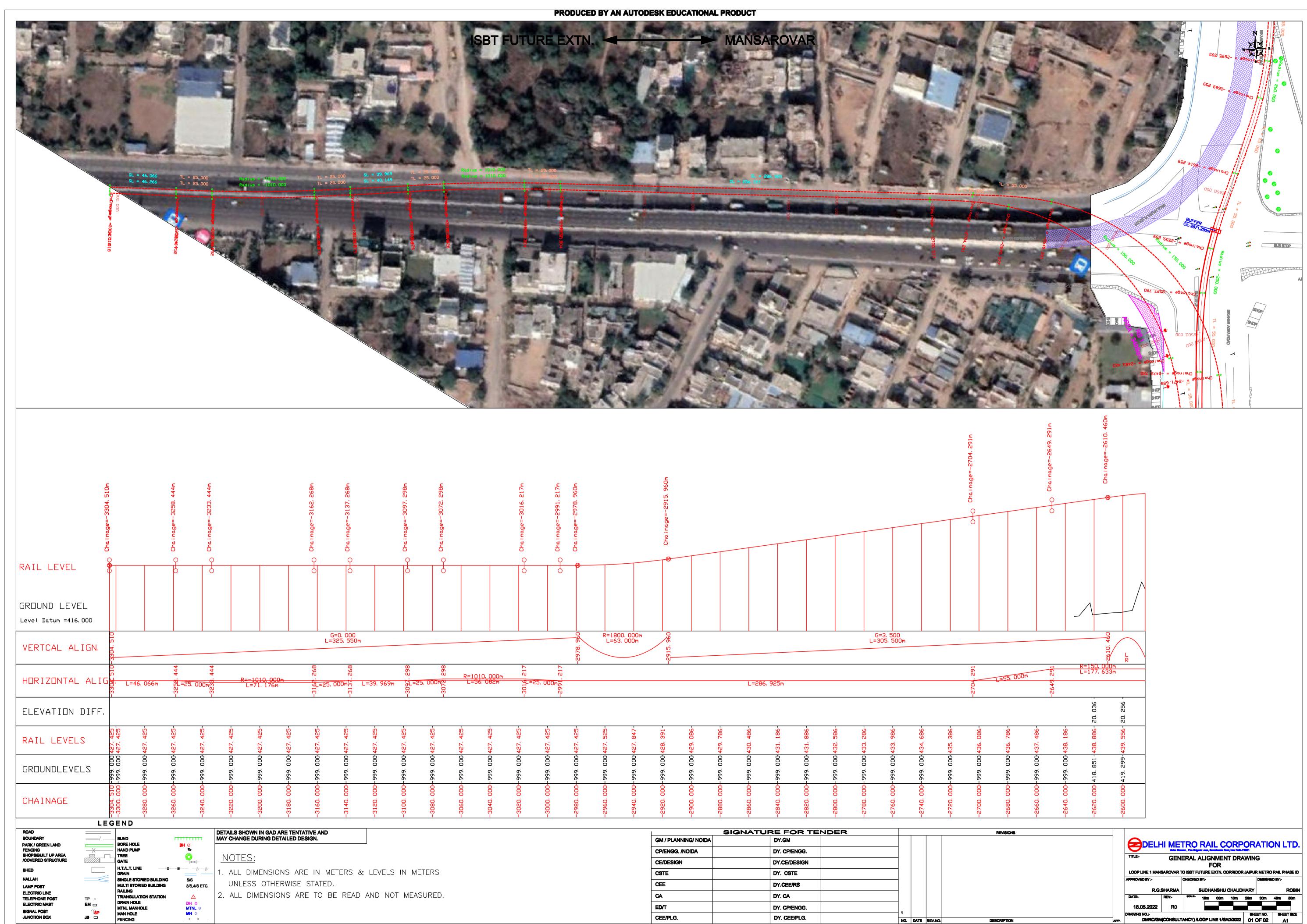
# DELHI METRO RAIL CORPORATION

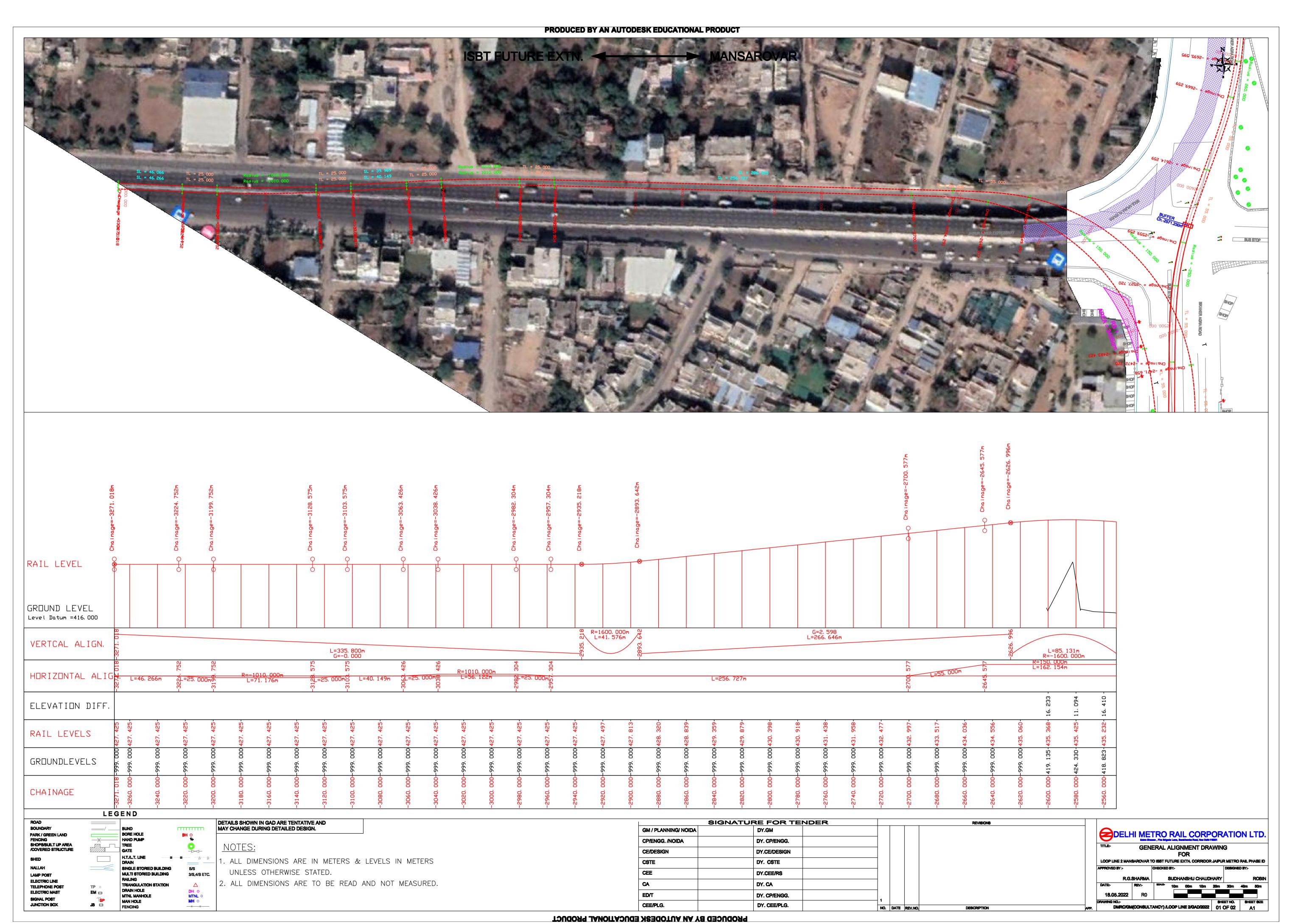
## JAIPUR METRO RAIL PHASE 1D

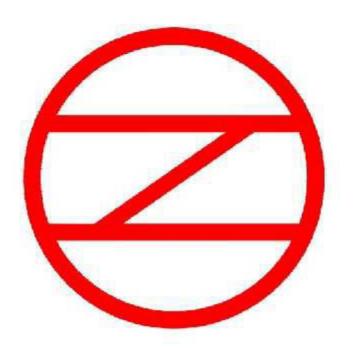
REPORT ON HORIZONTAL & VERTICAL ALIGNMENT AND STATION LOCATIONS

(MANSAROVAR TO AJMER ROAD (CHAURAHA) JAIPUR METRO CORRIDOR)

MAY 2022







# DELHI METRO RAIL CORPORATION

## JAIPUR METRO RAIL PROJECT

HORIZONTAL & VERTICAL ALIGNMENT DRAWING WITH STATION LOCATIONS

(EXTENSION OF EAST-WEST CORRIDOR FROM BADI CHAUPAR TO TRANSPORT NAGAR)

JUNE 2020

