



**Upgradation of Existing State Highway-25 from 4-Lane to
6 Lane including construction of drain for the stretch
between Tapukara (Km 212+800) to Bhiwadi (Km
221+350) in the state of Rajasthan**

**TENDER DOCUMENT FOR
OPEN COMPETITIVE
BIDDING**

**Road Infrastructure Development Company
of Rajasthan Ltd. (RIDCOR)**

701-706, 7th Floor, ARG Corporate Park
Gopalbari, Ajmer Road, Jaipur-302001 (Rajasthan)
Tel. (0141) 2747001/2, Fax : 0141 - 2747010
E-Mail : office@ridcor.in

September, 2025

ONLINE TENDER INVITATION

RIDCOR invites online post qualification competitive tender for “**Upgradation of Existing State Highway-25 from 4-Lane to 6 Lane including construction of drain for the stretch between Tapukara (Km 212+800) to Bhiwadi (Km 221+350) in the state of Rajasthan**” from eligible bidders. Tender shall only be submitted through online tendering system of www.eproc.rajasthan.gov.in. The interested bidders shall have to be enrolled/registered with portal of www.eproc.rajasthan.gov.in for participating in the tendering process.

The schedule of dates is as follows:-

| S. No. | Schedule | Date | Time |
|--------|-------------------------------|----------------------|------------|
| 1. | Document Download Start Date | 17.09.2025 | 5.00 p.m. |
| 2. | Tender Submission Start Date | 17.09.2025 | 5.00 p.m. |
| 3. | Tender Submission End Date | 06.10.2025 | 6.00 p.m. |
| 4. | Technical Tender Opening Date | 07.10.2025 | 11.30 a.m. |
| 5. | Financial Bid Opening Date | To be conveyed later | |

Detail of tender:

| Sr. No. | Name of work | Approx. value (Rs. in Cr.) | Bid Security (in Rs.) | Tender Fee |
|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-----------------------|------------------------------------------------------------------------------------------|
| 1 | Upgradation of Existing State Highway-25 from 4-Lane to 6 Lane including construction of drain for the stretch between Tapukara (Km 212+800) to Bhiwadi (Km 221+350) in the state of Rajasthan | 46.57 | 93,14,000 | Rs.11,800/- (incl. GST) as tender fee (non-refundable) and Rs. 2,500/- as processing fee |

Terms & conditions of Tender

Tenderers should read these conditions and the complete tender document for Technical part and financial part carefully and comply strictly while submitting their tenders.

1. Tender shall be submitted online only through www.eproc.rajasthan.gov.in
2. No physical/offline Tender/bid shall be accepted.
3. The Bid Security, Tender Fee and Processing Fee of RISL shall only be accepted through Electronic mode of payment like RTGS/NEFT/Inter Bank Transfer/Bank Guarantee. The details of unit bank account for payment of Bid Security, Tender Fee and Processing Fee through Electronic mode of payment are as under :
 - a) Beneficiary Name : RIDCOR Ltd.
 - b) Account No. : 50058007643
 - c) Beneficiary Bank : Indian Bank
 - d) Beneficiary Branch : Jaipur Main 10, Motilal Atal Marg
Opp Ganpati Plaza, JAIPUR 302001
 - e) Branch ISFC Code : IDIB000J003

The bid security in the form of Bank Guarantee shall be submitted by the bidder at least one day before the date of opening of the technical bid of tenders at RIDCOR Head Office, Jaipur.

4. Tenderer/Bidder should specifically mention UTR No. (Unit Transaction Reference) in his bid.
5. The time period for completion of the work is 15 months. Employer reserves the right to reduce the scope of work and the period of Contract by giving 30 days prior notice without any compensation or loss of profit etc. and the contractor shall not be eligible to submit any claim for early termination of the contract.
6. Director/Manager, RIDCOR reserves right to cancel the Tender without assigning any reason to the Bidder or anyone else.
7. Conditional Tender and casual letters sent by the contractors about the tender will not be accepted.
8. Any representation on the procedure of tendering after opening of tenders shall be ignored. Such parties may be debarred from tendering in future for a period of 1 year.

9. Tenderers are requested to read the instructions in the Tender Document and visit the site before submitting the Tender/Bid online.
10. Director/Manager (RIDCOR) reserves the right to finalize the bid in a fair and transparent manner in the best interest of the Company and such decision shall be final and binding on the tenderers.
11. Director/Manager (RIDCOR) reserves the right to accept any tender not necessarily the lowest tender and reject any or all tender/ tenders without assigning any reason thereof.
12. The tenderer shall not assign or sublet his tender or any part thereof to any other agency without prior written approval of Director/Manager or authorized representative of RIDCOR.
13. The tenderer who is registered under the GST & having valid GST No., shall only be eligible to submit the bids. The GST number should be indicated and a copy attached with the tender submission.
14. The tenderer shall indicate Permanent Account Number issued by the Income Tax Authority. The successful bidder has to submit KYC in the prescribed format appended herewith and shall submit required KYC documents before signing of the contract agreement.
15. The Bill of Quantities (BOQ) along with the rates as per RIDCOR indicating total amount are annexed at Section-7. The bidder has to quote the %above or below the total amount in Financial Proposal of the online bidding for this work.
16. **All the enclosed documents, Performa's, annexures, appendices, certificates etc. should be digitally signed by the tenderer & must be submitted online at www.eproc.rajasthan.gov.in**
17. **Release of Bid security:**
 - (i) Bid security of the bidder except L1 & L2 shall be released immediately upon opening of the financial bids.
 - (ii) Bid security of the L2 bidder shall be released after execution of contract agreement by the L1 bidder or 30 days of issuance of Letter of Acceptance (LOA) to L1 bidder or bid validity period, whichever is earlier.

Bid security of the L1 bidder shall be released after submission of Performance Security and execution of contract agreement by the L1 bidder. The bid security of L1 bidder available in cash may be adjusted against performance security on request of L1 bidder.

18. **Forfeiture of Bid Security:** When tenderer withdraws or modifies the offer after opening of technical bid of tender.
19. Successful tenderer will have to execute the contract agreement on requisite non-judicial stamp papers as per norms of GoR.

20. **Performance security:**

- (i) The successful tenderer shall submit performance security amounting to 5% of total cost of work as per work order in the form of FDR/TDR/DD/Bank Guarantee issued from a Nationalized/Scheduled bank within 14 days of issuance of Letter of Acceptance (LOA). If, performance security is not submitted within the prescribed time then penalty of Rs. 5,000 per day shall be levied on the successful tenderer upto 30 days (penalty period) beyond specified time of 14 days. If the performance security is not submitted within 60 days beyond specified time, Director/Manager, RIDCOR reserves the right to accept the performance security in case of further delay with penalty of Rs 10,000 per day beyond 30 days thereafter.

The performance security may also be accepted through Electronic mode of payment like RTGS/NEFT/Inter Bank Transfer in the name of RIDCOR Ltd.

- (ii) The bid security deposited at the time of tender in the form of RTGS/NEFT/IMPS will be adjusted towards performance security amount on written request of successful bidder. The bid security in the form of Bank Guarantee shall not be adjusted in the performance security, but shall be returned on depositing the performance security for the contract.
- (iii) No Interest will be paid by RIDCOR on the Bid Security or Performance security or Security Deposit.
- (iv) Additional performance security as 40% of the amount beyond 10% lower than the estimated amount for unbalanced bids will also be required to be submitted alongwith above performance security which will be valid upto end of DLP period of 5 years.
- (v) The performance security shall be released upon completion of 1 year after satisfactory completion of work. This may be noted that additional performance security, in case of unbalanced bids, will have validity upto end of DLP period of 5 years and will be released after successful completion of DLP period. If, the tenderer fails to deposit the required performance security or to execute the agreement within the specified period such a failure will be treated as a breach of the terms and conditions of the tender and will result in forfeiture of the Bid Security. The successful bidder shall pay the expenses of completing and stamp duty on the agreement. The forfeiture of the Bid Security or failure to execute

the agreement and to submit performance security and additional performance security (if required under bid stipulations) within the specified period shall also result in cancellation of LOA. Such tenderers may be debarred from tendering in RIDCOR for 1 year.

21. Security Deposit @ 5% of work amount shall be deducted from each running bill on prorata basis, which shall be released after successful completion of defect liability period of 5 years. The contractor shall maintain the road in as built condition for this period at his cost. In case he fails to do so, it shall be done through any other agency at his cost.
22. The bidders are advised to visit the Project Roads before quoting their rates for the work and fully satisfy themselves regarding the Condition of Site, availability of material, labour, distance to quarries and availability of Water, Electricity and other resources required for the execution of work. No additional payment shall be paid to the contractor beyond work order rates. Any claim beyond accepted approved rates shall not be permissible.
23. Bids shall be valid for a period of 120 days from the date of opening of technical bid.
24. In the event of disagreement between RIDCOR and the approved Contractor the matter will be referred to the Director/Manager-RIDCOR, whose decision shall be final.
25. In case of any discrepancy whatsoever, the decision of the Director/Manager, RIDCOR shall be final. All the matters/disputes shall be resolved through conciliation. In case the issue is not resolved then arbitration shall be the next step. The contractor shall not file any case in any court before the final arbitration award/conciliation order is passed.
26. Any grievance related to tender may be resolved as per procedure adopted in Annexure-4. All legal proceedings, if any, arising out of this tender shall have to be filed within the specified timelines in courts with jurisdiction in Jaipur city only, in case the matter is not resolved by procedure mentioned at Annexure-4.
27. All taxes including GST are inclusive in the rates.
28. Project Manager will be administrator of this contract agreement. Work shall be executed under the supervision of RIDCOR representatives/Supervision Consultant and payment shall be released based on the certification by the Project Manager/Engineer.
29. Director/Manager, RIDCOR is empowered to approve all the time extensions, variations in the contract, waiving off penalty and approval of change of scope as per site requirement on the merits of the case. They are also empowered /authorized to award the work on any other stretch also in RIDCOR/RIPL on

the same terms & conditions to any Agency.

30. All RIDCOR, RIPL roads are State Highways and works are to be executed strictly as per specifications. The inspection by Independent Engineer will be done regularly and necessary compliances are to be done by the contractor.
31. Contractors debarred or black listed by any department of Rajasthan State Govt. or any other States/Union Territories are not eligible to bid.
32. Contractors, who have left incomplete, any work awarded to them by RIDCOR, RIPL are also not eligible to bid.

**Director
RIDCOR, Jaipur**

CERTIFICATE

I/We have carefully read, understood and accepted all the above terms & conditions. No additional conditions will be imposed by us. No conditions of the tender have been altered/changed.

Date:

Signature of the Tenderer (S)
along with the stamp of the firm/company.
Also address of the Local office with phone/Fax numbers

TENDER FORM

Subject: Upgradation of Existing State Highway-25 from 4-Lane to 6 Lane including construction of drain for the stretch between Tapukara (Km 212+800) to Bhiwadi (Km 221+350) in the state of Rajasthan

1. Name and full postal address of the firm submitting the tender:

.....
.....

Contactor's Name: Designation of the person signing the contract.

Tel. No. Fax E-Mail

Mobile No.

PAN No. of firm..... GST Reg. No.

2. Reference of the Tender Notice: -

3. Address to: - Director, RIDCOR

4. Last Date for submitting tender online through **www.eproc.rajabsthan.gov.in**:
06.10.2025 (6:00 P.M.)

5. We agree to abide by all the terms and conditions mentioned in the above referred tender notice, issued by RIDCOR, and also the terms and conditions of the said Tender document (for Technical and Financial Part) given in the attached sheets, all pages of which are signed by us in token of acceptance of the Terms and Conditions mentioned therein.

6. All the information required for Technical part as per the tender document with regard to eligibility, are also attached herewith. We are neither debarred from any department nor convicted by any regulatory agency in any criminal case.

7. The financial bids of only those bidders will be opened who are found responsive and technically eligible in evaluation of technical bids.

The Financial part of the tender is to be submitted online in the BOQ specified on www.eproc.rajabsthan.gov.in, which shall be opened after evaluation of technical bid that shall be opened on 07.10.2025. Date of opening of financial bid shall be notified at www.eproc.rajabsthan.gov.in

Date:

**Signature of the Tenderer(s)
along with the stamp of the firm/company**

CONTENTS

| | | |
|--------------------|---------------------------------------------------------------|------------|
| Section – 1 | : Instructions to Bidders | 12 |
| Section – 2 | : Qualification Information and Other Forms | 29 |
| Section – 3 | : General Conditions of the Contract (Part-I) | 44 |
| | Special Conditions of the Contract (Part-II) | 65 |
| Section-4 | : Contract Data | 74 |
| Section-5 | : General Technical Specifications (Part-I)..... | 79 |
| | Supplementary Technical Specifications (Part-II) | 79 |
| Section-6 | : Securities and Other Forms..... | 96 |
| Section-7 | : Bill of Quantities | 107 |

SECTION 1:

INSTRUCTIONS TO BIDDERS
(ITB)

SECTION 1: INSTRUCTIONS TO BIDDERS

CONTENTS

| | | Page No | | | Page No |
|----------|------------------------------------------|------------|----------|------------------------------------------------------------------|------------|
| A | General | | D | Bid Opening and Evaluation | |
| 1 | Scope of Works | 13 | 17 | Opening and Evaluation of Bids | 21 |
| 2 | Eligible Bidders | 14 | 18 | Process to be Confidential | 21 |
| 3 | Qualification of the Bidder | 14 | 19 | Clarification of Bids | 21 |
| 4 | One Bid per Bidder | 16 | 20 | Examination of Bids and Determination of Responsiveness | 21 |
| 5 | Cost of Bidding | 16 | 21 | Correction of Errors | 22 |
| 6 | Site Visit | 16 | 22 | Evaluation and Comparison of Bids | 22 |
| B | Bid Document | | E | Award of Contract | |
| 7 | Content of Bid Document | 17 | 23 | Award Criteria | 24 |
| 8 | Clarification on Bid Document | 17 | 24 | Employer's Right to Accept any Bid and to Reject any or all Bids | 24 |
| 9 | Amendment of Bid Document | 17 | 25 | Notification of Award and Signing of Agreement | 25 |
| | | | 26 | Performance Security | 25 |
| C | Preparation of Bids | | 27 | Advance Payment | 26 |
| 10 | Language of the Bid | 18 | 28 | Corrupt or Fraudulent Practice | 26 |
| 11 | Documents to be submitted along with Bid | 18 | | Annexure-1A | 27 |
| 12 | Bid Prices | 19 | | Annexure-1B | 28 |
| 13 | Currencies of Bid and Payment | 19 | | | |
| 14 | Bid Validity | 19 | | | |
| 15 | Bid Security | 20 | | | |
| 16 | Alternative Proposals by Bidders | 20 | | | |

A : GENERAL

1. Scope of Works

- 1.1 RIDCOR (hereinafter be referred to as the “**Employer**”) proposes to execute Upgradation of Existing State Highway-25 from 4-Lane to 6 Lane including construction of drain for the stretch between Tapukara (Km 212+800) to Bhiwadi (Km 221+350) in the state of Rajasthan hereinafter referred to as the “**Works**”.

The Work detailed herein is a percentage Rate Contract where the rates and quantities of various items have been mentioned in BOQ (Section-7). The bidder has to quote %above/below the total amount of the BOQ.

The indicative scope of work to be carried out by the successful Bidder, inter alia, includes the following but is not limited to:

(a) The Works:

- (i) Bituminous Work using DBM/BC Material manufactured in Bituminous Batch mix plant of 120-160TPH capacity and Sensor paver of 7 m width;
- (ii) Strengthening of existing crust with GSB, WMM, DBM etc. in selected stretches;
- (iii) Full depth construction/raising of road for geometric improvements/rigid pavement in selected stretches, if any;
- (iv) Milling of Bituminous pavement upto 50 mm using Milling Machine and disposal of surplus material with all lead and salvage value;
- (v) Prime coat (Providing and applying primer coat with bitumen emulsion on prepared surface or granular Base including cleaning of road surface;
- (vi) Providing and applying tack coat with bitumen emulsion using emulsion pressure distributor;
- (vii) Providing and laying Dense Bituminous Macadam and/or Bituminous Concrete with designed thickness of using VG-40/PMB 76-10E with 120-160 TPH batch type hot mix plant;
- (viii) Providing & Laying DLC & PQC Work
- (ix) Road Marking with Hot Applied Thermoplastic Compound with Reflectorizing Glass Beads on Bituminous Surface;
- (x) Construction of Road Side RCC Drain
- (xi) Construction of hard shoulders/soft shoulders as per requirement; and

The cost of maintenance of the road part which is subject matter of the contract, Barricading, traffic management, markings and signs, look-out persons, construction of temporary cross-drainage and road diversion works, and other similar works needed during implementation of Works are deemed to be included by the Bidder in the Bid Price, as incidental to work.

(b) Defect Liability:

Subsequent to completion of the Works, Contractor shall be responsible for any defect arising in the executed work for a period of 60 Months from the Works Completion Date as specified in the Contract Data.

The successful Bidder shall have full regard and be responsible for the safety of the Works/road users and all Project Site operations and for all methods of design for temporary structures, construction and maintenance of the Project Road and the Facility, irrespective of any approval or consent by the Employer and cost for the same is deemed to be included in the Bid Price, as incidental to work. The Agency will be legally liable for safety of road users in this stretch & will take all precautionary measures proactively.

The successful Bidder shall take full responsibility for maintenance of the existing road and facilities there to and for Traffic Management, in accordance with Clause–A2 of Supplementary Technical Specifications of Section 5 (Specifications) and IRC-SP-55, 2014 (guide lines for Traffic management in works zones) from the Start Date to the date of completion. The cost of maintenance of the road, Barricading, traffic management, markings and signs, look-out persons, construction of temporary cross-drainage and road diversion works, and other similar works needed during implementation of Works are deemed to be included by the Bidder in the Bid Price, as incidental to work.

- 1.2 The Employer is now inviting bids for Upgradation of Existing State Highway-25 from 4-Lane to 6 Lane including construction of drain for the stretch between Tapukara (Km 212+800) to Bhiwadi (Km 221+350) in the state of Rajasthan as defined in the Contract Data and referred to as “Works”.
- 1.3 The successful Bidder will be expected to complete the Works within the time period as specified in the Contract Data and thereafter responsible for the defects for a period of 60 months.

2. Eligible Bidders

- 2.1(a) All the Contractors who will produce the certificate that they have successfully completed following quantities during last 3 financial years (2022-23, 2023-24, 2024-25) are eligible to bid.

| Sr. No. | Item Description | Unit | Quantities executed |
|---------|-----------------------------------|------|----------------------------------------------------------|
| 1 | Bituminous Work (DBM + BC) | Cum | 100% of total quantity mentioned in the BOQ (13,025 Cum) |
| 2 | PQC (M40 & Above) | Cum | 100% of total quantity mentioned in the BOQ (15,397 Cum) |
| 3 | Concrete work (M20 & Above Grade) | Cum | 100% of total quantity mentioned in the BOQ (11,565 Cum) |

- 2.1(b) And having minimum average annual turnover in the last 3 financial years (2022-23, 2023-24, 2024-25) equivalent or more than 100% of estimated cost.
- 2.2 Bidders should not have abandoned any of their contracts for, and should not be under a declaration of ineligibility or blacklisted for corrupt, fraudulent and coercive practices or works of poor quality / delayed implementation of any work by the Government of India (GoI), Government of Rajasthan (GoR), other State Governments and Union Territories, RIDCOR and/or Statutory Authorities like National Highways Authority of India. He should not have been convicted of any criminal /anti national activities by the laws of India.

3. Qualification of the Bidder:

- 3.1 Bidders should submit, with their Bids, qualification information regarding the Road/Highway Works completed by them as defined in clause 2.1 (a) & (b) and other information correct as on 28 days prior to last date of submission of Bids as per Form 2A, Qualification Information and Other Forms of Section 2.
- 3.2 All Bidders shall also include the following information and documents with their Bids in the formats prescribed, wherever applicable, in this Bidding Document:
- (a) the certificate that they have successfully completed the quantities defined in clause 3.1 in last 3 Financial Years (2022-23, 2023-24, 2024-25): Refer Form 2A, Point 1.6 (A) of Section-2.
 - (b) the certificate duly certified from a reputed chartered accountant firm along with the UDIN number that they have average annual turnover equivalent to 100% of estimated cost in last 3 Financial Years (2022-23, 2023-24, 2024-25). The bid will be rejected, if the certificate does not have UDIN Number: Refer Form 2C of Section-2.
 - (c) written Power of Attorney authorizing the signatory of the Bid;
 - (d) latest Income Tax clearance certificate from the concerned department;
 - (e) major items of construction equipment required to carry out the Contract {as per Clause 3.4 (a)};
 - (f) names of persons with sufficient qualifications and experience for site management and construction work should be proposed for the Project {as per Clause 3.4 (b)};
 - (g) an undertaking confirming the validity of above information;
 - (h) an undertaking with respect to Clause 2.2 hereinabove that he has not been convicted in any criminal case;
 - (i) information regarding any litigation or arbitration resulting from contracts executed by the Bidder in the last five years or currently under execution. The information shall include the names of the parties concerned, the disputed amount, duration of dispute, cause of litigation, matter in dispute and other relevant details; the Bidders shall also submit the information regarding debarring / expelling of Bidder or abandonment of work by Bidder (as per S. Nos. 1.4 & 1.5 of Form 2A of Section 2);
 - (j) The Bidder may submit his proposed Monthly Cash Flow Forecast in form at Annexure 3A.
- 3.3 Joint Venture (JV) is not allowed.
- 3.4 Each Bidder shall demonstrate:

- (a) Availability of key construction equipment as minimum required is indicated in the Schedule at Annexure–1A. The equipment can be either owned or leased or rented to be procured against advance payment for equipment and plant. However, it is entirely the responsibility of the Contractor to deploy required and sufficient Plant and Equipment to ensure satisfactory compliance with his obligations under the Contract, during the execution of the Works and also for Maintenance Works at the Site.

All Equipment provided by the Contractor at the site of Works shall be of the quality and capacity as approved by the Engineer and shall be deemed to be exclusively intended for the execution of the Works, and all these shall be operated, used and maintained in a manner acceptable to the Engineer.

- (b) Availability of key personnel as stated at Annexure–1B. However, it is entirely the responsibility of the Contractor to deploy sufficient key personnel at his head office and at the site, to ensure satisfactory compliance with his obligations under the Contract.
- (c) Evidence of access to line(s) of credit and availability of other financial resources facilities (10% of Contract Value) certified by the Bankers (not more than 3 months old). Bank Certificate shall be submitted as per Form 2D of Section-2
- (d) Through an Undertaking (Form 2E of Section-2) that the bidder will be able to invest a minimum cash upto 25% of contract value of work, during implementation of work.

3.5 Even though the Bidders meet the criteria set out above, they are subject to be declared non-responsive if they have:

- (a) made misleading or false representations in the forms, statements and attachments submitted in proof of the qualification requirements; and/or
- (b) record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc.; and/or
- (c) have been debarred/black listed by any Statutory Agency/Authority during the intervening period between qualification and award of Works; and/or
- (d) participated in bidding for any work and has quoted unreasonably high/low bid prices and could not furnish rational justification to the Employer.

4. One Bid per Bidder

4.1 Each Bidder shall submit only one Bid.

5. Cost of Bidding

5.1 The Bidder shall bear all costs associated with the preparation and submission of his Bid, and the Employer will in no case be responsible and liable for those costs.

6. Site visit

6.1 The Bidder, at the Bidder's own responsibility and risk is encouraged to visit and examine the site and its surroundings and obtain all information that may be necessary for preparing the Bid and entering into a contract for the Works. The costs of visiting the site shall be at the Bidder's own expense and no claim shall be entertained in this regard. Any information about the site can be obtained from our Project Manager/Head Office, Jaipur.

B : BID DOCUMENT

7. Content of Bid Document

- 7.1 The set of Bid Document consist of documents listed in the Table below and amendment/addenda issued in accordance with Clause 9 of this Section-1.

| Invitation for Bid | |
|---------------------------|---------------------------------------------------------------------------------------------------------------------|
| Section 1 | Instructions to Bidders |
| Section 2 | Qualification Information and Other Forms |
| Section 3 | Part-I : General Conditions of Contract Part-II : Special Conditions of Contract |
| Section 4 | Contract Data |
| Section 5 | Specifications Part – I : General Technical Specifications Part – II : Supplementary Technical Specifications |
| Section 6 | Securities and Other Forms |
| Section 7 | Bill of Quantities (BOQ) |

- 7.2 The Bid Document can be downloaded from the GoR web portal 'www.eproc.rajasthan.gov.in'. Documents to be furnished by the Bidder should be in the formats prescribed in the Bid Document and addendum issued pursuant to Clause 9 of Section-1.

8. Clarification on Bid Document

- 8.1 A Bidder requiring any clarification of the Bid Document may request the Employer at least 7 days before the last date for receipt of Bids in writing through post, fax or e-mail at the Employer's address indicated as below:

701-706, 7th Floor, ARG Corporate Park, Gopalbari, Ajmer Road, Jaipur-302001
Tel. No.: +91-141-2747001, Fax: +91-141-2747010, Email: office@ridcor.in

The Employer will respond to request for clarification to the respective e-mail address of the bidder.

- 8.2 Any modification of the Bid Document listed in Clause 7.1 which may become necessary as a result of the clarification given to Bidders shall be made known by the Employer exclusively through the issue of an Addendum pursuant to Clause 9.

9. Amendment of Bid Document

- 9.1 Before the deadline for submission of bids, the Employer may modify the Bid Document by issuing addenda on GoR web portal 'www.eproc.rajasthan.gov.in'.
- 9.2 Any addendum if issued by the Director/Manager/Authorized Representative shall be part of the Bid Document. All such addenda shall become an integral part of the Bidding Document and it shall be incorporated in Bid prices and duly signed, stamped and submitted along with the Bid documents on GoR web portal 'www.eproc.rajasthan.gov.in'. Bid shall be deemed to be incomplete if the addendum (addenda) is (are) not enclosed duly signed by the Bidder along with the Bid documents.

C : PREPARATION OF BIDS

10. Language of the Bid

10.1 All documents relating to the Bid shall be in the English language.

11. Documents to be submitted along with Bid

11.1 The Bidders should furnish the bid document duly signed by the authorized signatory. The certificate from a reputed Chartered Accountant firm along with UDIN number certifying the turnover of the Bidder shall be provided by the Bidder.

11.2 The Bidder shall attach copies of the certified/audited annual balance sheet / financial statement for financial year on the basis of which it is meeting eligibility criteria. The financial statement shall reflect the financial condition of the Bidder, which should be duly audited/ certified by Chartered Accountant. Following documents should be furnished along with the BID:

- Copy of PAN Card and GST Registration Certificate of the firm.
- Power of attorney favouring authorized representative/ signatory
- In case of a company, copy of the certification of incorporation and certificate of commencement of business (if applicable)
- Affidavit from the Bidder that the Bidder is not involved in any litigation with the RIDCOR.
- An undertaking shall be produced that No dispute is pending between any Authority/NHAI/ Government (state/union)/Govt. undertaking and the eligible Bidder. In case, there is any pending dispute with these departments, details of the same shall be provided.
- Transaction Receipt of BID security.
- Transaction Receipt of BID processing fee and cost of bid document

11.3 The Bidder shall submit the Bid on-line through e-portal 'www.eproc.rajasthan.gov.in' which shall comprise scanned copies of following documents by the stipulated date and time:

Cover-1

Envelope/Folder 'A' – 'Technical Proposal' shall contain:

- a) Bidder information along with required supporting documents;
- b) Receipt of transaction details of Bid Security / Bank Guarantee;
- c) Irrevocable Power of Attorney for signing the Bid;
- d) Copies of Bidder's duly audited/ certified balance sheet/ financial statements for the year for which it is seeking eligibility;
- e) Bid Document Fee and E-Tendering Processing Fee through NEFT/RTGS/IMPS in the designated account of RIDCOR.
- f) The Bidder shall deposit a Bid Security through RTGS/NEFT/IMPS in the designated account of RIDCOR in accordance with the provisions of this Bid Document. The bidder may submit bid security in the form of Bank Guarantee also, one day before bid opening date.
- g) Compliances as per Annexures 2, 3 & 4 of Section-2

Before submission of online financial Bid, Bidders must ensure that scanned copies of all the necessary documents have been uploaded with the Bid.

Bid document along with related documents can be downloaded from the website <https://eproc.rajasthan.gov.in>. The document downloaded from the website shall not be tempered. If any tempering is detected before signing of the agreement, the Bid security of the Bidder shall be forfeited and the Bidder shall be debarred for a period of one year for Bidding in the RIDCOR, RIPL.

Cover-2

Envelope/Folder 'B' – 'Financial Proposal'

The bidder shall quote its financial proposal in Cover-2 (Envelope-B) on the E-Tender portal.

12. Bid Prices

- 12.1 The Contract shall be for the Works as described in Contract Data, based on the quote submitted by the Bidder in Financial Proposal through online mode.
- 12.2 The Bidder shall fill in percentage rate above or below the total amount of the Works described in the Bill of Quantities at Section-7. Any incidental item shall be deemed to be covered by the other rates and prices in the Bill of Quantities.
- 12.3 All duties, taxes, and other levies payable by the Contractor under the Contract, or for any other cause shall be included in the rates, prices and total Bid Price submitted by the Bidder. Price variation on bitumen only is payable as per terms of contract.
- 12.4 The Contract Price shall not be subject to any adjustment in price in respect of rise or fall in the cost of labour, materials or any other matters affecting the cost of execution of the Contract, except for the price of bitumen consumed for the Improvement Works. The adjustment in price for the quantity of bitumen used in Improvement Works shall be as indicated in Clause 42 of the General Conditions of Contract of Section 3.

13. Currencies of Bid and Payment

- 13.1 The unit rates and the prices of the BOQ are entirely in Indian Rupees, and payment shall be made in Indian Rupees.

14. Bid Validity

- 14.1 Bids shall remain valid for a period not less than one hundred and twenty (120) days after the deadline date for Bid submission. **A bid valid for a shorter period shall be rejected by the Employer as non-responsive.**
- 14.2 In exceptional circumstances, prior to expiry of the original time limit, the Employer may request the Bidders to extend the period of validity of their bid for a specified additional period. The request and the Bidders' responses shall be made in writing or by email. A Bidder may refuse the request without forfeiting his Bid security. A Bidder agreeing to the request will not be required or permitted to modify his Bid but will be required to extend the validity of his Bid security also for a period of the extension, and in compliance with Clause 15 in all respects.

15. Bid Security

- 15.1 The Bidder shall furnish, as part of his Bid, a Bid Security for an amount of Rs. 93,14,000/- through NEFT/RTGS/IMPS/Bank Guarantee in the designated account of RIDCOR. This Bid Security Bank Guarantee shall be in favour of "RIDCOR Ltd." and may be in one of the following forms:
- A Bank Guarantee, in the prescribed format is acceptable from the following institutions located in India:
 - (a) State Bank of India or its subsidiaries;
 - (b) Any Indian Nationalized /Scheduled Bank;
 - (c) IDBI Bank or Axis Bank or ICICI Bank or HDFC Bank or Yes Bank or AU Small Finance Bank or IDFC First Bank; or
 - (d) Foreign Bank with operations in India provided the net worth in respect of the Indian operations shall not be less than Rs 500 crores as per the latest Annual Report of the Bank and that Bank Guarantee is issued by a branch in India.
 - The bid security in the form of Bank Guarantee shall be submitted by the bidder at least one day before the date of opening of the tenders at RIDCOR Head Office, Jaipur.
- 15.2 Bank guarantees issued as surety for the Bid should be valid for 45 days beyond the validity of the Bid.
- 15.3 Any Bid not accompanied by an acceptable Bid Security and not secured as indicated in Sub Clauses 15.1 and 15.2 shall be rejected by the Employer as non-responsive.
- 15.4 Bid security of the bidders except L1 & L2 shall be released immediately upon opening of the financial bids. Bid security of the L2 bidder shall be released after execution of contract agreement by the L1 bidder or 30 days of issuance of Letter of Acceptance (LOA) to L1 bidder or bid validity period whichever is earlier.
- Bid security of the L1 bidder shall be released after submission of Performance Security and execution of contract agreement by the L1 bidder. The bid security of L1 bidder available in cash may be adjusted against performance security on request of L1 bidder.
- 15.5 The Bid Security of the successful Bidder will be discharged when the Bidder has furnished the required Performance Security and signed the Agreement.
- 15.6 The Bid Security may be forfeited
- (a) if the Bidder withdraws the Bid after Bid opening during the period of Bid validity;
 - (b) if the Bidder does not accept the correction of the Bid Price, pursuant to Clause 21 of ITB;
 - (c) in case of a successful Bidder, if the Bidder fails within the specified time limit to
 - (i) furnish the required Performance Security, and/or
 - (ii) sign the Contract Agreement.

16. Alternative Proposals by Bidders

- 16.1 Conditional offers or alternative proposals will not be considered.

D: BID OPENING AND EVALUATION

17. Opening and Evaluation of Bids:

- 17.1 Opening and evaluation of Bids will be done for the bids only through online process. The Employer shall open online bids received as per schedule mentioned hereinabove on the Bid Due Date. The Employer will examine and evaluate the online Bids in accordance with the provisions set out in this Bid Document.
- 17.2 To facilitate evaluation of Bids, the Employer may, at its sole discretion, seek clarifications in writing from any Bidder regarding its Bid. The bid evaluation committee may ask for the pending documents for technical qualification in order to have more competitive bids in a prescribed time frame and such documents have to be submitted by the bidder through online mode.
- 17.3 Correction of Errors; Bids determined to be substantially responsive will be checked and considered by the Employer for any discrepancy as follows:

“Where there is any discrepancy between the amounts in figures and in words, the amount in figures entered in the BOQ (online) shall prevail.”

18. Process to be Confidential

- 18.1 Information relating to the examination, clarification, evaluation, and comparison of Bids and recommendations for the award of a contract shall not be disclosed to Bidders or any other persons not officially concerned with such process until the award to the successful Bidder has been announced.

19. Clarification of Bids

- 19.1 To assist in the examination, evaluation, and comparison of Bids, the Employer may, at his discretion, ask any Bidder for clarification of his Bid, including breakdowns of all the bid rates. The request for clarification and the response shall be in writing or by email, but no change in the price or substance of the Bid shall be sought, offered, or permitted except as required to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the Bids in accordance with Clause 21. In case any Bidder refuses to furnish any clarification sought by the Employer, which may affect his Bid Price, then his bid shall be liable to be treated as non-responsive.
- 19.2 Subject to Sub Clause 19.1, no Bidder shall contact the Employer/its representatives on any matter relating to the Bid from the time of the bid opening to the time the contract is awarded.
- 19.3 Any effort by the Bidder to influence the Employer in the Employer's bid evaluation, bid comparison or contract award decisions may result in the rejection of the Bidder's Bid.

20. Examination of Bids and Determination of Responsiveness

- 20.1 During the detailed evaluation of Bids, the Employer will determine whether each Bid
- (a) meets the eligibility criteria defined in Clauses 2 and 3 of ITB;
 - (b) has been properly signed;
 - (c) is accompanied by the required securities; and
 - (d) is substantially responsive to the requirements of the Bid Document.

- 20.2 A substantially responsive Bid is one which conforms to all the terms, conditions, and specifications of the Bid Document, without material deviation or reservation. A material deviation or reservation is one
- (a) which affects in any substantial way the scope, quality, or performance of the Works;
 - (b) which limits in any substantial way, inconsistent with the Bid Document, the Employer's rights or the Bidder's obligations under the Contract; or
 - (c) whose rectification would affect unfairly the competitive position of other Bidders presenting substantially responsive Bids.
- 20.3 If a Bid is not substantially responsive, it will be rejected by the Employer and shall not subsequently be made responsive by correction or withdrawal of the non-conforming deviation or reservation.

21. Correction of Errors

- 21.1 Bids determined to be substantially responsive will be checked by the Employer/Authorized Representative for any arithmetic errors. Errors will be corrected by the Employer/Authorized Representative as follows:
- (a) where there is a discrepancy between the rates in figures and in words, the rate in figures will govern; and
 - (b) where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted will govern.
 - (c) in case different rates are furnished in different sections of the Bill of Quantities for the same item, then the lowest rate for the item shall prevail for all the places where the item is appearing.
- 21.2 The amount stated in the Bid will be corrected by the Employer/Authorized Representative in accordance with the above procedure for the Correction of Errors and, with the concurrence of the Bidder. Such adjusted Bid Price shall be considered as binding upon the Bidder. If the Bidder does not accept the corrected amount, the Bid will be rejected and the Bid Security may be forfeited in accordance with Sub Clause 15.6 (b) of ITB.

22. Evaluation and Comparison of Bids

- 22.1 The Employer/Authorized Representative will evaluate and compare only the Bids determined to be substantially responsive in accordance with Clause 20 of ITB. For avoidance of doubt, the Employer shall compare the Bid and the lowest bidder shall be considered for evaluation. However, preference shall be given to the lowest cost to the Employer.
- 22.2 In evaluating the Bids, the Employer/Authorized Representative will determine for each Bid the evaluated Bid Price by adjusting the Bid Price as follows:
- (a) making any correction for errors pursuant to Clause 21 of ITB; or
 - (b) making an appropriate adjustment for any other acceptable variations, deviations; and
 - (c) making appropriate adjustments to reflect discounts or other price modifications offered by the Bidder.

- 22.3 The Employer reserves the right to accept or reject any variation, deviation, or alternative offer. Variations, deviations, and alternative offers and other factors which are in excess of the requirements of the Bid Document or otherwise result in unsolicited benefits for the Employer shall not be taken into account in Bid evaluation.
- 22.4 The estimated effect of the price adjustment conditions under Clause 42 of the Conditions of Contract, during the period of implementation of the Contract, will not be taken into account in Bid evaluation.
- 22.5 If the Bid of the successful Bidder is unbalanced in relation to the Employer's estimate of the cost of work to be performed under the Contract, the Employer may require the Bidder to produce detailed rate analysis, to demonstrate the internal consistency of the bid price with the construction methods and schedule proposed. After evaluation of the rate analysis, the Employer may require that the amount of the performance security set forth in Clause 26 of ITB be increased at the expense of the successful Bidder to a level sufficient to protect the Employer against financial loss in the event of default of the successful Bidder under the Contract.

E : AWARD OF CONTRACT

23. Award Criteria

- 23.1 Subject to Clause 24 of ITB, the Employer will award the Contract to the Bidder whose Bid has been determined to be substantially responsive to the Bid Document and who has offered the lowest evaluated Bid Price, provided that such Bidder has been determined to be (a) eligible in accordance with the provisions of Clause 2 of ITB, and (b) qualified in accordance with the provisions of Clause 3 of ITB.
- 23.2 Deleted

24. Employer's Right to accept any Bid and to reject any or all Bids

- 24.1 Notwithstanding Clause 23, the Employer reserves the right to accept or reject any Bid, and to cancel the Bidding process and reject all Bids, at any time prior to the award of Contract, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for the Employer's action.

25. Notification of Award and Signing of Agreement

- 25.1 The Bidder whose Bid has been accepted will be notified of the award by the Employer prior to expiration of the Bid validity period by email or facsimile or confirmed by registered letter. This letter (hereinafter and in the Conditions of Contract called the "Letter of Acceptance") (Form 6B of Section 6) will state the contract amount that the Employer will pay the Contractor in consideration of the execution and completion of the Works by the Contractor as prescribed by the Contract (hereinafter and in the Contract called the "Contract Price").
- 25.2 The notification of award through the Letter of Acceptance will signify the intention of the Employer to enter into a contract, subject to the furnishing of a Performance Security by the Bidder in accordance with the provisions of Clause 26.
- 25.3 The Agreement (Form 6E of Section 6) will incorporate all clarifications sought and submitted, and all agreements between the Employer and the successful Bidder. It will be signed by the Employer and kept ready in his office for signatures of the successful Bidder within 28 days following the issue of the Letter of Acceptance.
- 25.4 Upon furnishing of the Performance Security by the successful Bidder, the Employer will promptly notify the other Bidders that their Bids have been unsuccessful and refund their bid security.

26. Performance Security

- 26.1 Within 14 days of receipt of the Letter of Acceptance, the successful Bidder shall deliver to the Employer a Performance Security in the form of an unconditional Bank Guarantee for an amount equivalent to 5% of the Contract Price for the Works, in accordance with Clause 25.2 of ITB of Section-1 and Clause 45 of GCC of Section 3.

Additional performance security as 40% of the amount beyond 10% lower than the estimated amount for unbalanced bids will also be required to be submitted alongwith

above performance security which will be valid upto end of DLP period of 5 years.

The Bank Guarantee, in the prescribed format (Form 6C of Section 6), is acceptable from the following institutions located in India:

- (a) State Bank of India or its subsidiaries;
- (b) Any Indian Nationalized /Scheduled Bank;
- (c) IDBI Bank or Axis Bank or ICICI Bank or HDFC Bank or Yes Bank or AU Small Finance Bank or IDFC First Bank; or
- (d) Foreign Bank with operations in India provided the net worth in respect of the Indian operations shall not be less than Rs 500 crores as per the latest Annual Report of the Bank and that Bank Guarantee

If, performance security and additional performance security (if required under bid stipulations) is not submitted within the prescribed time then penalty of Rs. 5,000 per day shall be levied on the successful tenderer upto 30 days (penalty period) beyond specified time of 14 days. If the above securities are not submitted within 60 days beyond specified time, Director/Manager, RIDCOR reserves the right to accept the above securities in case of further delay with penalty of Rs 10,000 per day beyond 30 days thereafter.

- 26.2 Failure of the successful Bidder to comply with the requirements of Sub Clause 26.1 shall constitute sufficient grounds for cancellation, cause for annulment of the award, forfeiture of the Bid Security and any such other remedy the Employer may take under the Contract, and the Employer may resort to awarding the Contract to any other evaluated Bidder.

27. Advance Payment

- 27.1 The Employer will provide an interest free mobilization Advance Payment on the Contract Price to the Contractor, as per Clause 44 of GCC (Section 3) subject to a maximum amount as stated in Contract Data.

28. Corrupt or Fraudulent Practices

- 28.1 The Employer requires that the Bidders/Contractors, observe the highest standard of ethics during the procurement and execution of the Contracts. In pursuance of this policy, the Employer:

- (a) defines, for the purposes of this provision, the terms set forth below:
 - (i) "corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of Employer/its representatives in the procurement process or in contract execution;
 - (ii) "fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Employer, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish Bid Prices at artificial non-competitive levels and to deprive the Employer of the benefits of free and open competition;
 - (iii) "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the procurement process or affect the execution of the Contract.

- (b) will reject a proposal for award if the Employer determines that the Bidder recommended for award has engaged in corrupt, fraudulent or coercive practices in competing for the contract in question;
- (c) will declare a firm ineligible, either indefinitely or for a stated period of time, if the Employer at any time determines that the firm has engaged in corrupt, fraudulent or coercive practices in competing for, or in executing, contracts.

Annexure – 1A
(Please refer Sub Clause 3.4 (a) of ITB)

**Schedule of Minimum Key Construction Plant and Equipment required
to be mobilized by Contractor for each Lot**

| S. No. | Type of Equipment | Plant & Equipment Nos. |
|--------|----------------------------------------------------------------------------|------------------------|
| 1 | Batch Type Hot Mix plant (120-160 ton per Hr) with all electronic controls | 1 |
| 2 | Sensor Paver finisher (7Mtr Width) (not older than year 2019) | 1 |
| 3 | Fixed Form Paver | 1 |

Note: The bidder must produce the documentary evidence in support of his owning/leased/ rented of the above equipment. In case the bidder proposes to hire or take the above equipment on lease, he should, along with the lease/rent agreement, attach the proof of ownership of these equipment with the company/ entity from whom the equipment are proposed to be hired on lease/ rent.

Annexure –1B*(Please refer Sub Clause 3.4 (b) of ITB)***Details of Minimum Key Personnel required to be mobilized by Contractor for each Lot**

| S No | Position | Minimum Qualification & Experience | Nos. |
|-------------|-------------------------------------|------------------------------------------------------------------------------------|-------------|
| 1 | Project Manager/Highway Engineer | B.E. (Civil) with 5 years or Diploma civil with 7 years' experience | 1 |
| 2 | Planning Engineer/Quantity Surveyor | B.E. (Civil) with 3 years' experience or Diploma in Civil with 5 years' experience | 1 |
| 3 | Quality Control Engineer | B.E. (Civil) with 5 years or Diploma civil with 7 years' experience | 1 |
| 4 | Safety Engineer | B.E. (Civil/ Mechanical) with 5 years or Diploma civil with 7 years' experience | 1 |

SECTION 2:

QUALIFICATION INFORMATION AND OTHER FORMS

| Table of Forms | Description | Page No |
|-----------------------|-----------------------------------------------------------------------------------------------------------------|----------------|
| Form 2A | Qualification Information | 30 |
| Form 2B | Letter from bidder to bankers authorizing them to provide information to RIDCOR Limited/ Representatives | 33 |
| Form 2C | Annual Turnover of the Bidder | 34 |
| Form 2D | Bank Certificate | 35 |
| Form 2E | Undertaking | 36 |
| Annexure-2 | Compliance with the Code of Integrity and No Conflict of Interest | 37 |
| Annexure-3 | Declaration by the Bidder regarding Qualifications | 39 |
| Annexure-4 | Grievance Redressal during Procurement Process | 40 |

QUALIFICATION INFORMATION

The information to be filled in by the Bidder in the following pages will be used for purposes of the Qualification Information as mentioned in Clause 3 of the Instructions to Bidders. (Separate pages with required details shall be attached)

1. Details of Bidder

Name of Bidder/ Address/ Telephone/ Fax/ Email/ Contact Person and Designation

1.1 Constitution or legal status of Bidder **[Attach copy]**

Place of registration: _____

Principal place of business: _____

Power of attorney in favor of signatory of Bid (Attach copy)

1.2 Availability of Contractor's Equipment should be listed below for carrying out the Works. Contractor is to fill the following items regarding the availability of Equipment. The minimum requirement is available at Clause 3.4 (a) of ITB.

| Item of equipment (not more than 3 years old) | Minimum Requirement | | Availability proposals | | | | Remarks / Make |
|--------------------------------------------------|---------------------|----------|------------------------|----------|-----------|---------------------------------------|----------------|
| | No | Capacity | Nos | Capacity | Condition | Owned/ Leased/Rented / to be procured | |
| | | | | | | | |
| | | | | | | | |

1.3 Qualifications and experience of key personnel proposed for management and execution of the work. Attach CV. Refer also to Sub Clauses 3.4 (b) of Instructions to Bidders and Sub Clause 9.1 of the General Conditions of Contract.

| S No | Position | Name | Qualification | Years of experience (general) | Years of experience | |
|------|----------|------|---------------|-------------------------------|---------------------|------------------------------------|
| | | | | | In similar capacity | In similar nature of works (Roads) |
| | | | | | | |

1.4 Information on litigation history in which the Bidder is involved
{Refer ITB Clause 3.2 (i)}-

| Item Head | Litigation 1 | Litigation 2 |
|--------------------------------------------------------|--------------|--------------|
| Name of Client | | |
| Month/Year of institution of dispute | | |
| Cause of Litigation/ Matter in Dispute | | |
| Disputed Amount (Current Value in Indian Rupees) | | |
| Resolved or pending resolution | | |
| Award <i>For</i> or <i>Against</i> | | |
| Actual Amount Awarded (Current Value in Indian Rupees) | | |
| Other Claims Made, Settled/ Rejected | | |

1.5 Information regarding current litigation, debarring / expelling of bidder or abandonment of work by bidder; {(Refer ITB Clause 3.2 (i))}

| | | | |
|---|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| 1 | (a) | Has the Bidder or its constituent partners, a history of litigation/arbitration | Yes/No |
| | (b) | If yes, give details | |
| 2 | (a) | Has the Bidder or any of its constituent partners been debarred/expelled by any Agency in India, during the last 5 years as on the date of application | Yes/No |
| | (b) | If yes, give details | |
| 3 | (a) | Has the Bidder or any of its constituent partners abandoned any contract work in India / Rajasthan during the last 5 years | Yes/No |
| | (b) | If yes, give details | |
| 4 | (a) | Has the Bidder or any of its constituent partners been declared bankrupt during the last 5 years | Yes/No |
| | (b) | If yes, give details, including present status | |

Note: If any information in this schedule is found to be incorrect or concealed, at any time including after the award of works, the Bidder's bid will be treated as non-responsive, and rejected.

1.6 (A) Work performed as a prime contractor/sub-contractor, in the past 3 years as a nominated/approved sub-contractor provided further that all other qualification criteria are satisfied (in the same name) of a similar nature during the last 3 (FY 2022-23, 2023-24, 2024-25) years.

| Project Name | Name of the Employer* | Description of work | Executed qty. of DBM & BC | Financial Year of Execution | Contract No. | Value of Contract (Rs. Crore) | Date of issue of work order | Stipulated period of completion | Actual date of completion * | Remarks explaining reasons for delay. |
|--------------|-----------------------|---------------------|---------------------------|-----------------------------|--------------|-------------------------------|-----------------------------|---------------------------------|-----------------------------|---------------------------------------|
| | | | | | | | | | | |

(B) Current Commitments and Works in Progress

[illegible]

(C) Contracts for which Bids already submitted and are likely to be awarded

| Sl No | Description of Work | Place & State | Name of the Employer | Estimated Value of Contract (Rs Crores) @ | Stipulated Period of Completion | Date when Decision is expected | Role of Applicant* and Remarks |
|-------|---------------------|---------------|----------------------|-------------------------------------------|---------------------------------|--------------------------------|--------------------------------|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | TOTAL | | | | | | |

Note :

@ : In case of currencies other than Indian Rupees, please indicate the value of works in the original currency as well as Indian Rupees on the date of submission of bid and also the exchange rate assumed.

* : Specify whether works were executed as Main Contractor, EPC Contractor, and Sub-Contractor or as JV Partner, along with their share.

(D) Minimum technical eligibility in respect of executed PQC, bituminous work (DBM+BC) and structural concrete M20 and above in the last 3 financial years (2022-23, 2023-24, 2024-25):

| Particulars | Minimum Eligibility (in Cum.) | Quantity Executed (in Cum.) | | | | Reference documents details |
|---------------------------------|-------------------------------|-----------------------------|---------|---------|---------------------------------------------------|-----------------------------|
| | | 2022-23 | 2023-24 | 2024-25 | Total executed quantity in last 3 financial years | |
| DBM + BC | 13,025 | | | | | |
| PQC (M-40 & above) | 15,397 | | | | | |
| Structural Concrete M20 & above | 11,565 | | | | | |

1.6.1. Suitable certification from Employers (not below the rank of Executive Engineer) to be necessarily attached as part of this Appendix.

**SAMPLE FORMAT FROM BIDDER TO BANKERS AUTHORISING THEM TO
PROVIDE INFORMATION TO RIDCOR Limited / ITS REPRESENTATIVES**

To
Name of Bank/Address/City

Dear Sirs :

We have recently submitted a Bid to RIDCOR Ltd. for **“Upgradation of Existing State Highway-25 from 4-Lane to 6 Lane including construction of drain for the stretch between Tapukara (Km 212+800) to Bhiwadi (Km 221+350) in the state of Rajasthan”**. We hereby authorize you to provide all information/data readily about us and our credit status, as may be required by RIDCOR Limited and you need not seek any clearance/opinion from us for providing the information/data to RIDCOR Limited and/or its authorized representatives.

Sincerely,

Authorized Signatory

Annual Turnover of the Bidder*

(to be certified by the Chartered Accountant with UDIN)

| Particulars | Turnover in last 3 FYs | | |
|-------------|------------------------|---------|---------|
| | 2022-23 | 2023-24 | 2024-25 |
| | | | |

NOTE: *Whether a Company, Partnership firm, Proprietary firm, Individual

: In case of Partnership firm/Propriety firm, the Turnover of the firm and not of the individual partners shall be considered.

Date: (Signature, name and designation of the Authorized signatory)
Place: Name and seal of Bidder

**SAMPLE FORMAT FOR EVIDENCE OF ACCESS TO OR
AVAILABILITY OF CREDIT FACILITIES**

BANK CERTIFICATE

This is to certify that M/s is a reputed company with a good financial standing.

If the contract for the work, namely is awarded to the above firm, we shall be able to provide overdraft/credit facilities to the extent of Rs. to meet their working capital requirements for executing the above contract during the contract period.

Date:
Place:

(Signature)
Senior Bank Manager
Name of Bank
Address of the Bank

UNDERTAKING

I, the undersigned do hereby undertake that our firm M/s would invest a minimum cash up to 25% of the value of the work during implementation of the Contract.

(Signature)
Authorized Officer of the Firm

Title of Officer

Name of the Firm

Date

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 of 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 the 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 behaviour to impair the transparency, fairness and process 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 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 pervious 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.

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:

- have controlling partners/shareholders in common; or
- receive or have received any direct or indirect subsidy from any of them;
- have the same legal representative for purposes of the Bid; or
- 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
- 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 Bidder, in more than one Bid; or
- the Bidder or any of its affiliates participated as consultant in the preparation of the design or technical specifications of the Goods, Works or Services that are the subject of the Bid; or
- 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.

Signature of Bidder

Declaration by the Bidder regarding Qualifications

Declaration by the Bidder

In relation to my/our Bid submitted to the Company for Upgradation of Existing State Highway-25 from 4-Lane to 6 Lane including construction of drain for the stretch between Tapukara (Km 212+800) to Bhiwadi (Km 221+350) in the state of Rajasthan in response to their Notice Inviting Bids No..... Dated I/we hereby declare, that:

1. I/we possess the necessary professional, technical, financial and managerial resource and competence required by the Bidding Document issued by the Procuring Entity;
2. I/we/ have fulfilled my/our obligation to pay such of the taxes payable to the Union and the State Government or any local authority as specified in the Bidding document;
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 are not debarred from any department or any regulatory agency.
5. I/we do not have, and our Directors and Officers not have, been convicted of any criminal offence related to my/our professional conduct or the marking of false statements or misrepresentations as to my/our qualifications to enter into a procurement contract within a period of three years preceding the commencement of this procurement process, or not have been otherwise disqualified pursuant to debarment proceedings;
6. I/we do not have a conflict to interest as specified in the Act, Rules and the Bidding Document, which materially affects fair competition;

Date:
Place:

Signature of Bidder
Name:
Designation: Address:

Grievance Redressal during Procurement Process

The designation and address of the First Appellate Authority is Manager, RIDCOR Ltd., Rajasthan, Jaipur

The designation and address of the Second Appellate Authority is Director, RIDCOR Ltd., Rajasthan, Jaipur

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.

- (1) The officer to whom an appeal is filed under para (1) 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.
- (2) 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.

(3) Appeal not to lie 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.

(4) Form of Appeal

- (a) An appeal under para (1) 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 by authorized representative.

(5) 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.

(6) 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 there of 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.

Signature of Bidder

SECTION 3:

| Part No | Description | Page no |
|----------------|---------------------------------------------|----------------|
| Part I | General conditions of contract (GCC) | 44 |
| Part II | Special Conditions of Contract (SCC) | 65 |

SECTION : 3

PART – I : GENERAL CONDITIONS OF CONTRACT (GCC)

Table of Contents

| | | Page No. | | | Page No. |
|----------|-----------------------------------------------------------------------------------------|-------------|----------|--------------------------------|-------------|
| A | General | | C | Quality Control | |
| 1 | Definitions | 46 | 30 | Identifying Defects | 55 |
| 2 | Interpretation | 48 | 31 | Tests | 55 |
| 3 | Language and Law | 48 | 32 | Correction of Defects | 55 |
| 4 | Site Office for Engineer | 48 | 33 | Uncorrected Defects | 55 |
| 5 | Field Laboratory | 48 | D | Cost Control | |
| 6 | Communication | 48 | 34 | Bill of Quantities | 56 |
| 7 | Procurement of Bitumen | 48 | 35 | Changes in the Quantities | 56 |
| 8 | Other Contractors | 49 | 36 | Variations | 56 |
| 9 | Personnel | 49 | 37 | Payments for Variations | 56 |
| 10 | Employer's & Contractor's Risks | 49 | 38 | Cash Flow Forecasts | 57 |
| 11 | Employer's Risks | 49 | 39 | Payment Certificates | 57 |
| 12 | Contractor's Risks | 49 | 40 | Tax | 58 |
| 13 | Insurance | 49 | 41 | Currencies | 58 |
| 14 | Contractor to Construct the Works and Works to be Completed by Contract Completion Date | 50 | 42 | Change in Legislation | 59 |
| 15 | Safety, Security and Protection of the Environment | 50 | 43 | Liquidated Damages and Penalty | 60 |
| 16 | Working Drawings | 51 | 44 | Advance Payment | 60 |
| 17 | Approval by the Employer | 51 | 45 | Securities | 60 |
| 18 | Safety of Traffic | 51 | 46 | Cost of Maintenance | 61 |
| 19 | Discoveries | 51 | 47 | Security Deposit | 61 |

| | | | | | |
|----------|----------------------------------------|----|----------|------------------------------------------------|----|
| 20 | Possession of the Site | 51 | E | Finishing the Contract | |
| 21 | Access to the Site | 52 | 48 | Completion | 62 |
| 22 | Instructions | 52 | 49 | Final Account | 62 |
| 23 | Disputes | 52 | 50 | Termination | 62 |
| 24 | Procedure for Disputes – Arbitration | 52 | 51 | Payment upon Termination | 63 |
| B | Time Control | | 52 | Property | 64 |
| 25 | Program | 53 | 53 | Release from Performance | 64 |
| 26 | Extension of the Works Completion Date | 53 | 54 | Details to be Confidential | 64 |
| 27 | Delays Ordered by the Employer | 53 | 55 | Life-saving Appliances and First-aid Equipment | 64 |
| 28 | Management Meetings | 53 | | | |
| 29 | Early Warning | 54 | | | |

PART – I
GENERAL CONDITIONS OF CONTRACT (GCC)
A : GENERAL

1. Definitions

- 1.1 Terms which are defined in the Contract Data but are not defined in the Conditions of Contract but keep their defined meanings. Capital initials are used to identify defined terms.

Authorised representative is the person (or any other competent person appointed and notified to the Contractor to act in replacement of the Employer) who is responsible for supervising the execution of the Works and administering the Contract. Project Manager is the Authorized representative of the Employer for this contract.

Bill of Quantities means the priced and completed **Bill of Quantities** forming part of the Bid.

Contract Completion Date is the date of completion of Contractor's obligations under this Contract for the Construction works as indicated in the Contract Data.

Contract is the contract signed between the Employer and the Contractor to execute, complete and maintain the Works. It consists of the documents listed in Sub Clause 2.2.

Contract Data defines the documents and other information which comprise the Contract, as specified in Section 4 of the Document.

Contractor is a person or firm, whose Bid to carry out the Works has been accepted by the Employer.

Contractor's Bid is the completed Bidding document submitted by the Contractor to the Employer.

Contract Price is the price stated in Indian Rupees in the Letter of Acceptance for the Works.

Days are calendar days; **months** are calendar months.

Defect is any part of the Works not completed in accordance with the specifications and designs of the Contract.

Defects Liability Period is the period specified in the Contract Data and calculated from the actual Completion Date of Works. For this particular contract, Defects Liability Period is 5 years after the Works Completion Date.

Drawings include designs and calculations and other information provided.

Employer is the party who employs the Contractor to carry out the contracted Works or its authorized representative (Director/Manager/Project Manager/Authorized Representative, RIDCOR)

Engineer is the person (or any other competent person appointed and notified to the Contractor to act in replacement of the Engineer) who is responsible for supervising the execution of the Works and administering the Contract. Project Manager, RIDCOR/Supervision Consultant will act as the Engineer, as notified by the Employer.

Equipment is the Contractor's machinery and vehicles' brought, temporarily or otherwise, to the Site to construct the Works.

Intervention Standards is the level of the damage at which road assets need to be intervened and repaired.

Letter of Acceptance means the formal acceptance by the Employer or its authorized representative of the Bid.

Materials are all supplies, including consumables, used by the contractor for incorporation in the Works.

Milestone is a specified date or duration by which specified works are to be completed.

Permanent Works means the permanent works to be executed in accordance with the Contract.

Plant is any integral part of the Works which is to have a mechanical, electrical, electronic or chemical or biological function.

Rectification Standards is the period of time given to repair the damage to the road asset.

Service Quality specifies the condition of the road asset which gives a desirable level of service and comfort.

Site is the area defined as such in the Contract Data.

Specification means the latest MORTH Specifications of the Works included in the Contract and any modification or addition made or approved by the Employer/Engineer, in writing.

Start Date is given in the Contract Data. It is the date when the Contractor shall commence execution of the Works. It does not necessarily coincide with any of the Site Possession Dates.

Subcontractor is a person or firm or corporate body who has a contract with the Contractor to carry out a part of the work in the awarded Contract.

Temporary Works are works designed, constructed, installed, and removed by the Contractor which are needed for construction or installation or maintenance of the Works.

Variation is an instruction given by the Employer in writing which varies the Works.

Works means the Upgradation of Existing State Highway-25 from 4-Lane to 6 Lane including construction of drain for the stretch between Tapukara (Km 212+800) to Bhiwadi (Km 221+350) in the state of Rajasthan or other Works as stated in the Contract Data.

Works Completion Date is the actual date of completion of the Upgradation Works as certified by the Employer in accordance with Sub Clause 48.3.

Working Drawings means all Drawings, calculations, samples, patterns, models, maintenance manuals and other technical information of a like nature submitted by the Contractor and approved by the Employer, for execution of the Works.

2. Interpretation

- 2.1 In interpreting these Conditions of Contract, singular also means plural, male also means female or neuter, and the other way around. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Employer will provide instructions clarifying queries about the Contract.
- 2.2 The documents forming the Contract shall be interpreted in the following order of priority:
- (1) Agreement
 - (2) Letter of Acceptance
 - (3) Contractor's Bid
 - (4) Contract Data
 - (5) General and Special Conditions of Contract
 - (6) Specifications
 - (7) Priced Bill of Quantities; and
 - (8) Any other document forming part of the Contract.

3. Language and Law

- 3.1 The language of the Contract and the law governing the Contract are stated in the Contract Data.

4. Site office for Engineer

- 4.1 The contractor shall arrange to provide, at his cost, a fully furnished site office, which includes providing furniture, uninterrupted electric supply, all electrical items like lights, fans, Air Conditioner and complete wiring, water supply etc. The contractor shall arrange to maintain the site office until the issue of completion certificate for the work.

5. Field Laboratory

- 5.1 The contractor shall arrange to provide at his cost a fully furnished and adequately equipped field laboratory constructed as per Clause 120 of MoRTH (Vth Revision). The field laboratory shall preferably be located adjacent to the site office of the Engineer and provided with amenities like testing equipment, testing personnel and consumables, water supply, electric supply etc.

6. Communication

- 6.1 Communication between parties of the Contract shall be effective only when it is in writing. A notice shall be effective only when it is delivered (in terms of Indian Contract Act) physically or through electronic mail.

7. Procurement of Bitumen

- 7.1 Bitumen shall be procured in bulk by the successful bidder from the nearest refinery i.e. from IOCL, BPCL or HPCL or any other source as approved by NHAI/MoRTH/PWD, GoR, Rajasthan subject to fulfillment of quality parameters as per approval of the Engineer. Use of imported bitumen can be permitted subject to compliance of MoRTH stipulation as detailed in Circular issued on 23th Aug 2023. Engineer's prior approval is mandatory if bitumen is procured from refineries other than IOCL/BPCL/HPCL.

8. Other Contractors

- 8.1 The Contractor shall cooperate and share the Site with other Contractors, public authorities and the Employer and his representatives. The Contractor shall provide facilities and services for them related to the Work. The Employer may modify the Schedule of Other Contractors and shall notify the Contractor of any such modification.

9. Personnel

- 9.1 The Contractor shall employ the key personnel for the Works, named in the Details of Key Personnel as referred to in the Contract Data to carry out the functions of the positions stated in Annexures–1B of the Instructions to Bidders, Section 1 or other personnel approved by the Employer. The Employer will approve any proposed replacement of key personnel only if their qualifications, abilities, and experience are relevant to the nature of duties and better than the person replaced.
- 9.2 If the Employer requires the Contractor to remove a undesirable person who is a member of the Contractor's staff or his work force stating the reasons, the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the work in the Contract.

10. Employer's and Contractor's Risks

- 10.1 The Employer carries the risks which this Contract states are Employer's risks, and the Contractor carries the risks which this Contract states are Contractor's risks.

11. Employer's Risks

- 11.1 The Employer is responsible for the excepted risks which are in so far as they directly affect the execution of the Works in the Employer's country, the risks of war, hostilities, invasion, act of foreign enemies, rebellion, revolution, insurrection or military or usurped power, civil war, riot, commotion or disorder (unless restricted to the Contractor's employees), and contamination from any nuclear fuel or nuclear waste or radioactive toxic explosive.

12. Contractor's Risks

- 12.1 All risks of loss of or damage to physical property and of personal injury and death to contractor's and Project Manager's staff, Engineer's staff, equipment, material and executed work which arise during and in consequence of the performance of the Contract other than the excepted risks as at Sub Clause 11.1 are the responsibility of the Contractor.

13. Insurance

- 13.1 The Contractor shall provide before commencement of the work, in the joint names of the Employer and the Contractor, "Contractor's All Risk" insurance cover valued at 1.15

times the value of the work order, from any of the acceptable Insurance Companies in India, valid from the Start Date to Completion Date of the Works, including extended period, in the amounts and deductibles stated in the Contract Data.

- 13.2 Policies and certificates for insurance, from the acceptable Insurance Companies in India, shall be delivered by the Contractor to the Employer for the Employer's approval before the Start Date. All such insurance shall provide for compensation to be payable in Indian Rupees, along with the types and proportions required to compensate the loss or damage incurred.
- 13.3 If the Contractor does not provide any of the policies and certificates required, the Employer may affect the insurance which the Contractor should have provided and recover the premiums the Employer has paid, from payments otherwise due to the Contractor or, if no payment is due, the payment of the premiums shall be a debt due and if warranted, recovered by invoking Performance Security, or other payments due to the contractor.
- 13.4 Alterations to the terms of insurance shall not be made without the prior approval of the Employer, in writing.
- 13.5 The parties shall ensure that insurance is as per the applicable laws, and comply with all conditions of the insurance policies.
- 13.6 It shall be the responsibility of the Contractor to notify the insurance company of any change in the nature and extent of the Works and to ensure the adequacy of the insurance cover at all times during the period of validity of the Contract or the extended period, if any.

14. Contractor to Construct the Works and Works to be completed by Contract Completion Date

- 14.1 The Contractor shall undertake the Works in accordance with the Contract as per instructions of the Engineer.
- 14.2 The Contractor shall commence the Works on the Start Date and shall carry out the Works in accordance with the Program submitted by the Contractor, as updated with the consent of the Engineer, and complete them by the Contract Completion Date stated in the Contract Data.

15 Safety, Security and Protection of the Environment

- 15.1 The Contractor shall, throughout the execution and completion of the Works, the remedying of any defects therein and during Defect Liability period:
 - (a) have full regard for the safety of all persons entitled to be upon the Site, the road user traffic, and keep the Site so far as the same is under his control and the Works so far as the same are not completed or occupied by the Engineer in an orderly state appropriate to the avoidance of danger to such persons;
 - (b) provide and maintain at his own cost all lights, guards, fencing, warning signs and watching, when and where necessary or required by the Engineer for the protection of the public or others; and
 - (c) take all reasonable steps to protect the environment, on and off the Site, and to avoid damage or nuisance to persons, road user or to property of the public or

others resulting from pollution, noise or other causes arising as a consequence of his methods of operation.

The Contractor and his Subcontractors shall abide at all times by all existing enactments on environmental protection and rules made there under, regulations, notifications and bye-laws of the State or Central Government, or local authorities and any other law, bye-law, regulations that may be passed or notification that may be issued in this respect in future by the State or Central Government or the local Employer. Some of the major laws that are applicable are given below:

- The Water (Prevention and Control of Pollution) Act, 1974.
- The Air (Prevention and Control of Pollution) Act, 1981.
- The Environment (Protection) Act, 1986.
- The Public Liability Insurance Act, 1991.

16. Working Drawings

- 16.1 The Contractor shall submit Designs, Specifications and Drawings to the Engineer who will approve these, if they complied with the specifications & Drawings.

17. Approval by the Engineer

- 17.1 The Engineer shall approve the Designs, Specifications and Drawings submitted by the Contractor
- 17.2 The Contractor shall obtain approval of other relevant authorities/agencies (if any like Railways, RPCB etc.) for carrying out Works, where ever required. RIDCOR shall initiate applications to these authorities
- 17.3 The Engineer's approval shall not relieve the Contractor of his obligations.

18. Safety of Traffic

- 18.1 The Contractor shall be responsible for the safety of all traffic related activities on the Site (IRC-SP-55, 2014)

19. Discoveries

- 19.1 Anything of historical or other interest or of significant value unexpectedly discovered on the Site shall be property of the Employer. The Contractor shall notify the Employer/Engineer of such discoveries and carry out the Employer's instructions for dealing with them.

20. Possession of the Site

- 20.1 The Employer/Engineer shall give possession of the Site to the Contractor in accordance with the Contract Data. As the upgradation work is proposed to be carried out from 4 lane to 6 lane, the existing ROW is available to the contractor on the commencement date. However, marginal acquisition of land in built up area of Tapukara (0.626 Ha), mainly for drainage and utilities is required, which will be handed over to the Contractor at the end of 6 months from the commencement date. The details of available ROW and proposed land acquisition for the project work is given hereunder :

| S.No. | Chainage (in Km) | | Existing ROW | Proposed Land Acquisition (Ha) |
|-------|------------------|---------|--------------|--------------------------------|
| | From | To | | |
| 1 | 212+000 | 213+000 | 45.72 | - |
| 2 | 213+000 | 214+000 | 45.72 | - |
| 3 | 214+000 | 215+000 | 29.00 | - |
| 4 | 215+000 | 216+000 | 29.00 | - |
| 5 | 216+000 | 217+000 | 31.52 | - |
| 6 | 217+000 | 218+000 | 32.91 | - |
| 7 | 218+000 | 219+030 | 23.59 | 0.627 |
| 8 | 219+030 | 220+000 | 29.00 | - |
| 9 | 220+000 | 221+000 | 29.00 | - |

If any works cannot be undertaken where vacant access and Right of Way could not be handed over within 180 days of the start date, the Contractor will be required to execute such works on the approved rates in the corresponding extension of time subject to the condition that such stretches can be handed over to the Contractor before expiry of the original scheduled construction period. In such cases the Contractor shall not be entitled to raise any claim on account of prolongation costs in this behalf. In case, the vacant access and Right of Way is not available for works even upto the expiry of original scheduled construction period, the affected works shall be deemed to be withdrawn under the provisions of this clause.

21. Access to the Site

21.1 The Contractor shall allow the Employer/Engineer or its any authorized person or Independent Engineer to access to the Site, to any place where work in connection with the Contract is being carried out or is intended to be carried out and to any place where materials or plant are being manufactured / fabricated / assembled /stored for the Works.

21.2 Commencement of the Project

The Contractor shall commence the Works on Site within the period stated in the Contract Data after signing of the Agreement. Thereafter, the Contractor shall proceed with the Works with due diligence, expedition and without delay.

The requirement to commence the Works at Site shall be fulfilled if:

- A programme has been submitted in accordance with Clause 25 of Conditions of Contract;
- The Contractor's authorized representative, vide Clause 9, with full supporting staff are in position at the Site;
- Equipment, Plant, materials and labour mobilised for the work programmed for execution in the first two months have been mobilized at the Site;

- (d) Submission of insurance policies in accordance with Clause 13 & S. No. 9 of Contract Data; and
- (e) Submission of statutory clearances as per Clause 2 of SCC.

22. Instructions

- 22.1 The Contractor shall carry out all instructions of the Employer/Engineer pertaining to the Works, which comply with the applicable laws where the Site is located. He shall also comply to the legal and statutory requirements about the execution of works.

23. Disputes

- 23.1 If either party believes that a decision taken by the Employer/Engineer /Contractor was either outside the Contract or that the decision was wrongly taken, the objecting party may file notice of dispute to the other party stating that it is giving the notice pursuant to this Clause while stating clearly the basis for the dispute within 21 days of the notification of the decision.
- 23.2 The party receiving the dispute notice will consider it and reply in writing within 28 days of the receipt of the notice. If no reply is received or the reply is not acceptable to the other party, the affected party may refer the dispute for conciliation. Independent Engineer of RIDCOR will be the Dispute Review Expert (DRE) for conciliation. The decision for conciliation is to be given in 60 days by DRE. In case, conciliation is not successful then the dispute may be referred to Arbitration.

24. Procedure for Disputes – Arbitration

- 24.1 The arbitration shall be conducted at RIDCOR office at Jaipur in accordance with the arbitration procedure stated in Clause 5 of the Special Conditions of Contract.

B : TIME CONTROL

25. Program

- 25.1 Within 21 days of issuance of Letter of Acceptance, the Contractor shall submit to the Employer/Engineer for approval, an updated Program for the awarded Works including Quality Control, Traffic Management Plans showing the general methods, arrangements, order, and timing for all the activities in the Works along with monthly cash flow forecast (Annexure 3A).
- 25.2 An update of the Program shall be a program showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining work including any changes to the sequence of the activities.
- 25.3 If the Contractor does not submit an updated Program within this period as specified in the Contract Data, the Employer/Engineer may withhold the amount stated in the Contract Data from the next payment certificate and continue to withhold this amount until the next payment after the date on which the updated Program has been submitted. An updated Program is to show the effect of Variations and Compensation Events.
- 25.4 The Employer/Engineer's approval of the Program shall not relieve the Contractor of his obligations with respect to the contract.

26. Extension of the Works Completion Date

- 26.1 The Employer/Engineer shall extend the Works Completion Date as stated in the Contract Data, if a Compensation Event occurs or a Variation is issued which makes it impossible for completion to be achieved by the stipulated Completion Date, without the Contractor taking steps to accelerate the remaining work and which would cause the Contractor to incur additional cost.
- 26.2 The Engineer shall decide whether and by how much to extend the Works Completion Date, within 28 days of the Contractor asking the Engineer for a decision upon the effect of a Compensation Event or Variation and submitting full supporting information. If the Contractor has failed to give early warning of a delay or has failed to cooperate in dealing with a delay, the delay by this failure shall not be considered in assessing the new Works Completion Date.
- 26.3 Employer/Engineer is fully empowered to grant extension to the Works Completion Date for reasons not attributable to the contractor.

27. Delays Ordered by the Employer/Engineer

- 27.1 The Employer/Engineer may instruct the Contractor to delay the start or progress of any activity within the Works.

28 Management Meetings

- 28.1 Either the Employer/Engineer or the Contractor may require the other to attend a management meeting/site visit. The business of a management meeting shall be to review the progress of work plans for remaining work and to deal with matters raised in

accordance with the early warning procedure and hindrances caused or likely to be caused to the completion of the work.

- 28.2 The Employer/Engineer shall record the business of management meetings and shall provide copies of his record to those attending the meeting. The responsibility of the parties for actions to be taken is to be decided by the Employer/Engineer either at the management meeting or after the management meeting and stated in writing to all those who attended the meeting. Failure to attend the management meetings/site visits shall attract penalties at the rate indicated in the Contract Data and in case of non-attendance of more than three such meetings/visits by the Contractor, then the same shall be construed as fundamental breach of the Contract in terms of Clause 50.
- 28.3 Monthly progress reports shall be prepared by the Contractor and submitted to the Engineer/ Project Manager in the format prescribed by RIDCOR. (Sample Format attached as per Annexure 3B)

29. Early Warning

- 29.1 The Contractor is to warn the Engineer at the earliest opportunity of specific likely future events or circumstances that may adversely affect the quality of the Work, increase the Contract Price or delay the execution of the Works. The Engineer may require the Contractor to provide an estimate of the expected effect of the future event or circumstance on the Contract Price and Contract Completion Date. The estimate is to be provided by the Contractor as soon as reasonably possible.
- 29.2 The Contractor shall cooperate with the Employer/Engineer in making and considering proposals as to how the effect of such an event or circumstance can be avoided or reduced by anyone involved in the work and in carrying out any resulting instruction of the Employer/Engineer.

C : QUALITY CONTROL

30. Identifying Defects

- 30.1 The Employer shall check the Contractor's work through the Engineer, Independent Engineer and notify the Contractor of any Defects that are found. The Engineer may instruct the Contractor to search for a Defect and to uncover and test any work that the Engineer considers may have a Defect. Such checking/instructions shall not absolve the Contractor of his responsibilities.
- 30.2 The Contractor shall permit the Site visits of the Employer's Technical Auditor/ Engineer/Independent Engineer /Lenders' Engineer to check the Contractor's work and notify the Employer and the Contractor of any Defects that are found. Such a check shall not absolve the Contractor's or the Employer's responsibility as defined in the Contract.

31. Tests

- 31.1 The Contractor shall be responsible for carrying out the tests prescribed for the Works.
- 31.2 The Contractor shall, at his cost, establish fully equipped testing facility with adequate and suitable equipment and survey equipment in the vicinity of the work Site premises, as prescribed in the Specifications, to the satisfaction of the Engineer.
- 31.3 If the Engineer instructs the Contractor to carry out a test not specified in the Specification to check whether any work has a defect and the test shows that it does, the Contractor shall pay for the test and sample. If it shows that the work is not defective, then the Employer shall pay for the test and samples.
- 31.4 The Contractor shall furnish all test results as per the approved Quality Control Plan to the Engineer, in a monthly progress report as per Sub Clause 28.3 or at a frequency directed by the Engineer. The Engineer may withhold payment for those works where test results have not been submitted or the work requires to be redone.

32. Correction of Defects

- 32.1 The Contractor shall undertake measures to rectify the defects in the Work identified by the Engineer/ Independent Engineer or any of the Employer's authorized representative at the earliest, but not later than the time period specified by the Engineer.
- 32.2 The Defect Liability Period shall be as given in the Contract Data. The Employer/Engineer shall give notice to the Contractor of any defects before the end of the Defect Liability Period. The Defect Liability Period shall be extended for as long as defects remain to be corrected.

33. Uncorrected Defects

- 33.1 If the Contractor has not corrected a defect to the satisfaction of the Employer/Engineer/Project Manager/ Independent Engineer, within the time specified in the Employer/Engineer's notice, the Employer/Engineer will assess the cost of having the defect corrected, and the Contractor will pay this amount. In case of failure to pay, the same shall be deducted from any payment due to the Contractor/recovered from his Bank Guarantees/Security Deposit under intimation to the Contractor.

D : COST CONTROL

34. Bill of Quantities

- 34.1 The Bill of Quantities shall contain items for the Works for construction, installation, testing and commissioning works to be executed by the Contractor.
- 34.2 The Bill of Quantities shall be the basis to calculate the payment for the Works. The Contractor is paid for the quantity of the work done as per specifications at the rate in the Bill of Quantities for each item and quoted percentage above/below the total amount.

35. Changes in the Quantities

- 35.1 The change in quantities/amounts due to increase/decrease in the scope of work, that is, Variation in Bill, shall be considered for additional payment as per rates defined in Bill of Quantities and the percentage rate quoted.
- 35.2 If requested by the Engineer, the Contractor shall provide the Engineer with a detailed cost breakdown of rate of any item in the Bill of Quantities.
- 35.3 Director/Manager, RIDCOR is fully empowered to approve the variation and rates for extra / excess items in accordance to the prevailing SoP of RIDCOR.

36. Variations

- 36.1 Item rates approved for each BOQ item shall remain fixed irrespective of any Quantity Variation.
- 36.2 All Variations during implementation of the Works, shall be included in updated Programs produced by the Contractor.

37. Payments for Variations

- 37.1 In the event of variation, the payment for the works done, shall be made as per the provisions stated in Sub Clause 35.1.
- 37.2 If the event of variation is in terms of additional/extra item(s) or substitution of any item(s) in the BOQ with new item(s), then the rates for the items shall be derived as follows:
 - (a) The Contractor shall submit a quotation along with detailed rate analysis for deriving the unit rate for the item(s) with all supporting documents as follows:
 - (i) Such analysis shall be prepared based on the Standard MORT&H Data Book adopting the current PWD schedule of rates applicable to the relevant District of Rajasthan;
 - (ii) In case the data for the item is not available in the Standard MORT&H Data Book, Standard PWD Data Book with current PWD schedule of rates applicable to the relevant District of Rajasthan shall be adopted;

- (iii) In case the data for the item is not available in the Standard MORT&H Data Book as well as in the PWD Data Book, observed data with current PWD schedule of rates applicable to the relevant District of Rajasthan shall be adopted;
 - (iv) In case rate for any item is not available in the current schedule of rates, current local market rate for the same shall be adopted for which required supporting documents shall be produced;
 - (v) On the new rates, derived through observed data, only 10% would be allowed towards Contractor's administrative and other overheads and profits, taken together.
- (b) If the Contractor's quotation is unreasonable or if the Contractor fails to provide the Engineer with a quotation within a reasonable time specified by the Engineer in accordance with (a), the Engineer may order the Variation and make a change to the Contract Price which shall be based on Engineer's own forecast of the effects of the Variation on the Contractor's costs.
- 37.3 If the Engineer decides that the variation work is urgent, then in order to avoid delay in execution of the variation work due to non-availability of quotation, the Engineer shall instruct the Contractor in writing, to commence the additional works before the approval of the rate.
- 37.4 The Contractor shall not be entitled to additional payment for costs that could have been avoided by giving early warning.
- 37.5 **The %age of bitumen in any of the courses shall be as per the approved Job Mix formula and no variation shall be paid against the same.**

38. Cash Flow Forecasts

- 38.1 When the Program is updated, the Contractor shall provide the Engineer with an updated cash flow forecast.

39. Payment Certificates

39.1 Highway Upgradation Works

- (a) The Contractor is required to measure the work executed as per specifications under the observation and control of the Engineer. The Contractor shall submit to the Engineer monthly statements of the estimated value of the work executed, less the cumulative amount certified previously and, applicable statutory deductions, outstanding advances supported with detailed measurements of the items of work executed, approved request for inspections (RFI) for the work done during the month, applicable rates and other relevant details, both in hard and soft form along with an abstract statement, in accordance with the provisions of this Contract.
- (b) The Engineer shall ascertain and determine by measurement the value of the work done in accordance with the Contract. The Engineer shall exclude any item in a previous certificate or reduce the proportion of any item previously certified in the light of later information.

- (c) The value of work executed shall comprise the value of quantities of the items at rates in the Bill of Quantities.
- (d) The value of work executed shall include the valuation of Variations.
- (e) Items of the Works for which no rate or price has been provided in the priced BOQ will not be paid for by the Engineer and shall be deemed to be covered by other rates and prices in the Contract.
- (f) The certification and payment methodology for the Works shall be as given below:
 - (i) Contractor to submit a payment request with details of Works completed or partly completed during the calendar month to the Engineer, within seven days from the last date of the particular month;
 - (ii) Within Seven days of receipt of Contractor's RA Bill, Engineer is required to evaluate the payment request in terms of the work executed, and if the Engineer finds the payment request in order, he certifies to pay 70% of eligible payment against the RA Bill, subject to availability of funds. This payment shall be net of recovery of mobilization and other advances, recovery in terms of Contract and Taxes to be deducted at source as applicable under the Law.
 - (iii) Subsequent to submission of monthly payment request, Engineer shall check the Contractor's monthly statement within 10 days and certify the amount to be paid to the Contractor after taking into account the recovery of advance payments, as per para (ii). Engineer shall also account for Liquidated Damages and other deductions, Variation in price of bitumen, while arriving at the amount payable to the Contractor.
 - (iv) Employer shall make payments within 30 days for final certified bills to the contractor.
- (g) The Employer shall pay the final bill amount as certified by the Engineer within 90 days from its submission.
- (h) In case of delay in payment, the Contractor shall be paid interest on the late payment. Interest shall be calculated at the rate of 8% p.a. from the date by which the payment should have been made up to the date when the payment is made.

40. Tax

- 40.1 The rates quoted by the Contractor shall be deemed to be inclusive of GST and all other applicable taxes including duties/royalties/levies as may be levied by Central/State Governments and local bodies that the Contractor will have to pay for the performance of this Contract. The Employer/Engineer will perform such duties in regard to the deduction of such taxes at source as per applicable law on the date of payment of the Contractor's bill.

41. Currencies

- 41.1 All payments shall be made in Indian Rupees only.

42. Changes in Cost and Legislation

42.1 Price Adjustment

42.1.1 Contract Price shall be adjusted for increase/decrease in price of bitumen only.

42.1.2 Compensation to the Contractor for any rise or fall in the Contract Price is not covered by the provisions of this or other clauses in the Contract except for the bitumen consumed in the Improvement Works. The unit rates and prices included in the Contract shall be deemed to cover the contingency of such rise or fall in costs.

42.1.3 It is reiterated that the price adjustment for bitumen shall not be applicable on the bitumen consumed during maintenance work/defect liability period.

42.1.4 The price adjustment for bitumen shall apply for the work done from the start date given in the contract data upto end of the initial intended completion date or extensions granted by the Employer/Engineer in the following manner:

a) In case the extension is granted for the reasons not attributable to the Contractor, there will be no change in the applicability of Price Adjustment for Bitumen for the extended period.

b) In case the extension is granted for the reasons attributable to the Contractor, No positive variation towards Price Adjustment for Bitumen shall be applicable beyond the stipulated completion date i.e. it will be limited to the Bitumen Price prevailing in the Month corresponding to Stipulated Completion Date. Moreover, applicability of price Adjustment for Bitumen in such situation will be applied in such a manner that financial interests of RIDCOR are protected in such extended period. It is further clarified that in case the bitumen rates further decrease during the extended period attributable to the contractor, then actual reduced rates of bitumen will be applicable in price adjustment for bitumen.

42.1.5 Price adjustment is applicable only in case Bitumen price increase or decrease beyond 5% of Base Rate of Bitumen specified in the Contract. Basic price of bitumen per tonne prevailing on the date of receipt of bid, which shall be the ex-factory price of the nearest IOCL refinery of bitumen, i.e. Mathura

The price adjustment shall be determined during each month in accordance to the formula given in Clause 42.1.6.

42.1.6 Price Adjustment for Bitumen

The price adjustment for increase or decrease in the cost of bitumen consumed in the Improvement Works shall be paid in accordance with the following formula:

$$\text{Positive Variation } V_b = Q_c \times (P_p - P_b \times 1.05)$$

$$\text{Negative variation } V_b = Q_c \times (P_p - P_b \times 0.95)$$

Where

V_b = **increase or decrease** in the cost of bitumen consumed in the Works due to change in the rate of the bitumen;

Q_c = **quantity of bitumen** in tonnes consumed in the Works during the period under consideration;

Pp = current price of bitumen per tonne prevailing on 16th day of every month, which shall be the ex-factory price of the nearest refinery of bitumen plus GST i.e Mathura, as applicable;

Pb = basic price of bitumen Rs. 52,465/- per tonne for VG-30 inclusive of GST and Rs. 49,751/- per tonne for VG-10 inclusive of GST.

Note: For emulsion, basic rates of VG-10 grade bitumen of nearest IOCL/HPCL/BPCL refinery will be considered. To avoid any doubt, the % of Bitumen content in case of emulsion @ 60% will be considered for calculation of price adjustment and for use of PMB-76-10E in bituminous works basic rates of VG-30 grade will be considered for calculation of price adjustment. To avoid any doubt total quantity of PMB-76-10E used in the work will be considered in price adjustment formula of bitumen.

42.2 Changes in Legislation

If, after the last date for submission of tenders for the Contract, there occur changes to any National or State Statute, Ordinance, Decree or other Law or any regulation or bye-law of any local or other duly constituted Employer, or the introduction of any such State Statute, Ordinance, Decree, Law, regulation or bye-law which causes additional or reduced cost to the Contractor, other than under the preceding Sub-Clauses of this Clause, in the execution of the Contract, such additional or reduced cost shall, after due consultation with the Employer shall be added to or deducted from the Contract Price and the Employer shall notify the Contractor accordingly.

43. Liquidated Damages and Penalty

43.1 For the Works

Compensation for delays attributable to the contractor shall be applicable @ 0.03% of Contract Value per day for delay due to non-completion of the work within stipulated completion time. Maximum cumulative (total) penalty applicable shall be @5% of the Contract Price.

44. Advance Payment

44.1 The Employer shall, make interest free advance payment to the Contractor, on his request, of the amounts and by the date stated in the Contract Data, against provision by the Contractor of an unconditional Bank Guarantee for an amount equal to the advance payment. The Bank Guarantee, in the prescribed format is acceptable from the following institutions located in India:

- (a) State Bank of India or its subsidiaries;
- (b) Any Indian Nationalized /Scheduled Bank;
- (c) IDBI Bank or Axis Bank or ICICI Bank or HDFC Bank or Yes Bank or AU Small Finance Bank or IDFC First Bank; or
- (d) Foreign Bank with operations in India provided the net worth in respect of the Indian operations shall not be less than Rs 500 crores as per the latest Annual Report of the Bank and that Bank Guarantee is issued by a branch in India.

The guarantee shall remain effective until the advance payment has been fully recovered, but the amount of the guarantee can be progressively reduced by the amounts repaid by the Contractor.

- 44.2 The Contractor is to use the advance payment only to pay for Equipment, Plant and Mobilization expenses required specifically for execution of the Works. The Contractor shall demonstrate that advance payment has been used in this way by supplying copies of invoices or other documents to the Employer.
- 44.3 The advance payment shall be recovered by deducting proportionate amounts as indicated in the Contract Data, from payments otherwise due to the Contractor, following the schedule of completed percentages of the Works on a payment basis. No account shall be taken of the Mobilization & Equipment/Plant advance payment or its repayment in assessing valuations of work done, Variations, price adjustments, Compensation Events, or liquidated damages.

45. Securities

The Performance Security (including additional security for unbalanced bids) shall be provided to the Employer no later than the date specified in the Letter of Acceptance and shall be issued in an amount and form indicated in Contract Data as acceptable to the Employer, and denominated in Indian Rupees, from:

- (a) State Bank of India or its subsidiaries;
- (b) Any Indian Nationalized Bank;
- (c) IDBI Bank or Axis Bank or ICICI Bank or HDFC Bank or Yes Bank or AU Small Finance Bank or IDFC First Bank; or
- (d) Foreign Bank with operations in India provided the net worth in respect of the Indian operations shall not be less than Rs 500 crores as per the latest Annual Report of the Bank and that Bank Guarantee is issued by a branch in India.

The performance security shall be valid for a period of 45 days beyond 1 year after the works completion date. This may be noted that additional performance security, in case of unbalanced bids, will have validity upto end of DLP period of 5 years and will be released after successful completion of DLP period.

In case, the Works Completion Date is extended, then the Contractor shall substitute fresh Performance Security for the same value valid until a date 1 year beyond the extended Works Completion Date. Similarly, validity for the additional security (as the case may be) shall also be extended till end of DLP period of 5 years. The performance security will be released upon completion of 1 year after satisfactory completion of works whereas the additional performance security (for unbalanced bids) will be released upon successful completion of DLP period of 5 years.

46. Cost of Maintenance

- 46.1 Loss or damage to or defective works or materials during the execution of Works shall be remedied by the Contractor at the Contractor's cost to the satisfaction of the Employer/Engineer. No maintenance fee is payable to the contractor.

47. Security Deposit

- 47.1 The security deposit @5% of the amount in cash shall be deducted from each running bill. This will be released after successful completion of defect liability period.

E : FINISHING THE CONTRACT

48. Completion

- 48.1 The Contractor shall request the Engineer to issue a certificate of completion of the Works and the Engineer shall do so upon deciding that the assigned Work is completed.
- 48.2 No later than 30 days prior to the Contract Completion Date, the Contractor and the Engineer shall conduct a condition survey of all the items mentioned in the Enclosure-1 of the Section-3 and the items not confirming to the specified Intervention Standard shall be recorded.

Where items not meeting the specified Interventions Standard are identified, the Engineer shall:

- (a) provide a written record of the condition survey to the Contractor within 14 days of the completion of the survey. The Engineer's decision on the condition of any item of Enclosure-1 of the Section-3 shall be final.
 - (b) direct the Contractor to rectify the deficiencies within the specified Rectification Standard / Period.
- 48.3 On satisfactory completion of Defect Liability Period, the Contractor shall request the Engineer to issue a Certificate of Completion of the Contract. The Engineer shall, issue such certificate subject to the Contractor satisfying all provisions under the Contract.

49. Final Account

- 49.1 The Contractor shall supply to the Engineer a detailed account of the total amount that the Contractor considers payable under the Contract within 60 days after the issue of certificate of completion of the Works by the Engineer. The Engineer shall certify any final payment that is due to the Contractor within 60 days of receiving the Contractor's account. If the Engineer is not satisfied with the detailed account, then the Engineer shall issue within 30 days thereto a schedule that states the scope of the corrections or additions that are necessary. If the Contractor fails to comply with the Engineer's instructions within 15 days, Engineer will certify as per the schedule of Corrections or addition sent to contractor and recommend payment to the Contractor within 45 days.

50. Termination

- 50.1 The Employer or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract.
- 50.2 Fundamental breach of the Contract includes, but shall not be limited to the following:
- (a) the Contractor stops work for 28 days when no stoppage of work is shown on the current program and the stoppage has not been authorized by the Employer/Engineer;
 - (b) the Employer or the Contractor is made bankrupt or goes into liquidation, other than for purposes of reconstruction or amalgamation;
 - (c) a payment for certified bills is not paid by the Employer to the Contractor within 90 days of the date of the Engineer's certificate;

- (d) the Employer/Engineer gives notice that failure to correct a particular Defect is a fundamental breach of the Contract and the Contractor fails to correct it within a reasonable period of time determined by the Engineer;
- (e) the Contractor does not maintain Performance Security which is required;
- (f) the Contractor has defaulted in fulfilling his obligations under this Contract;
- (g) the Contractor has contravened Sub-Clause 9.2;
- (h) the Contractor does not adhere to the agreed construction program as per Clause 25 and also fails to attend the management meetings (Clause 28);
- (i) the Contractor fails to carry out instructions of the Employer/Engineer within a reasonable time determined by the Engineer in accordance with the Sub Clauses 15.1, and 22.1;
- (j) the Contractor has delayed the completion of the Works beyond the period for which the maximum amount of liquidated damages has become payable as defined in the Contract Data;
- (k) if the Contractor, in the judgment of the Employer has engaged in corrupt, fraudulent or coercive practices as defined in Sub Clause 28.1 (a) of ITB in competing for or in executing the Contract;

50.3 When either party to the Contract gives notice of a breach of contract to the Employer for a cause other than those listed under Sub Clause 50.2, the Employer shall decide whether the breach is fundamental or not.

50.4 Notwithstanding the above, the Employer may terminate the Contract for his official convenience by giving 30 days prior notice due to any reason.

50.5 If the Contract is terminated, the Contractor shall stop work immediately, make the Site safe and secure and leave the Site as soon as reasonably possible.

51. Payment upon Termination

51.1 If the Contract is terminated because of a fundamental breach of the Contract by the Contractor, the Employer/Engineer shall issue a certificate for the value of the work done less advance payments made up to the date of the issue of the certificate, less other recoveries due in terms of the Contract, less taxes due to be deducted at source as per applicable law and less the percentage to apply to the work not completed as indicated in the Contract Data. If the total amount due to the Employer exceeds any payment due to the Contractor, the difference shall be a debt payable to the Employer. For this purpose, the performance security furnished by the Contractor shall not be taken into account. The Performance Security furnished by the Contractor shall stand forfeited in favor of the Employer without any restrictions or preconditions.

51.2 If the Contract is terminated at the Employer's convenience or because of a fundamental breach of the Contract by the Employer, the Employer/Engineer shall issue a certificate for the value of the work done, and less advance payments received up to the date of the certificate, less other recoveries due in terms of the Contract and less taxes due to be deducted at source as per applicable law and the Employer/Engineer shall pay this amount. This includes all type of compensations and no other claim will be payable.

52. Property

- 52.1 If the Contract is terminated because of Contractor's default, all materials on the Site, Plant, Equipment, Temporary works and the Works are deemed to be the property of the Employer, till completion of the work. The Employer shall make use of the available materials and equipment for completion of the Work and pay for these at agreed rates.

53. Release from Performance

- 53.1 If the Contract is frustrated by the outbreak of war, pandemic or by any other event entirely outside the control of either the Employer or the Contractor, the Employer shall certify that the Contract has been frustrated. The Contractor shall make the Site safe and stop work as quickly as possible after receiving this certificate and shall be paid for all Works carried out before receiving the certificate and for any work carried out afterwards to which commitment was made.

54. Details to be Confidential

- 54.1 The Contractor shall treat the details of the Contract as private and confidential and shall not publish or disclose the same or any particulars thereof in any trade or technical paper or elsewhere without the previous consent in writing of the Employer. If any dispute arises causing the necessity of any publication or disclosure for the purpose of the Contract, the same shall be referred to the Employer whose determination shall be final.

55. Life-saving Appliances and First-aid Equipment

- 55.1 The Contractor shall provide and maintain upon the Works and the Site, sufficient, proper and efficient life-saving appliances and first-aid equipment, to the satisfaction of the Engineer. A local doctor shall be on call. The appliances and equipment shall be available for use at all times during the pendency of the Contract.

PART – II : SPECIAL CONDITIONS OF CONTRACT

Table of Contents

| | Page No |
|------------------------------------------------------------------------|--------------------|
| A General Clauses | |
| 1 Labour | 66 |
| 2 Statutory Clearances | 66 |
| 3 Revision of Quality Control Plan | 67 |
| 4 Measuring/Monitoring Equipment | 67 |
| 5 Arbitration | 67 |
| B Monitoring of Works | |
| 6 Monitoring of Maintenance Works | 69 |
| 7 Site Visits, recording, rectification measures for Maintenance Works | 69 |
| Enclosure-1 : Road Defect Rectification Standards | 70 |
| Annexure – 3A | 72 |
| Monthly Cash Flow Forecast | |
| Annexure – 3B | 73 |
| Format for MPR on behalf of executing agency | |

PART – II SPECIAL CONDITIONS OF THE CONTRACT (SCC)

A : GENERAL

1 Labour

- 1.1 The Contractor shall, unless otherwise provided in the Contract, make his own arrangements for the engagement of all staff and labour, local or otherwise, and for their payment, housing, feeding and transport and medical assistance.
- 1.2 The Contractor shall, if required by the Employer, deliver to the Employer a return in detail, in such form and at such intervals as the Employer may prescribe, showing the staff and the numbers of the different classes of labour from time to time employed by the Contractor on the Site and such other information as the Employer may require.
- 1.3 During continuance of the Contract, the Contractor and his Sub-Contractors shall abide at all times by all existing labour enactments and rules made thereunder, regulations, notifications and bye laws of the State or Central Government or local Employer and any other labour law (including rules) that may be passed or notification that may be issued under any labour law in future either by the State or the Central Government or any competent Employer.
- 1.4 The Contractor shall keep the Employer indemnified in case any action is taken against the Employer by the competent Authority on account of contravention of any of the provisions of any Act or rules made thereunder, regulations or notifications including amendments to labour laws, ESI, PF etc.. If the Employer is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications/bye laws/Acts/ Rules/regulations including amendments, if any, on the part of the Contractor, the Employer shall have the right to deduct any money due to the Contractor including his amount of performance security. The Employer shall also have the right to recover from the Contractor any sum required or estimated to be required for making good the loss or damage suffered by the Employer.
- 1.5 The employees of the Contractor and the Sub-Contractor in no case shall be treated as the employees of the Employer at any point of time.

2 Statutory Clearances

- 2.1 List of clearances to be obtained by the Employer and the Contractor are given below prior to the start after work. It may be noted that the list below may not be exhaustive and in case any additional clearances are required, the same shall be procured by the Contractor, unless otherwise specified in the Law / guidelines of statutory agencies.

(a) Employer's Responsibility:

NIL

(b) Contractor's Responsibility:

- (i) Pollution Control Board and other Statutory Clearances for hot mix plant, stone crushers and any other purpose / activity as may be required;

- (ii) Excavation, cutting, transporting and dumping of earth and other construction materials including that for quarry;
- (iii) All police and traffic management related clearances at the work sites;
- (iv) Employing labour and other labour related clearances (ESI / Contract Labour / Health / PF etc.);
- (v) Electrical connections and Water Supply;
- (vi) Employment of migrant labour;
- (vii) Establishing and operating labour camps;
- (viii) Location of fuel storage tanks / containers etc.;
- (ix) Clearances for using / storing explosives;
- (x) All clearances required from the Fire Department; and
- (xi) Any other clearances that are not specifically included in Employer's list and may be required according to prudent utility practices or instructed by Employer.

3 Revision of Quality Control Plan

- 3.1 The Engineer shall instruct the Contractor to revise and/or resubmit his Quality Control Plan, if required before giving approval. The Contractor shall implement any required changes to improve the Quality Control Plan. The approval by the Engineer shall not absolve the Contractor of his responsibilities and obligations under the Contract.

4 Measuring / Monitoring Equipment

- 4.1 The Contractor shall ensure properly calibrated and functional measuring/ monitoring equipment, to the satisfaction of the Engineer, at all times during the Contract.

5 Arbitration (Refer GCC Sub Clause 24.1)

- 5.1 The procedure for arbitration shall be as follows:
 - (a) In case of Dispute or difference arising between the Employer and the Contractor relating to any matter arising out of or connected with this agreement referred for arbitration, shall first be settled mutually, otherwise in accordance with the Arbitration and Conciliation Act, 1996 and amendment thereof.
 - (b) The Arbitral Tribunal shall consist of three Arbitrators, one each to be appointed by the Employer and the Contractor. The third Arbitrator shall be chosen by consensus by the two Arbitrators so appointed by the Parties and shall act as the Presiding Arbitrator. In case of failure of the two Arbitrators appointed by the parties to reach upon a consensus within a period of 30 days from the appointment of the Arbitrators, then the Presiding Arbitrator shall be appointed by the Indian Roads Congress on the request of the Employer.

- (c) If one of the parties fails to appoint its Arbitrator in pursuance of Sub Clauses (a) and (b) within 30 days after receipt of the notice of the appointment of its Arbitrator by the other party, then the Indian Roads Congress shall appoint the Arbitrator on the request of the Employer. In case the Employer fails to do so within 30 days, the Contractor will approach the Indian Roads Congress for appointment of Arbitrator. A certified copy of the order of the Indian Roads Congress, making such an appointment shall be furnished to each of the parties.
- (d) Arbitration proceedings shall be held at Jaipur at RIDCOR office and the language of the arbitration proceedings and that of all documents and communications between the parties shall be English.
- (e) The decision of the majority of Arbitrators shall be final and binding upon both parties. The cost and expenses of Arbitration proceedings will be paid as determined by the Arbitral Tribunal and shared equally by both the parties.
- (f) Performance under the Contract shall continue during the arbitration proceedings and payments due to the Contractor by the Employer shall not be withheld, unless they are the subject matter of the arbitration proceedings.

B : MONITORING OF WORK

1 Monitoring of Works

The road which has been completed under the Highway Upgradation/Construction Work has to be kept defect free and monitored by the Contractor, at all times till the end of defect liability period. The road shall be maintained above the Service Quality level indicated in Enclosure–1 of the Section-3. In case of any deficiency being found, the Contractor shall rectify the same within the Rectification Standards and Periods, indicated therein.

2 Site Visits, recording, rectification measures for Works

- (i) The Project Manager, RIDCOR or its authorized representative shall make a detailed joint inspection at regular interval with prior intimation to the Contractor. The Contractor shall accompany the Project Manager during the inspection. The Project Manager shall proceed ahead with such pre notified inspection, if the Contractor fails to attend the inspection at the appointed time. However, the Contractor shall be bound by the assessment of the Project Manager.
- (ii) The Project Manager and the Contractor shall drive on the road and both shall record various items under each of the item as per Enclosure–1 of the Section-3 needing rectification. The Contractor shall make all necessary arrangements for it.
- (iii) After completing the joint inspection, the Project Manager shall notify the Contractor, the details of the deficiencies/ defects/ damages etc. noticed on the road and assets. The Contractor shall rectify/repair/reinstate the deficiencies/ defects/ damages within the Rectification Standards indicated in Enclosure–1.
- (iv) The Project Manager and Contractor shall undertake a joint inspection on the date as mutually agreed to assess the status of remedial work on items identified in the earlier visit. The Project Manager shall proceed with the inspection, if the Contractor fails to attend the inspection at the appointed time. The assessment of the Project Manager shall be binding on the Contractor.
- (v) In the case contractor does not rectify the defect within the specified time lines, then it will be rectified at his risk and cost by any other agency and the expenses so incurred will be recovered from any dues/ Security Deposits/ Performance Security available with RIDCOR/RIPL.

Enclosure-1

ROAD DEFECT RECTIFICATION STANDARDS

| S. No. | Item | Service Quality | Measurement/ Detection | Intervention Standard | Rectification Standard / Period |
|--------|-----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Pavement Edge | No broken or uneven edges allowed | Visual inspection | Upon noticing | Repairs must be completed within seven (7) days |
| 2 | Potholes/ Patches | No potholes and patches allowed | Visual inspection | Upon noticing | Potholes must be repaired within two (2) days. Patches (i) shall be square or rectangular, (ii) shall be level with surrounding pavement, (iii) shall be made using materials similar to those used for the surrounding pavement |
| 3 | Cracking in pavement | There shall not be cracks/fissures more than 3 mm wide | Crack widths measured with small transparent ruler | Cracks more than 3 mm to be rectified | Cracks more than 3 mm wide must be sealed within fifteen (15) days after their detection. If deterioration continue even after sealing, then pavement surface in vicinity to be scoured and re-laid |
| 4 | Rutting | There shall not be ruts deeper than 15 mm on a 2m straight edge | Measured with rulers | Rutting above threshold value to be rectified | Rutting above threshold value must be rectified within fifteen (15) days |
| 5 | Minor Surface Repair | No bleeding, skidding, stripping, elimination and raveling allowed | Area to be measured enclosing the affected area plus 0.25 m away from the end of bleeding | Affected area more than 0.25 Sq.m | Rectify within seven (7) days |
| 6 | Centre-line, edge-line, markings and other markings/paintings including those on median | To be present and firmly adhere to pavement. Micro spheres must be firm and visible. Reflection index to be within the limits according to the Specification for the works | Visual inspection (for measuring reflection inspection to be done in night) Reflective index measured with Reflectometre | Upon noticing | Absent or defective stretches to be rectified within fifteen (15) days |
| 7 | Height of shoulders vs. height of pavement | Difference in height at edge of pavement shall not be more than 30 mm | Measured with ruler, with scale in mm. | Upon noticing | Repairs must be completed within seven (7) days |

| | | | | | |
|----|-----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8 | Unsealed shoulders-roughness, scouring or potholes (holding of water), cross slopes | No potholes, rough surfaces or water stagnation | Visual and with ruler | When pothole/depression scouring or roughness > 20 mm | Rectify within seven (7) days |
| 9 | Any item that may be damaged/removed for whatever reason including but not limited to vandalism, accidents/ floods or any incident etc. | Immediate repair and rectification. Restoration and replacement as per original specification | Visual inspection | Upon noticing | Rectify within fifteen (15) days |
| 10 | Average pavement roughness for carriage way of entire Project Road under this contract | <p>Average value of Surface Roughness for 1 Km shall be less than the value given below</p> <p>(a) Flexible Pavement: Immediately after completion of the Works- 1800 mm/ Km</p> <p>(b) Rigid Pavement: Immediately after completion of the Works- 2000 mm/ Km</p> <p>(c) For subsequent years, as prescribed by MoRTH publication "Guidelines for Maintenance Management of Primary, Secondary and Urban Roads", Para 3.2: Serviceability Indicator Level 2</p> | Measured with calibrated 5th wheel bump-integrator | To be measured after completion of the Works and thereafter every year till end of DLP | Upon detection of the roughness value more than prescribed herein under Service Quality, the Contractor shall undertake suitable rectification measures with bituminous material to restore the surface quality within the specified values, or as may be directed by Project Manager/Employer |

Annexure – 3A

(Sub Clause 3.2 (j) of Section 1 and 25.1 of Section 3, GCC)

MONTHLY CASH FLOW FORECAST

| Period from Commencement of Works (Months) | Contractor's Estimate | | | |
|--------------------------------------------------|-----------------------|--------|------------|---------------------|
| | % of Work | Amount | Cumulative | Aggregate Amount |
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Annexure – 3B
(Sub Clause 28.3 of Section 3, GCC)

FORMAT FOR MPR ON BEHALF OF EXECUTING AGENCY

| | | | | | | | |
|--------------------------------------|-------------|-----------------|-----------|----------|----------------------------|---------------|----------|
| Stretch Name : | | | | | | | |
| Contractor Name : | | | | | | | |
| Month : | | | | | | | |
| Financial Monthly | Qty | Amount | | % | | Amount | % |
| Total Target Amount upto Month (DBM) | | | Cr | | Work Order Value | | |
| Total Achieved Amount upto Month | | | Cr | | Work done DBM | | |
| Balance to achieve upto Month | | | Cr | | Work done | | |
| Total Target Amount upto Month (BC) | | | Cr | | Work done till date DBM/BC | | |
| Total Achieved Amount upto Month | | | Cr | | Balance work done DBM/BC | | |
| Balance to achieve upto Month | | | Cr | | | | |
| Total Target Amount upto Month (PQC) | | | Cr | | | | |
| Total Achieved Amount upto Month | | | Cr | | | | |
| Balance to achieve upto Month | | | Cr | | | | |
| Major Material Stock | | | | | | | |
| Material | Unit | Quantity | | | | | |
| Bitumen - VG-30 | MT | | | | | | |
| Bitumen - PMB 76-10E | MT | | | | | | |
| Emulsion | MT | | | | | | |
| Cement | MT | | | | | | |

| Qty in Cum | DBM | BC | DLC | PQC | RCC Drain |
|---------------------|-----|----|-----|-----|-----------|
| Total in Contract | | | | | |
| Work done till date | | | | | |
| Balance | | | | | |

| Qty in Cum | DBM | BC | DLC | PQC | RCC Drain |
|------------------------------|-----|----|-----|-----|-----------|
| Target for Month | | | | | |
| Achieved as on date | | | | | |
| Balance for the Month | | | | | |

PHYSICAL PROGRESS-MONTHLY

| SN | Description | Total Lane Kms. in Scope | Total Plan till previous month | Total Achieved till previous month | Monthly Plan | Achieved in Month | Cum. Achieved till date | Balance | % Balance |
|----|-------------|-----------------------------|-----------------------------------|---------------------------------------|--------------|-------------------|-------------------------|----------|-----------|
| | | Lane Kms | Lane Kms | Lane Kms | Lane Kms | Lane Kms | Lane Kms | Lane Kms | % |
| 1 | BC | | | | | | | | |
| 2 | DBM | | | | | | | | |
| 3 | DLC | | | | | | | | |
| 4 | PQC | | | | | | | | |
| 5 | RCC Drain | | | | | | | | |

Main area of concern /Bottleneck/hinderances: If any during the month

Authorized Signatory of the contractor

SECTION 4:

CONTRACT DATA

CONTRACT DATA

| S. No. | Item | Clause Reference of CC | | | | | | | | | | | | | | | |
|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|----------------------|----------------------------|--|-------------------------------------------|--|-----|------------------------------|---------------------------------|------|-------------------------------------------|-----------------------------------------------|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|-----------|
| 1 | The Employer is : Director/Manager/Head-Operations Road Infrastructure Development Company of Rajasthan Ltd. (RIDCOR) 701-706, 7 th Floor, ARG Corporate Park, Gopalbari, Ajmer Road, Jaipur-302001, Rajasthan Tel.: +91 0141-2747001, Facsimile: +91 0141-2747010, E-mail: office@ridcor.in Authorized representative is Project Manager, RIDCOR | 1.1 GCC | | | | | | | | | | | | | | | |
| 2 | The Engineer is Project Manager, RIDCOR or the Supervision Consultant authorized by RIDCOR | 1.1 GCC | | | | | | | | | | | | | | | |
| 3 | The work of Upgradation of Existing State Highway-25 from 4-Lane to 6 Lane including construction of drain for the stretch between Tapukara (Km 212+800) to Bhiwadi (Km 221+350) in the state of Rajasthan | 1.1 GCC | | | | | | | | | | | | | | | |
| 4 | The Works consists of Civil works & other items as per Bill of Quantities | 1.1 ITB | | | | | | | | | | | | | | | |
| 5 | The Start Date shall be the date of signing of the contract agreement for the works (Form 6E, Section 6) | 1.1 GCC | | | | | | | | | | | | | | | |
| 6 | The language of the Contract documents is English | 3 GCC | | | | | | | | | | | | | | | |
| 7 | The law which applies to the Contract is the laws of Union of India | 3 GCC | | | | | | | | | | | | | | | |
| 8 | The following documents are also part of the Contract in addition to documents mentioned in Sub Clause 2.2 of GCC: Details of Minimum Key Personnel required to be mobilized by Contractor for the Works (as per Annexure–1B of Section 1) Schedule of Minimum Key Plant and Equipment to be deployed by Contractor on the work as per Program of Construction (as per Annexure–1A of Section 1) | 9 GCC 3 ITB | | | | | | | | | | | | | | | |
| 9 | Insurance requirements are as under: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">S. No.</th><th style="text-align: left;">Description of Cause</th><th style="text-align: left;">Minimum Cover of Insurance</th></tr> </thead> <tbody> <tr> <td></td><td><u>During implementation of the Works</u></td><td></td></tr> <tr> <td>(i)</td><td>Contractor's All Risk Policy</td><td>Contract Price + 15% escalation</td></tr> <tr> <td>(ii)</td><td>Loss or damage to Machinery and Equipment</td><td>Sum sufficient to provide replacement at site</td></tr> <tr> <td>(iii)</td><td>Workmen compensation - Personal injury or death insurance. Unlimited number of accidents. After each accident, Contractor will pay additional premium necessary to increase the limit make insurance valid for unlimited number of accidents always</td><td>Rs 10 Lacs per person per accident for unlimited number of accidents</td></tr> </tbody> </table> | S. No. | Description of Cause | Minimum Cover of Insurance | | <u>During implementation of the Works</u> | | (i) | Contractor's All Risk Policy | Contract Price + 15% escalation | (ii) | Loss or damage to Machinery and Equipment | Sum sufficient to provide replacement at site | (iii) | Workmen compensation - Personal injury or death insurance. Unlimited number of accidents. After each accident, Contractor will pay additional premium necessary to increase the limit make insurance valid for unlimited number of accidents always | Rs 10 Lacs per person per accident for unlimited number of accidents | 13 GCC |
| S. No. | Description of Cause | Minimum Cover of Insurance | | | | | | | | | | | | | | | |
| | <u>During implementation of the Works</u> | | | | | | | | | | | | | | | | |
| (i) | Contractor's All Risk Policy | Contract Price + 15% escalation | | | | | | | | | | | | | | | |
| (ii) | Loss or damage to Machinery and Equipment | Sum sufficient to provide replacement at site | | | | | | | | | | | | | | | |
| (iii) | Workmen compensation - Personal injury or death insurance. Unlimited number of accidents. After each accident, Contractor will pay additional premium necessary to increase the limit make insurance valid for unlimited number of accidents always | Rs 10 Lacs per person per accident for unlimited number of accidents | | | | | | | | | | | | | | | |

| | | |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| | <p>(iv) Against liabilities for death or injury to any person or loss of or damage to any third-party property</p> <p>(v) Any other insurance cover`</p> <p>Note:</p> <ul style="list-style-type: none"> For the above purpose "Roads" include: Main road with service roads, subways, culverts, toe wall, dividing median, crash barriers, electrical poles, separator, public toilets etc. and other infrastructure related to insured trade including sign boards and other property of the project along with electrical fittings, side separator, crash barrier, dividing median various culverts, Cat Eyes, Delineators, W-Beam Crash Barrier, Gantry Sign Boards, Single led Sign Boards, Double legged Sign Boards, Cantilever Sign Boards, Bollards, Road Marking, and other properties of insured. During Defect Liability Period, all the damages are to be repaired by the contractor and damages to completed works due to insurable perils will be paid to the extent of reimbursement from insurance company. | <p>In accordance with statutory requirements, applicable in India.</p> <p>In accordance with statutory requirements, applicable in India.</p> |
| 10 | <p>Contract Completion Date for:</p> <p>(a) Highway Upgradation works: - 15 months from the Start Date of the Works. The Employer reserves the right to reduce the scope of the work and the period of Contract without any compensation and the contractor shall not be liable to submit any claim for early termination of the contract.</p> <p>(b) Defect Liability Period: - 5 years after Upgradation works Completion Date.</p> | 14 GCC |
| 11 | <p>The Site Possession shall be as under :</p> <p>a. Existing ROW : From the start date</p> <p>b. Proposed acquired land (0.626 Ha) : at the end of 6 months from the start date</p> <p>(Complete details to be referred in clause 20 of GCC)</p> | 20 GCC |
| 12 | The period between Program Updates shall be 90 days | 25 GCC |
| 13 | The amount to be with-held for late submission of an updated Program shall be Rs 10,000/- each time | 25 GCC |
| 14 | Penalty for not attending Management Meetings/ Site visits including Weekly Meetings: Rs 5000/- per incidence | 28 GCC |
| 15 | The Defects Liability Period is 5 years after the Works Completion Date. | 32 GCC |
| 16 | <p>Changes in Cost and Legislation:</p> <p>Price Adjustment Formula for Bitumen only: Clause 42.1.6</p> | 42 GCC |

| | | | | | |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| 17 | Penalty and Liquidated Damages: | | | | 43 GCC |
| | S. No. | Particulars | Penalty / Liquidated Damages | Limit | |
| | 1 | Delay of work | Compensation for delays attributable to the contractor shall be applicable @ 0.03% of Contract Value per day for delay of non-completion of the work within stipulated completion time. | Maximum cumulative (total) penalty 5% of the Contract Price. | |
| 18 | (i) Interest free advance payments payable for the Works are as below: | | | | 44 GCC |
| | S. No. | Nature of Advance | Amount in Rs. | Conditions to be fulfilled | |
| | 1. | Mobilization* | 5% of the Contract Price for the Works. | After submission of un-conditional Bank Guarantee for 5% of Contract Price and, thereafter, obtaining confirmation of the Bank Guarantee from the issuing Bank. | |
| | 2. | Equipment* and Plant | 5% of Contract Price for the Works | After equipment are brought to site as above, and on submission of un-conditional Bank Guarantee for an equivalent amount and, thereafter, obtaining confirmation of the Bank Guarantee from the issuing Bank. | |
| | <p>* The recovery of advance payments shall commence from the Contractor's on account bills, when value of the work executed under the contract reaches 15% of the original contract value (OCV), and shall be completed when the value of the work reaches 80% of the original contract value. The installment on each "on account bill" schedule shall be on prorata basis.</p> | | | | |
| 19 | <p>The Performance Security shall be for the following minimum amounts equivalent as a percentage of the Contract Price for the Works:</p> <p>(i). Performance Security of 5% of Contract Price valid for 45 days beyond 1 year after the Works Completion Date;</p> <p>(ii). Plus additional security as 40% of the amount beyond 10% lower than the estimated amount for unbalanced bids valid upto end of DLP period of 5 years. This will be submitted alongwith the performance security as mentioned in (i) above prior to signing the contract agreement.</p> <p>The standard form of Performance Security acceptable to the Employer shall be an unconditional Bank Guarantee of the type as presented in Section 6 of the Bid Document.</p> | | | | 45 GCC |

SECTION 5 : SPECIFICATIONS

| Part No | Description | Page no |
|---------|----------------------------------------|---------|
| | Preamble | 79 |
| Part I | General Technical Specifications | 79 |
| Part II | Supplementary Technical Specifications | 79-94 |

SECTION : 5

SPECIFICATIONS

1. Preamble

- 1.1 The Specifications contained herein shall be read in conjunction with the MORTH other Bid Document as specified in Section 1.
- 1.2 Wherever reference is made in the Contract to specific standards/codes to be met by the materials, plant, and other supplies to be furnished, and work performed or tested, the provisions of the latest current edition or revision of the relevant MORTH, IRC standards and codes shall apply, unless otherwise expressly stated in the Contract. Where such standards and codes are national, or relate to a particular country or region, other internationally recognized standards and codes specified will be accepted subject to the Employer's prior review and written approval.

2. General Requirement

The Specifications in accordance with which the entire work shall be constructed and maintained by the Contractor are as described hereunder:

2.1 Part I – General Technical Specifications

The General Specifications for the Works shall be the "Specifications for Road & Bridge Works" (5th Revision 2013, published by IRC) issued by the Ministry of Road Transport & Highways (MORTH), henceforth called MORTH Specification.

2.2 Part II – Supplementary Technical Specifications

The Supplementary Technical Specifications shall comprise of various Amendments/Modifications/Additions to the MORTH referred to in Part – I for particular item of works not already covered in Part – I and Specifications for Building, Sanitary, Electrical and Miscellaneous Works.

- 2.2.1 Where a particular Clause or a part thereof in the "MORTH SPECIFICATIONS" referred in Part-I, has been Amended/Modified/Added upon, and incorporated in Part-II, such Amendment/Modification/ Addition supersedes the relevant Clause or part of the Clause.
- 2.2.2 The following Clauses in the "MORTH SPECIFICATIONS" have been amended/modified/ added upon:

102, 106, 108, 109, 111, 112, 115, 120, 501, 502, 503, 507, 803, 900, 901, 1007, 1014,.
- 2.2.3 The Additional Specifications shall comprise of specifications of particular item of work not covered in Part-I. These are given new Clause numbers.

The following Clauses A-1 to A-2 have been added to the "MORTH SPECIFICATIONS

Clause A-1 Test Procedure for Measuring Roughness Index of the Riding Surface of A Flexible Pavement

Clause A-2 Traffic Safety and Control

- 2.2.4 In the absence of any definite provisions on any particular issue in the MORTH Specifications, reference may be made to the latest codes and specifications of IRC, BIS, BS, ASTM, AASHTO in that order. Where even these are silent, the construction and completion of the works shall conform to sound Engineering practice as approved by the Engineer and in case of any dispute arising out of the interpretation of the above, the decision of the Employer shall be final and binding on the Contractor.

Amendments/Modifications/Additions to Existing Clauses of General Specifications Referred in the Part – I

Clause 102 : Definitions

The following abbreviations shall be added at the end of Clause 102.

- “BIS” : Bureau of Indian Standards
“MORTH” : Ministry of Road Transport & Highways, Govt. of India.
“RIDCOR” : Road Infrastructure Development Company of Rajasthan Ltd.

Add a paragraph at the end of this Clause as under

Wherever in the Specification, the phrase “Condition of Contract” is mentioned, it shall mean General Conditions of Contract and Special Conditions of Contract contained in Section 3 of the Bid Document.

Clause 106 : Construction Equipment

Add the following after Sub Clause 106 (k).

- l) Adequate standby equipment including spare parts shall be available as required, and as may be advised by the Employer.
- m) All measuring devices and gauges shall be in good working condition. Measuring devices that can affect product quality shall be calibrated prior to use and at prescribed intervals against certified equipment. Calibration procedures shall be established, maintained and documented and corrective actions taken when results are unsatisfactory. Accuracy and fitness of measuring devices shall be ensured at all times by proper maintenance.

Clause 108 : Site Information

Add the following at the end of Sub-clause 108.3

“Identification of quarry sites and borrow areas is the responsibility of the Contractor. Material to be procured from quarry sites and borrow areas identified by the Contractor and to be used in the works shall be as per Specifications for particular items of work.”

Clause 109 : Setting Out

The second sentence in Para 1 of Sub Clause 109.3 shall be inserted and read as under:

“The Reference Bench Mark for the areas shall be GTS Benchmark established by Survey of India and the values of the same shall be obtained by the Contractor from Survey of India.”

Clause 111 : Precautions for Safeguarding the Environment

Add new Sub Clause:

Clause 112 : Arrangement for Traffic During Construction

Sub Clause 112.6 : “Measurements for Payment and Rate” is deleted

Clause 115 : Methodology and Sequence of Work

Sub Clause 120.2 : Description

Add the words “including uninterrupted power supply” to the second sentence of first paragraph.

Add the following at the end of this Sub-Clause:

“Within 14 (fourteen) days of the Commencement Date, the Contractor shall prepare and submit a layout plan and details of the laboratory building and make/supplier of the equipment to the Employer for his approval.

The field laboratory shall be provided in finished and fully equipped condition to the entire satisfaction of the Employer not later than 45 (forty-five) days after execution of the Contract Agreement. During the period till the laboratory is completed the laboratory tests shall be performed in another laboratory proposed by the Contractor and approved by the Employer at the cost of the former.”

Sub Clause 120.4 : Laboratory Equipment

The following items of laboratory equipment may also be ensured in the field laboratory:

| S. No. | Sub No. | Item, Specifications | Nos. Required |
|--------------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| A : General | | | |
| (i) | | Balance | |
| | (a) | 7 kg to 10 kg capacity semi-self indicating Electronic Type-Accuracy 1 gm | 2 |
| | (b) | 500 gm capacity semi-self indicating Electronic Type-Accuracy 0.01 gm | 2 |
| | (c) | Chemical balance 100 gm capacity – Accuracy 0.0001 gm | 1 |
| | (d) | Pan balance 5 kg capacity – Accuracy 0.5 gm | 2 |
| | (e) | Platform Scale – 300 kg capacity | 1 |
| (ii) | | Ovens – Electrically operated, thermostatically controlled | |
| | (a) | From 100°C to 220°C – Sensitivity | 2 |
| (iii) | | Sieves, as per IS 460-1962 | |
| | (a) | IS Sieves 450 mm internal dia of sieve sets as per ISI of required sieve sizes complete with lid and pan | 2 sets |
| | (b) | IS sieve 200 mm internal dia. (brass frame and steel or brass wire cloth mesh) consisting of sieve sets of required sieve sizes complete with lid and pan | 2 sets |
| (iv) | | Sieve shaker capable of taking 200 mm and 450 mm dia. Sieves electrically operated with time switch assembly (As per IS) | 1 |
| (v) | | 200 tonnes compression testing machine | 1 |
| (vi) | | Stop watches 1/5 sec. Accuracy | 2 |

| | | |
|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| (vii) | Glassware comprising of Beakers, Pipettes, dishes, measuring cylinders (100 to 1000 cc capacity) glass rods and funnels, glass thermometers range 0°C to 100°C and metallic thermometers range 300°C | 6 each |
| (viii) | Hot plates 200 mm dia (1500 watt) | 2 |
| (ix) | Enamel trays | |
| (a) | 600 mm x 450 mm x 50 mm | 10 |
| (b) | 450 mm x 300 mm x 40 mm | 10 |
| (c) | 300 mm x 250 mm x 40 mm | 6 |
| (d) | Circular plates of 250 mm dia | 6 |
| (x) | Water Testing Kit | 1 |

B : For Soils

Deleted

C : For Bitumen and Bituminous Mixes

| | | |
|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| (i) | Constant temperature bath for accommodating bitumen test specimen, electrically operated and thermostatically controlled | 1 |
| (ii) | Penetrometer automatic type, adjustable weight arrangement and needles as per IS : 1203-1978 | 1 |
| (iii) | Centrifuge type bitumen extraction apparatus complete with extraction thimbles with solvent and filter paper | 1 |
| (iv) | Laboratory mixer including required accessories about 0.02 cum capacity electrically operated fitted with heating jacket | 1 |
| (v) | Marshall compaction apparatus automatically operated as per ASTM 1559-62 T and complete with electrically operated loading unit, compaction pedestal heating head assembly, dial micrometer and bracket for flow measurement, load transfer bar, specimen mould 100 mm dia (4 in) with base plate, collars, specimen extractor, compaction hammer 4.53 kg (10 lb.) x 457 mm (18 in) fall | 1 set |
| (vi) | Distant Reading Digital Thermometer | 1 |
| (vii) | Automatic Asphalt Content Gauge (Nuclear or equivalent) | 1 |
| (viii) | 1.5 tonne capacity Air Conditioner | 1 |
| (ix) | Apparatus for the testing of theoretical Maximum Specific Gravity (GMM) | 1 |
| (x) | Viscosity Meter for testing of Bitumen | 1 |

D : For Cement, Cement Concrete and Materials

| | | |
|------|-----------------------------------------------------------------------------|-------------|
| (i) | Vicat needle apparatus for setting time with plungers, as per IS : 269-1967 | 1 |
| (ii) | Moulds | |
| (a) | 150 mm x 300 mm ht cylindrical moulds with capping component | As required |

| | | |
|--------|---------------------------------------------------------------------------------------------------------------|-------------|
| (b) | Cubical moulds 150 mm, 100 mm (each size) | As required |
| (iii) | High frequency mortar cube vibrator for cement testing | 1 |
| (iv) | Concrete mixer power driven, 1 cu ft capacity | 1 |
| (v) | Variable frequency and amplitude vibrating table size 1 metre x 1 metre, as per the relevant British Standard | 1 |
| (vi) | Flakiness & Elongation index test apparatus | 1 |
| (vii) | Aggregate impact test apparatus as per IS : 2386 (Part 4) 1963 | 1 |
| (viii) | 10% fines test equipment | 1 |
| (ix) | Flow table as per IS : 712-1973 | 1 |
| (x) | Equipment for slump test | 2 |
| (xi) | Equipment for determination of specific gravity for fine and coarse aggregate as per IS : 2386 (Part 3) 1963 | 1 |
| (xii) | Flexural attachment to compression testing machine | 1 |
| (xiii) | Core cutting machine with 150 mm dia. Diamond cutting edge | 1 |
| (xiv) | Needle vibrator | 1 |
| (xv) | Vibrating hammer as per BS specification | 1 |
| (xvi) | Air entrainment meter | 1 |
| (xvii) | 0.5 Cft cylinder for checking bulk density of aggregate with tamping rod | As required |
| xviii) | Soundness testing apparatus for cement | 1 |
| xxi) | Flexural Strength testing equipment for PQC | 1 |

E : For Checking Alignment, Control of Profile and Surface Evenness

| | | |
|-------|------------------------------------------------------|--------|
| (i) | Precision automatic level with micrometer attachment | 2 |
| (ii) | Precision staff | 1 set |
| (iii) | 3 metre straight edge and measuring wedge | 1 set |
| (iv) | Camber templates 2 lane, straight run cross-section | 2 sets |

F : Steel Tape

| | | |
|-----|-----------|-------------|
| (a) | 5 m long | As required |
| (b) | 10 m long | As required |
| (c) | 20 m long | As required |
| (d) | 30 m long | As required |
| (e) | 50 m long | As required |

Note: The laboratory set-up must be complete including a set of reference standards for all tests, adequately staffed and operational to the satisfaction of the Employer before commencement of the works.

Clause 501 : General Requirements for Bituminous Pavement Layers

Sub Clause 501.8.8.2 : Rate for Premixed Bituminous Material

Item (ii) shall read as:

‘Preparation of surface to receive the materials except rates for prime / tack coats’

Item (viii) shall be deleted from “with the provision that the variation in actual percentage of bitumen used will be assessed and the payment adjusted accordingly”.

Clause 502 : Prime Coat over Granular Base

Sub Clause 502.8 : Rate

Delete last sentence and read it as “Payment shall be made on the basis of the provision of prime coat at an application rate specified in relevant item of BOQ as approval by Employer. No variation is permitted.”

Clause 503 : Tack Coat

Sub Clause 503.8 : Rate

Delete last sentence and read it as “Payment shall be made on the basis of the provision of Tack Coat at an application rate specified in relevant item of BOQ as approval by Employer. No variation is permitted.”

Clause 505 : Dense Bituminous Macadam

Sub Clause 505.2.2 :

Add the following:

“The coarse aggregate shall consist of crushed rock be made from **black/ blue basaltic rock**”

Sub Clause 505.2.3 :

Add the following:

“The fine aggregate shall consist of crushed rock be made **from black/ blue basaltic rock**”

Clause 507 : Bituminous Concrete

Sub Clause 507.1 : Scope

Add the following at the end of this Clause

“A site trial shall be performed in accordance with Sub Clause 901.6.”

Sub Clause 507.2.2 :

The coarse aggregates shall be generally as specified in clause 504.2.2.

Add the following:

“The coarse aggregate shall consist of crushed rock be made from **black/ blue basaltic rock**”

Sub Clause 507.2.3 :

The coarse aggregates shall be generally as specified in clause 504.2.3.

Add the following:

“The fine aggregate shall consist of crushed rock be made from **black/ blue basaltic rock**”

Sub Clause 507.3.1 : Requirement for the Mixture

In table 500-12 giving the requirement of Bituminous Concrete mix, add the following:

“Air voids in mix (VIM) determined on Specimens compacted 3% (minimum) to refusal density by 300 blows of Marshal Hammer on each end”

Sub Clause 507.9 : Rate

The contract unit rate shall be all as specified in Clause 504.8, except that the rate shall include the provision of bitumen at minimum 5.2 percent & 5.4 percent for grading 1 and grading 2 by weight of total mix respectively. No additional payment for increased percentage of bitumen based on job mix formula shall be paid.

Clause 803 : Road Markings

Sub Clause 803.3.2

This Sub Clause is substituted to read as under:

“The road marking shall be laid with appropriate road marking machinery as approved by the Employer.”

Add at the end of Sub-clause 803.6.6:

Faulty Workmanship or Materials

If any material not complying with the requirements is delivered at the Site or used in the Works, or if any sub-standard work is carried out, such material or work shall be removed, replaced or repaired as required by the Employer, at the Contractor's own cost. Rejected traffic markings and paint that has been splashed or has dripped onto the surfacing, kerbs, structures or other such surfaces shall be removed by the Contractor at his own cost, in such a way that the markings of split paint will not show up again later.

Clause 900 : Quality Control for Road Works

Sub Clause 901.1

This Sub Clause is substituted to read as under

“All materials to be used, all methods adopted and all works performed shall be strictly in accordance with the requirements of these Specifications. The Contractor shall set up a field laboratory at location approved by the Employer and equip the same with adequate equipment and personnel in order to carry out all required tests and Quality Control work as per Specifications and/ or as per Clause 121 and/ or as directed by the Employer. The

list of laboratory equipments and the facilities to be provided shall be as per Clause 121 or as directed by Employer and shall be approved by the Employer in advance.”

Add new Sub Clause as under:

Sub Clause 901.15 : Site Trial

The following data shall be ordered at each site trial:

- The composition and grading of the material, including the bitumen content and properties, if appropriate;
- If appropriate, the moisture content at the time of laying;
- If appropriate, the temperature at the time of laying and rolling;
- The type and size of compaction equipment and the number of passes;
- The maximum density or target density as appropriate and the density achieved in the trial;
- The maximum compacted thickness of layer;
- Calibration of machinery for best and efficient results;
- Any other relevant information.

If, during execution of the Works, the construction control tests indicate that the requirements for a material are not consistently being achieved, then work on that layer shall stop until the cause is investigated. Such investigation may include further laboratory and site trials on the material to determine a revised set of data, as above which, when agreed, shall be the basis on which all subsequent material will be provided and processed to achieve the specified requirements.

Approval by the Employer to a set of data recorded, as above in a site trial shall not relieve the Contractor of responsibility to comply with the requirements of Technical Specifications.

Clause 1007 : Coarse Aggregates

- (i) Delete from the first sentence “crushed gravel..... inert material” appearing in 4th and 5th Line.
- (ii) Add the following at the end of this clause:
“Except where it can be shown to the satisfaction of the Employer that a supply of properly graded aggregate of uniform quality can be maintained over the period of the Works, the grading of aggregate shall be controlled by obtaining the coarse aggregate in different size and blending them in correct proportions as or when required.”

Clause 1014 : Storage of Materials

Sub Clause 1014.3: Storage of Materials : Aggregates

The following shall be added to this clause

“Aggregates shall be stored or stockpiled in such a manner that segregation and coarse size will be avoided and also that the various sizes will not become intermixed before proportioning. They shall be stored, stockpiled and handled in such a manner that will prevent contamination by foreign materials.”

**ADDITIONAL SPECIFICATIONS FOR PARTICULAR ITEMS
OF WORKS NOT COVERED IN PART – I**

**Clause A-1 TEST PROCEDURE FOR MEASURING SURFACE ROUGHNESS
INDEX OF THE RIDING SURFACE OF A FLEXIBLE PAVEMENT**

EQUIPMENT – British Towed Fifth Wheel Bump Integrator

Test Procedure:

The following test procedure shall be adopted for the test:

- (1) Check the installation and operation of the equipment is in order and meets the requirements prescribed in its operational manual. For example the towing hitch maintains the frame in a upright position but provides freedom of movement in longitudinal and transverse directions. The tyre pressure of wheels is as prescribed.
- (2) The instrument shall be calibrated prior to its use for measurement as prescribed in its operational manual.
- (3) The operators shall familiarize themselves with the Fifth Wheel Bump Integrator, operation using its Test Mode before commencing a survey.
- (4) A uniform speed of 30 km/hour, which is the specified operating speed of the British Towed Fifth Wheel Bump Integrator, shall be maintained during measurements. The readings shall be taken for each carriageway independently.
- (5) The equipment shall run on a lane in both the direction once and the average of two values taken for its roughness index.
- (6) Pavement unevenness/roughness of 3 lane carriageway shall be obtained from the average of the values of the 3 lanes recorded.
- (7) The surface roughness index value is obtained by using the following formula.

$$\text{Roughness Index Value} = \frac{B \times R \times 1 \text{ cm/km}}{W}$$

Where

B = Number of Bumps in a section

W = Number of Wheel Revolution Counter

R = is a constant, 1000 nos. of wheel revolution counter per km

Length count of B = 1 cm

- (8) All data shall be properly recorded with appropriate referencing and stored in a prescribed manner as in the operational manual.
- (9) The roughness measurements shall be properly calibrated using the procedure recommended in the World Bank Technical Publication No. 46.

TRAFFIC SAFETY AND CONTROL

(IRC-SP-55, 2014 to be adopted)

1. Description

These specifications describe the traffic management and safety measures to be taken by the Contractor throughout the construction period for ensuring the safe and convenient passage of public traffic through the project road on one hand and safety of the project workers on the other. It shall be understood that the Contractor is solely responsible for all the traffic management and safety measures which should be got approved by the Employer prior to taking up any construction work on the project. All relevant latest IRC specifications shall be followed by the contractor and he will be solely responsible for any lapses/accidents etc. due to non-compliance of safety measures etc. throughout the construction period.

Any construction work on or near a public traveled way will pose a set of new situations, which may include diversion of road users on to unfamiliar paths, exposure of road users to moving construction equipment and workers, stacking of construction materials to cause reduction in the space available for public traffic, inadequate space for maneuvering, etc. which may pose several surprises. These may cause to develop hazardous situations in case adequate advance precautions in the form of notification, traffic etc. is not taken. Within the construction area itself, the workers may be handling materials like hot bitumen and moving road construction equipment which may prove to be a cause of serious accident if adequate precaution and safety measures are not taken. Thus, the guiding principles on which the Contractor shall base the traffic management and safety measures will include:

- i) advance warning of road users about the road situation including diversion ahead.
- ii) providing clear and safe demarcated channels for guiding the public traffic.
- iii) providing necessary traffic warning/ guiding devices such as signs, safety cones, pavement markings, red lights, reflecting studs/tapes, etc.
- iv) barricading construction area with CGI sheets so that public traffic steer clear of these and do not come into conflict with construction activities.
- v) providing the project workers with necessary safety gears such as gum boots, luminous yellow jackets, crash helmets etc. as appropriate.
- vi) taking all other necessary measures so that safety is ensured during all hours of day and night.

2. Traffic Management and Safety

Any construction activity on the project will pose a hazardous situation to the road users. For least disturbance to safe passage of public traffic appropriate traffic management and safety measures should be adopted throughout the construction period. In this regard, the construction zone in which conflict from safety angle may arise between the road users on one hand and the construction activities on the other shall be divided into 4 sub zones, and safety measures to be adopted therefore shall be as described hereunder:

a) Advance Warning Zone

This warning sub-zone is meant to inform, alert and prepare the approaching driver well in advance by providing information regarding the distance and extent/type of hazard ahead so that he is able to reduce the speed and be in readiness to carry out the necessary manoeuvres as he meets with the changed situation. For the operating speeds on the project road, length of this sub-zone shall be 100 mtr. and 500 m, in plain and hilly terrain respectively. Information in this sub-zone will be conveyed through a series of traffic signs, which will include “Men at Work” and the speed reduction signs at the start and middle of this sub-zone.

b) Transition Sub-Zone

This sub-zone is the area in which the traffic is steered and guided into and out of the diverted path around the work sub-zone. This is the most crucial sub-zone from safety angle as vehicles have to be guided on to the diverted path, and most of the movements will be of turning type. The elements for designing this sub-zone are speed of the vehicles, extent of lateral shift and elevation difference between the normal and the diverted paths. The essential safety measures shall include delineation of the travel path and prevention of wayward movements of vehicles by means of barricades, channelizers, red cones, and red lamps during hours of darkness etc., as appropriate.

In the design of this sub-zone adequate attention shall be paid for providing necessary turning radius of the curves, grade to permit for safe passage of animal driven vehicles, drainage and dust-proofing. Where necessary traffic control shall be effected through manual flagging and by battery operated traffic lights during hours of darkness. Where vehicles have to wait, the waiting area shall be demarcated by stop lines.

Length of the sub-zone will generally be between 50 and 100 m.

c) Work Sub-Zone

This is to the area where construction activity takes place, and the main concern relates to safety of workers are also prevention of public traffic from entering the work area. In this sub-zone, path of traffic shall be clearly delineated to avoid intrusion of public traffic moving on to the work area or construction equipment moving on to the public traffic. It shall be ensured that adequate distance is available between 2 consecutive work zones (2 Km. on urban section and 5-10 km. in rural sections) so that vehicles get sufficient breather space for overtaking slow vehicles, lane adjustment etc. Traffic across this sub-zone shall be guided through with the help of various traffic control devices, such as signs, delineation of travel path by cones/drums, barricades, luminous tapes etc. as appropriate.

d) Termination Sub-Zone

The sub-zone is intended to inform the road users of the end of the construction zone. This shall be effected through suitable informatory sign boards.

The standard on “Safety During Construction” may be referred for compliance.

3. Traffic Control Devices

Traffic control devices in the construction zones perform the crucial task of warning, informing and alerting drivers apart from guiding the vehicle movements so that the drivers of the vehicles as well as the workers on site are not faced with situations posing surprise/hazard, and safe passage to traffic is affected.

The primary traffic control devices used in work sub-zone are signs, delineators, barricades, cones, pylons, pavement marking, flashing lights etc. They shall be such that they are easily understood without any confusion, are clearly visible during day and night, conform to the prevailing speed in immediate vicinity, stable against sudden adverse weather conditions and are easy in installation, renewal and maintenance. Broad details of the different devices are hereunder:

a) Signs

The construction signs fall into 3 major categories namely, regulatory signs, warning signs and guide or informatory sign as defined and detailed in IRC:67-1977, Code of Practice for Road Signs. These signs shall be placed on the left hand side of the travel path.

The common Regulatory signs used in the construction zones are “No Entry”, “Road Closed”, “Speed Limit” etc. These shall be used in consultation with the local police and / or authorities.

The warning signs to alert the drivers of the possible danger ahead in the construction zones are “Lane Closed”, “Diversion to other carriageway”, “Divided carriageway Starts”, “Divided carriageway End”, “Two way Traffic” etc. It will be advisable to explain the signs with the help of a rectangular definition plate of size of appropriate to the size of warning triangle and placed 0.15 m below, from the bottom of the triangle.

Guide signs in construction zones shall different background colour than the normal informatory signs of IRC : 67-1977, These signs shall have black messages and arrows on yellow (Traffic Yellow of IS : 5-1978) background. The guide signs to e commonly used are “Diversion “Road Ahead Closed”, “Sharp Deviation of Rout” etc.

The commonly used temporary signs during construction are depicted in the drawings. These should preferably be of reflectorised type to be visible during hours of darkness.

b) Delineators

Delineators are channelizing devices such as cones, traffic cylinders, tapes, drums etc. which are placed in or adjacent to the roadway to guide the driver along a safe path and to control the flow of traffic. These shall normally be retro-reflectorized for night visibility. IRC: 79-1981 (Recommended Practice for Road Delineators) gives details of some of the delineators. The types of delineators commonly used are traffic cones, drums and barricades.

c) Traffic Cones

Traffic cones shall normally be 0.5 m to 0.75 m high and 0.3 m to 0.4 m diameter or in square shape at the base. These shall be made of plastic or rubber with retro reflectorised red and white band and have suitable anchoring so that they are not easily blown over or displaced. The cones shall be placed close enough together (spacing 3-9m) to give an impression of the continuity. Larger sized cones shall be used for high speeds or where more conspicuous guidance is required.

d) Empty Bitumen Drums

Empty bitumen drums can be used as channelising device since they are highly visible, give the appearance of being formidable objects, thereby commanding the respect of the drivers. These drums can also be of plastic which are lighter, easy to transport and store. As delineators, these drums shall be painted in circumferential strips 0.10 m to 0.15 wide, alternatively in black and white colours.

e) Barricades

Whenever the traffic has to be restricted from entering the work areas such as excavations or material storage sites so that hazardous locations are barred for public and protection to workers is provided, or there is need for separation the two way traffic, barricades shall be used. The barricades may be of portable or fixed type and can be made of wooden planks, metal or other suitable material. The horizontal component facing the traffic shall be made of 0.30 m wide wooden planks joined together and painted in alternate yellow and white strips of 0.15 m width and sloping down at an angle of 45° in the direction of traffic. Suitable support or ballasting shall be provided so that they do not over turn or are not blown away in strong winds. In case of fixed type barricades, a gate or moveable section shall be separately provided to allow the movement of the construction/supervision vehicles.

f) Flagmen

In large construction sites, flagmen with flags and sign paddles shall be effectively used to guide the safe movements. The flags for signaling shall be 0.60m x 0.60m size made of good red cloth and securely fastened to a staff of approximately 1 meter in length. The sign paddles shall conform to IRC:67-1977 and provided with a rigid handle.

For one-way operation at a time hours of darkness, battery operated red/green lights shall be used at either end of the affected section.

4. Safety and Management Practices

Measures for providing safe movement of traffic in some of the most commonly occurring work-zones on highways shall be as follows:

a) Detour on Temporary Diversion

In certain situations during the project construction period it may become necessary to pass the traffic on temporary diversion constructed parallel to highway.

A temporary diversion road shall basically satisfy the following requirements

- ❖ It shall have smooth horizontal and vertical profile for easy negotiation by vehicles.
- ❖ It shall not get overtopped by flood or drainage discharge under any circumstances.

- ❖ It shall have adequate capacity to cater for the diverted traffic
- ❖ It shall be dust free and shall ensure clear visibility at all times of the day and night. Pavement and riding surface for the diversion will depend on the duration over which the diversion will be used, and shall be as directed by the Employer. The commonly used specifications are mix seal surfacing over 150-200 mm thick WMM constructed on completed sub-grade.
- ❖ It shall be provided with the required safety standards and

The warning for the construction ahead shall be provided by the sign “Men at Work” about 1 Km. in advance of the work zone. In addition a supplementary plate indication “Diversion 1Km. Ahead” and a sign “Road closed Ahead” shall be placed. It shall be followed by “Compulsory Turn right/left sign”. The “Detour” and sharp deviation” sign shall be used to guide the traffic on to the diversion. Hazard markers shall be placed where the railings for the cross drainage structures on the diversion start.

b) Switch over of traffic from widened section and vice-versa

In the course of construction widening of the carriageway will have to be taken up in course of construction widening of the carriageway will have to be taken up in stretches with intervening space between two such stretches. This will bring about the situations in which the traffic passing through the widened road would have to pass on and merge with the unwidened section and vice-versa. For such cases, apart from “Men At Work” signs with distance plate in the advance warning zone, the signs indicating “Road Narrowing” or “Road widening” as appropriate shall be installed.

5. Precautions for Safety

The following general precautions shall apply to all the work sites.

a) General Measures

- i) All the sign and delineators shall be maintained in clean and brightly painted conditions at all times.
- ii) Adequate lighting arrangements shall be made for proper visibility during night travel through the work area.
- iii) Adequate arrangements for frequent sprinkling of water shall be made to keep the area dust free.

b) For Safety of Workmen

- i) Workmen shall be trained in use of tools and plant.
- ii) Bitumen handling labour shall be given gum boots, spectacles etc.
- iii) First –aids kits shall be provided
- iv) Workers required on site during night hours shall be provided with fluorescent jackets with reflective tapes.

c) For Safety of Road User

- i) As far as possible, the material, equipment and machinery shall be installed/parked in places sufficient away from the berms in the available road land. Only in avoidable cases the same is allowed near the edge of berms.

- ii) Machinery shall be parked at appropriate places away from the path of public traffic, and shall be provided with red flags and red lights.
- iii) Only minimum quantity of material required for the construction operations shall be collected at site near the public traveled way.

6. Safety Audit

Safety audit shall be conducted periodically on the safety measures adopted during the constructions operations. The main aspects to be covered shall include:

- a) Manpower and their safety
- b) Machinery
- c) Temporary works
- d) Equipment & Vehicles
- e) Material storage and handling
- f) Construction procedures
- g) Environment
- h) Site safety guidelines
- i) Miscellaneous services

The contractor shall constitute special teams from his staff for the above audit, and shall take appropriate corrective measures to the directions of the Employer/Engineer.

SECTION 6

SECURITIES AND OTHER FORMS

SECTION 6:

SECURITIES AND OTHER FORMS

| | | |
|-----------|---|--------------------------------------------------|
| Form – 6A | : | Bid Security (Bank Guarantee) |
| Form – 6B | : | Letter of Acceptance |
| Form – 6C | : | Performance Securities Bank Guarantee |
| Form – 6D | : | Performance Bank Guarantee (for Unbalanced Bids) |
| Form – 6E | : | Form of Agreement |
| Form – 6F | : | Bank Guarantee for Advance Payment |

Forms of Securities

Acceptable forms of securities are annexed. Bidders should not complete the Performance and Advance Payment Security forms at this time. Only the successful Bidder will be required to provide Performance and Advance Payment Securities in accordance with one of the forms, or in a similar form acceptable to the Employer.

BID SECURITY (BANK GUARANTEE)

WHEREAS, _____ [name of Bidder] (hereinafter called "the Bidder") has submitted his Bid dated _____ [date] for the works **"Upgradation of Existing State Highway-25 from 4-Lane to 6 Lane including construction of drain for the stretch between Tapukara (Km 212+800) to Bhiwadi (Km 221+350) in the state of Rajasthan"** (hereinafter called "the Works").

KNOW ALL PEOPLE by these presents that We _____ [name of bank] having our registered office at _____ (hereinafter called "the Bank") are bound unto Road Infrastructure Development Company of Rajasthan Ltd (hereinafter called "the Employer") in the sum of Rs _____ Cr. for which payment well and truly to be made to the said Employer the Bank binds itself, his successors and assigns by these presents.

SEALED with the Common Seal of the said Bank this _____ day of _____ 2025.

THE CONDITIONS of this obligation are:

- (1) If after Bid opening the Bidder withdraws his Bid during the period of Bid validity specified in the Form of Bid; or
- (2) If the Bidder having been notified of the acceptance of his Bid by the Employer during the period of Bid validity:
 - (a) fails or refuses to execute the Form of Agreement in accordance with the Instructions to Bidders, if required; or
 - (b) fails or refuses to furnish the Performance Security, in accordance with the Instruction to Bidders; or
 - (c) does not accept the correction of the Bid Price pursuant to Clause 12 of ITB;

we undertake to pay to the Employer up to the above amount upon receipt of his first written demand, without the Employer having to substantiate his demand, provided that in his demand the Employer will note that the amount claimed by him is due to him owing to the occurrence of one or any of the three conditions, specifying the occurred condition or conditions.

This Guarantee will remain in force for 165 days i.e. upto and including 45 days after the Bid validity period (120 days) as stated in the Instructions to Bidders or as it may be extended by the Employer, notice of which extension(s) to the Bank is hereby waived. Any demand in respect of this guarantee should reach the Bank not later than the above date.

DATE _____ SIGNATURE OF THE BANK _____

WITNESS _____ SEAL _____

[signature, name, and address]

Form – 6B

(Please refer Sub-Clause 25.1 of ITB)

(Letterhead paper of the Employer)

Letter of Acceptance

To: [name and address of the Contractor]

[date]

Sub.: Upgradation of Existing State Highway-25 from 4-Lane to 6 Lane including construction of drain for the stretch between Tapukara (Km 212+800) to Bhiwadi (Km 221+350) in the state of Rajasthan

Dear Sirs,

1. It is hereby confirmed that your Bid received on _____ submitted to the Director, Road Infrastructure Development Company of Rajasthan Ltd. (RIDCOR), Jaipur for the work mentioned in the subject above has been accepted for and on behalf of the RIDCOR for an amount mentioned below on rates quoted by you and the terms and conditions as contained in the Bid Document and subsequently addendum/corrigendum issued.
2. The accepted amount of the bid for the above-mentioned work in consideration, execution, completion etc. of works by you as prescribed in the Bid Document is Rs. (Rupees *In words*).
3. The date of start will be as defined in S. No. 5 of Contract Data.
4. The period of completion of whole work is as defined in S. No. 10 of Contract Data as Contract Completion Date.
5. You are requested to please furnish the Performance Security in the form of Bank Guarantee for an amount equal to 5% of the Contract price within 14 days of receipt of this letter, in accordance with Clause 26 of ITB and Clause 45 of GCC as defined in the Contract Data S. No. 19. The Bank Guarantee will be provided in the proforma given in the Bid Document.
6. You are also requested to sign and execute the Contract Agreement within 28 days, failing which action as stated in Para 26.2 of ITB will be taken.
7. You are requested to submit a detailed Construction Program including Traffic Management Plans as per Clause 25 of General Conditions of Contract, Section 3, Part-I within 21 days of receipt of this letter.

Yours faithfully,

Authorized Signatory
Name and Title of Signatory
Name of Agency

PERFORMANCE SECURITIES BANK GUARANTEE

To

Road Infrastructure Development Company of Rajasthan Ltd. (RIDCOR)

701-706, 7th Floor, ARG Corporate Park

Gopalbari, Ajmer Road, Jaipur – 302 001, Rajasthan, India

(the Employer)

Bank Guarantee No.-----dated ----- for Rs.-----

WHEREAS vide the “**Upgradation of Existing State Highway-25 from 4-Lane to 6 Lane including construction of drain for the stretch between Tapukara (Km 212+800) to Bhiwadi (Km 221+350) in the state of Rajasthan**” Contract dated ----- (hereinafter referred to as “the Contract”), _____ [name of Contractor] having its office at _____ (hereinafter referred to as the ‘Contractor’ which expression shall unless repugnant to or inconsistent with the context mean and include its successors and assigns) has been awarded by Road Infrastructure Development Company of Rajasthan Ltd, a company incorporated under the Companies Act, 1956 and having its registered office at 701-706, 7th Floor, ARG Corporate Park, Gopalbari, Ajmer Road, Jaipur – 302 001, Rajasthan, India , (hereinafter referred to as the ‘Employer’ which expression shall unless repugnant to or inconsistent with the context mean and include its successors and assigns), the contract for the works “**Upgradation of Existing State Highway-25 from 4-Lane to 6 Lane including construction of drain for the stretch between Tapukara (Km 212+800) to Bhiwadi (Km 221+350) in the state of Rajasthan**”.

AND WHEREAS it has been stipulated by you in the Bid proposal and the said Contract that the Contractor shall furnish you a **Performance Guarantee** on or before the date of signing of the Contract, by a specified **nationalized bank** for the sum specified therein as security for compliance with the Contractor’s obligations in accordance with the Contract and against any breach or non-performance of the terms and conditions contained in the Contract;

AND WHEREAS WE, _____ [name of Bank], a body corporate, constituted under [relevant Act] and having its head office at _____ and branch office at _____ have agreed to furnish a Performance Guarantee for a sum of **Rs** _____ (**Rupees** _____ **Only**) (hereinafter referred as the guaranteed amount) as security for compliance of the Contractor’s obligations under the Contract;

NOW THEREFORE we hereby affirm that we, as the Guarantor, are responsible to you, on behalf of the Contractor for the guaranteed amount and we irrevocably undertake to pay you, upon your first written demand and without demur or argument, any sum or sums within the limits of the guaranteed amount as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified herein. The guaranteed amount shall be payable merely on demand by the Employer. Any certification or letter stating that the amount claimed in the demand notice is due and payable, signed by a duly authorised official of the Employer to this effect, shall be final, binding and conclusive upon us.

WE hereby agree to pay on demand the guaranteed amount without demur by crediting to the Bank Account of the Employer, the details of which are to be informed to us by you during the validity of the guarantee.

We hereby undertake that this Guarantee is absolute, irrevocable and unconditional and shall be enforceable against us notwithstanding any security or securities comprised in any instrument executed or to be executed by the Contractor in favour of the Employer.

We hereby also agree that this guarantee shall not be wholly or partially satisfied or exhausted by any payments made to or settled with the Employer by the Contractor and shall be valid and binding on us and operative until the expiry of this Guarantee.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed there under or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

The jurisdiction in relation to this Guarantee shall be the Courts at Jaipur and laws of India shall be applicable. This guarantee shall be valid up to _____ (Expiry Date) which will be 45 days beyond 1 year after Works Completion Date. We hereby agree to renew and extend the validity of this Guarantee on request from you. Unless a demand or claim is lodged within the aforesaid time i.e. before Expiry Date, your rights under this Guarantee shall be forfeited and we shall not be liable there under.

WE hereby represent that there is no litigation or arbitration or other proceedings pending against us which could reasonably be expected to have a material adverse effect or change in our ability to perform our obligation under this Guarantee.

Notwithstanding anything contained herein:

- a) our liability under this Guarantee shall not exceed the guaranteed amount i.e. Rs _____ (Rupees _____ Only)
- b) this guarantee shall be valid up to _____ (Expiry Date) and
- c) we shall be liable to pay the guaranteed amount under this Guarantee only and only if we receive a written claim or demand duly signed by a duly authorised official of the Employer before the _____ as mentioned above or any other extended date.

IN WITNESS WHEREOF we have executed this Guarantee on this ____ day of ____, ____.

Signed and delivered by the above named _____ through its Authorised Signatory as authorised by its Board Resolution passed on _____/Power of Attorney dated [].

In the presence of

PERFORMANCE BANK GUARANTEE (FOR UNBALANCED BIDS)

To
Road Infrastructure Development Company of Rajasthan Ltd. (RIDCOR)
701-706, 7th Floor, ARG Corporate Park
Gopalbari, Ajmer Road, Jaipur – 302 001, Rajasthan, India
(the Employer)

Bank Guarantee No.-----dated ----- for Rs.-----

WHEREAS vide the “**Upgradation of Existing State Highway-25 from 4-Lane to 6 Lane including construction of drain for the stretch between Tapukara (Km 212+800) to Bhiwadi (Km 221+350) in the state of Rajasthan**” Contract dated _____ (hereinafter referred to as “the Contract”), _____ [name of Contractor] having its office at _____ (hereinafter referred to as the ‘Contractor’ which expression shall unless repugnant to or inconsistent with the context mean and include its successors and assigns) has been awarded by Road Infrastructure Development Company of Rajasthan Ltd, a company incorporated under the Companies Act, 1956 and having its registered office at 701-706, 7th Floor, ARG Corporate Park, Gopalbari, Ajmer Road, Jaipur – 302 001, Rajasthan, India hereinafter referred to as the ‘Employer’ which expression shall unless repugnant to or inconsistent with the context mean and include its successors and assigns), the contract for the works “**Upgradation of Existing State Highway-25 from 4-Lane to 6 Lane including construction of drain for the stretch between Tapukara (Km 212+800) to Bhiwadi (Km 221+350) in the state of Rajasthan**”.

AND WHEREAS it has been stipulated by you in the said contract that the Contractor shall furnish you a **Performance Guarantee** for unbalanced Bids on or before the date of signing of the Contract, by a specified / **nationalised bank** for the sum specified therein as additional security for compliance with the Contractor’s obligations in accordance with the relevant Contract condition and against any breach or non-performance of the terms and conditions contained in the Contract;

AND WHEREAS WE, _____ [name of Bank], a body corporate, constituted under [relevant Act] and having its head office at _____ and branch office at _____ have agreed to furnish a Performance Guarantee for a sum of **Rs** _____ (**Rupees** _____ **Only**) (hereinafter referred as the guaranteed amount) as security for compliance of the Contractor’s obligations under the Contract;

NOW THEREFORE we hereby affirm that we, as the Guarantor, are responsible to you, on behalf of the Contractor for the guaranteed amount and we irrevocably undertake to pay you, upon your first written demand and without demur or argument, any sum or sums within the limits of the guaranteed amount as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified herein. The guaranteed amount shall be payable merely on demand by the Employer. Any certification or letter stating that the amount claimed in the demand notice is due and payable, signed by a duly authorised official of the Employer to this effect, shall be final, binding and conclusive upon us.

WE hereby agree to pay on demand the guaranteed amount without demur by crediting to the Bank Account of the Employer, the details of which are to be informed to us by you during the validity of the guarantee.

We hereby undertake that this Guarantee is absolute, irrevocable and unconditional and shall be enforceable against us notwithstanding any security or securities comprised in any instrument executed or to be executed by the Contractor in favour of the Employer.

We hereby also agree that this guarantee shall not be wholly or partially satisfied or exhausted by any payments made to or settled with the Employer by the Contractor and shall be valid and binding on us and operative until the expiry of this Guarantee.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed there under or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

The jurisdiction in relation to this Guarantee shall be the Courts at Jaipur and laws of India shall be applicable. This guarantee shall be valid up to _____ (Expiry Date) which will be 5 years beyond Works Completion Date. We hereby agree to renew and extend the validity of this Guarantee on request from you. Unless a demand or claim is lodged within the aforesaid time i.e. before Expiry Date, your rights under this Guarantee shall be forfeited and we shall not be liable there under.

WE hereby represent that there is no litigation or arbitration or other proceedings pending against us which could reasonably be expected to have a material adverse effect or change in our ability to perform our obligation under this Guarantee.

Notwithstanding anything contained herein:

- a) our liability under this Guarantee shall not exceed the guaranteed amount i.e. Rs _____ (Rupees _____ Only)
- b) this guarantee shall be valid up to _____ (Expiry Date) and
- c) we shall be liable to pay the guaranteed amount under this Guarantee only and only if we receive a written claim or demand duly signed by a duly authorised official of the Employer before the _____ as mentioned above or any other extended date.

IN WITNESS WHEREOF we have executed this Guarantee on this ____ day of ____, ____.

Signature

Date and place

FORM OF AGREEMENT**Agreement**

GENTLEMEN

This agreement, made the _____ day of _____ 2025 between Road Infrastructure Development Company of Rajasthan Ltd. (RIDCOR), 701-706, 7th Floor, ARG Corporate Park, Gopalbari, Ajmer Road, Jaipur – 302 001, Rajasthan, India (hereinafter called “the Employer” which expression shall unless the context otherwise requires, include its successors and assigns) of the one part and _____ [name and address of contractor] (hereinafter called “the Contractor” which expression shall unless the context otherwise requires, include its successors and assigns) of the other part.

Whereas the Employer is desirous that the Contractor to execute the works “**Upgradation of Existing State Highway-25 from 4-Lane to 6 Lane including construction of drain for the stretch between Tapukara (Km 212+800) to Bhiwadi (Km 221+350) in the state of Rajasthan**” (hereinafter called “the Works”) and the Employer has accepted the Bid by the Contractor for the execution and completion of such Works and the remedying of any defects therein, at a contract price as given in this Contract.

NOW THIS AGREEMENT WITNESSETH as follows:

1. In this Agreement, words and expression shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to, and they shall be deemed to form and be read and construed as part of this Agreement.
2. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy any defects therein in conformity in all aspects with the provisions of the Contract.
3. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying the defects wherein the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.
4. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz.:
 - i) Letter of Acceptance;
 - ii) Contractor’s Bid
 - iii) Contract Data;
 - iv) Conditions of Contract (including Special Conditions of Contract);
 - v) Specifications;
 - ix) Any other document forming part of the Contract.

In witness whereof, the parties thereto have caused this Agreement to be executed the day and year first before written.

Signed, Sealed and Delivered by the said Employer through his authorized representative and the said Contractor through his Power of Attorney Holder:

FOR AND ON BEHALF OF
Road Infrastructure Development
Company of Rajasthan Limited
By

Witness:
1) Signature _____
Name _____

Address _____

AUTHORIZED REPRESENTATIVE

2) Signature _____
Name _____
Address _____

FOR AND BEHALF OF
M/s _____
By

1) Signature _____
Name _____
Address _____

AUTHORIZED REPRESENTATIVE

2) Signature _____
Name _____
Address _____

BANK GUARANTEE FOR ADVANCE PAYMENT

To
Road Infrastructure Development Company of Rajasthan Ltd. (RIDCOR)
701-706, 7th Floor, ARG Corporate Park
Gopalbari, Ajmer Road, Jaipur – 302 001, Rajasthan, India
(the Employer)

Bank Guarantee No.-----dated ----- for Rs.-----

WHEREAS vide the “**Upgradation of Existing State Highway-25 from 4-Lane to 6 Lane including construction of drain for the stretch between Tapukara (Km 212+800) to Bhiwadi (Km 221+350) in the state of Rajasthan**” Contract dated ----- (hereinafter referred to as “the Contract”), _____ [name of Contractor] having its office at _____ (hereinafter referred to as the ‘Contractor’ which expression shall unless repugnant to or inconsistent with the context mean and include its successors and assigns) has been awarded by Road Infrastructure Development Company of Rajasthan Ltd, a company incorporated under the Companies Act, 1956 and having its registered office at 701-706, 7th Floor, ARG Corporate Park, Gopalbari, Ajmer Road, Jaipur – 302 001, Rajasthan, India (hereinafter referred to as the ‘Employer’ which expression shall unless repugnant to or inconsistent with the context mean and include its successors and assigns), the contract for the works “**Upgradation of Existing State Highway-25 from 4-Lane to 6 Lane including construction of drain for the stretch between Tapukara (Km 212+800) to Bhiwadi (Km 221+350) in the state of Rajasthan**”.

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you a **Advance Payment Guarantee** security, at the time of forwarding a request for Advance payment, from a specified / **nationalised bank**, for the sum proposed to be released as Advance Payment in accordance with the terms and conditions of the Contract.

AND WHEREAS WE, _____ [name of Bank], a body corporate, constituted under [relevant Act] and having its head office at _____ and branch office at _____ have agreed to furnish a Advanced Payment Guarantee for a sum of **Rs** _____ (**Rupees** _____ **Only**) (hereinafter referred as the guaranteed amount) as security for compliance of the Contractor’s obligations under the Contract;

NOW THEREFORE we hereby affirm that we, as the Guarantor, are responsible to you, on behalf of the Contractor for the guaranteed amount and we irrevocably undertake to pay you, upon your first written demand and without demur or argument, any sum or sums within the limits of the guaranteed amount as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified herein. The guaranteed amount shall be payable merely on demand by the Employer. Any certification or letter stating that the amount claimed in the demand notice is due and payable, signed by a duly authorised official of the Employer to this effect, shall be final, binding and conclusive upon us.

WE hereby agree to pay on demand the guaranteed amount without demur by crediting to the Bank Account of the Employer, the details of which are to be informed to us by you during the validity of the guarantee.

We hereby undertake that this Guarantee is absolute, irrevocable and unconditional and shall be enforceable against us notwithstanding any security or securities comprised in any instrument executed or to be executed by the Contractor in favour of the Employer.

We hereby also agree that this guarantee shall not be wholly or partially satisfied or exhausted by any payments made to or settled with the Employer by the Contractor and shall be valid and binding on us and operative until the expiry of this Guarantee.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed there under or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

The jurisdiction in relation to this Guarantee shall be the Courts at Jaipur and laws of India shall be applicable. This guarantee shall be valid up to 45 days beyond the period of stipulated date of completion _____ (Expiry Date). We hereby agree to renew and extend the validity of this Guarantee on request from you. Unless a demand or claim is lodged within the aforesaid time, i.e. Expiry Date, your rights under this Guarantee shall be forfeited and we shall not be liable there under.

WE hereby represent that there is no litigation or arbitration or other proceedings pending against us which could reasonably be expected to have a material adverse effect or change in our ability to perform our obligation under this Guarantee.

Notwithstanding anything contained herein:

- d) our liability under this Guarantee shall not exceed the guaranteed amount i.e. Rs _____ (Rupees _____ Only)
- e) this guarantee shall be valid up to _____ (Expiry Date) and
- f) we shall be liable to pay the guaranteed amount under this Guarantee only and only if we receive a written claim or demand duly signed by a duly authorised official of the Employer before the _____ as mentioned above or any other extended date.

IN WITNESS WHEREOF we have executed this Guarantee on this ____ day of ____, ____.

Signature

Date and place

SECTION 7:

Bill of Quantities (BOQ)

for

Upgradation of Existing State Highway-25 from 4-Lane to 6 Lane including construction of drain for the stretch between Tapukara (Km 212+800) to Bhiwadi (Km 221+350) in the state of Rajasthan

**Upgradation of Existing State Highway-25 from 4-Lane to 6 Lane
including construction of drain for the stretch between Tapukara (Km
212+800) to Bhiwadi (Km 221+350) in the state of Rajasthan**

Abstract of Bill of Quantities

| Bill No. | Description | Amount (Rs.) |
|-------------------|---------------------------------------------------|---------------------|
| 1 | SITE CLEARANCE AND DISMANTLING | 60,64,628 |
| 2 | EARTH WORK | 1,66,31,997 |
| 3 | SUB BASE/ BASE | 3,99,56,880 |
| 4 | BITUMINOUS COURSE (FLEXIBLE PAVEMENT) | 10,58,18,362 |
| 5 | CEMENT CONCRETE PAVEMENT (RIGID PAVEMENT) | 12,58,96,100 |
| 6 | CROSS DRAINAGE STRUCTURE (CULVERTS, MINOR BRIDGE) | 3,84,53,004 |
| 7 | DRAINAGE WORKS | 7,50,18,610 |
| 8 | JUNCTIONS | 3,40,65,332 |
| 9 | TRAFFIC SIGNS, MARKING AND APPURTENANCES | 2,37,96,652 |
| Total Cost | | 46,57,01,565 |

Upgradation of Existing State Highway-25 from 4-Lane to 6 Lane including construction of drain for the stretch between Tapukara (Km 212+800) to Bhiwadi (Km 221+350) in the state of Rajasthan

Bill of Quantities (BILL No. - 1: SITE CLEARANCE AND DISMANTLING)

| Item No. | Descriptions | Unit | Qty. | Rate (Rs) | Amount (Rs) |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------|-----------|------------------|
| 1.01 | Clearing and Grubbing Road Land (Clearing and grubbing road land including uprooting rank vegetation, grass, bushes, shrubs, saplings and trees girth up to 300 mm, removal of stumps of trees cut earlier and disposal of unserviceable materials and stacking of serviceable material to be used or auctioned up to a lead of 1000 metres including removal and disposal of top organic soil not exceeding 150 mm in thickness.) By Mechanical Means | | | | |
| (i) | In area of light jungle | Ha. | 5.03 | 16669 | 83,762 |
| 1.02 | Dismantling of Flexible Pavements (Dismantling of flexible pavements and disposal of dismantled materials up to a lead of 1000 metres, stacking serviceable and unserviceable materials separately) By Mechanical Means | | | | |
| (i) | Bituminous courses | Cum | 1626 | 140 | 2,27,640 |
| (ii) | Granular courses | Cum | 16390 | 327 | 53,59,530 |
| 1.03 | Dismantling Kerb Stone (Dismantling kerb stone by manual means and disposal of dismantled material with all lifts and up to a lead of 1000 metre) | Rm | 4306 | 6 | 25,836 |
| 1.04 | Scarifying existing bituminous surface to a depth of 50 mm by mechanical means (Scarifying the existing bituminous road surface to a depth of 50 mm and disposal of scarified material with in all lifts and lead upto 1000 metres.) | Sqm | 91965 | 4 | 3,67,860 |
| | Total | | | | 60,64,628 |

Upgradation of Existing State Highway-25 from 4-Lane to 6 Lane including construction of drain for the stretch between Tapukara (Km 212+800) to Bhiwadi (Km 221+350) in the state of Rajasthan

Bill of Quantities (BILL No. - 2: EARTH WORK)

| Item No. | Descriptions | Unit | Qty. | Rate (Rs) | Amount (Rs) |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|------------------|--------------------|
| 2.01 | Earth work in excavation, including stacking/disposal of surplus material with all lifts and lead up to 50 meters, exclusive of compensation of earth [MoRTH specification : Clause 301 to 305] | Cum | 68358 | 87 | 59,47,146 |
| 2.02 | Excavation for Structures (Earth work in excavation of foundation of structures as per drawing and technical specification, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom, backfilling the excavation earth to the extent required and utilising the remaining earth locally for road work.) | | | | |
| (i) | Ordinary soil | Cum | 20003 | 131 | 26,20,393 |
| 2.03 | Embankment Construction with Material Obtained from Borrow Pits (Construction of embankment with approved material obtained from borrow pits with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement of table 300-2) | Cum | 908 | 125 | 1,13,500 |
| 2.04 | Construction of Embankment with Material Deposited from Roadway Cutting (Construction of embankment with approved materials deposited at site from roadway cutting and excavation from drain and foundation of other structures graded and compacted to meet requirement of table 300-2) | Cum | 9592 | 120 | 11,51,040 |
| 2.05 | Construction of Subgrade and Earthen Shoulders (Construction of subgrade and earthen shoulders with approved material obtained from borrow pits with all lifts & leads, transporting to site, spreading, grading to required slope and compacted to meet requirement of table No. 300-2) | Cum | 42860 | 150 | 64,29,000 |
| 2.06 | Compacting original ground supporting subgrade (Loosening of the ground upto a level of 500 mm below the subgrade level, watered, graded and compacted in layers to meet requirement of table 300-2 for subgrade construction.) | Sqm | 8626 | 43 | 3,70,918 |
| | Total | | | | 1,66,31,997 |

Upgradation of Existing State Highway-25 from 4-Lane to 6 Lane including construction of drain for the stretch between Tapukara (Km 212+800) to Bhiwadi (Km 221+350) in the state of Rajasthan

Bill of Quantities (BILL No. - 3: GRANULAR SUB-BASES, BASES COURSES)

| Item No. | Descriptions | Unit | Qty. | Rate (Rs) | Amount (Rs) |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------|-----------|--------------------|
| 3.01 | Granular Sub Base (Providing laying spreading and compacting specified graded sand, gravel as per Table 400-1,400-2 or any other course material as per design mix, as per CBR in sub base course including premixing the material at OMC in wet mix plant, carriage of mixed material spreading in uniform layers with motoe grader F.E loader on a prepared base and compacting with vibratory roller to achieve desired density (as per I.S.2720) including all material, labour, machinery, lighting guarding, barricading and maintenance of diversion complete.[MoRTH specification : Clause 401]. with all lead.) | Cum | 17307 | 1240 | 2,14,60,680 |
| 3.02 | Wet Mix Macadam (Providing, laying, spreading and compacting stone aggregate for Wet Mix Macadam (as per table 400-12 and 400-13) specification including premixing the material with water to OMC in wet mix plant as per approved design mix, carriage of mixed material by Tipper to site, laying in uniform layers with motor grader/Front end Loader/paver finisher, in sub base/ base course on a well prepared under base and compacting with vibratory roller to achieve the desired density including lighting, guarding, barricading and maintenance of diversion etc. (MoRTH specification : Clause 406 & Clause 112) by mechanical means with all lead.) | Cum | 12756 | 1450 | 1,84,96,200 |
| | Total | | | | 3,99,56,880 |

Upgradation of Existing State Highway-25 from 4-Lane to 6 Lane including construction of drain for the stretch between Tapukara (Km 212+800) to Bhiwadi (Km 221+350) in the state of Rajasthan

Bill of Quantities (BILL No. - 4: BITUMINOUS COURSES (FLEXIBLE PAVEMENT))

| Item No. | Descriptions | Unit | Qty. | Rate (Rs) | Amount (Rs) |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--------|-----------|-------------|
| 4.01 | Providing and applying primer coat over prepared surface or granular base with bitumen emulsion (SS-1) as per IS: 8887 & manufacturer's specifications @ 7.5 kg /10 sqm with a self propelled or towed bitumen pressure sprayer equipped for spraying the material uniformly at specified rates and temperatures as per MORTH specification CI 502,112 (Including cleaning of road surface) | Sqm | 47958 | 37.50 | 17,98,425 |
| 4.02 | Providing and applying tack coat on the prepared surface ,with bitumen emulsion (RS-1) as per IS : 8887 & manufacturer's specifications @ 2.50 kg /10sqm. With a self propelled or towed bitumen pressure sprayer equipped for spraying the material uniformly at specified rates and temperatures as per MORTH specification CI.503,112 (Including cleaning of Road Surface) | Sqm | 139923 | 11.80 | 16,51,091 |
| 4.03 | Dense Bituminous Macadam (Providing and laying Dense Bituminous Macadam on prepared surface with specified graded crushed aggregates as per table 510 and design mix for base/binder course including loading of material with F.E loader heating of binder aggregate and filler in approved hot mix plant as per clause 6.5 of manual transporting the mixed material by tippers and laying with sander paver finisher as per clause 507.3.5 to the required level and grade rolling by self propelled power rollers and vibratory rollers or pneumatic tyred roller 150-250KN. TP=0.7MPa to achieve the desired density (approved by the department) but excluding cost of primer/tack coat. [MoRTH Specification : Clause 507,112] including antistripping agent with all lead.) | | | | |
| (i) | Grading I (40 mm nominal size) - Bitumen @ minimum 4.0 % of mix (VG-30 grade) & thickness 80 - 100 mm | Cum | 4610 | 7015 | 3,23,39,150 |

| Item No. | Descriptions | Unit | Qty. | Rate (Rs) | Amount (Rs) |
|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------|-----------|---------------------|
| 4.04 | <p>Bituminous Concrete (Providing and laying bituminous concrete as per design mix on prepared surface with specified graded stone as per table 500-17 for wearing course including loading of aggregate with F.E loader and hot mixing of binder and 2% cement filler with aggregates in approved hot mix plant as per clause 6.5 of manual Transporting the mix material with tipper to paver and laying with sensor paver finisher (as per clouse 507.3.5) to the required level , grades and rolling with vibratory compactor and pneumatic tyred roller 150-250 KN,TP=0.7 Mpa, to achieve the desired density (approved by the department) excluding cost of primer/tack coat (MORTH Specification : Clause -507,112) including Antistripping Agent with all lead.)</p> <p>PMB-76-10E confirming to IS 15462 - 2019</p> <p>(PMB 76-10E shall be produced with VG30 bitumen to be blended with High Vinyl SBS type of Elastoimeric Polymer; minimum 4.2% of Linear High enyl SBS Polymer having >90% Triblock content and >35% Vinyl Content. PMB shall be suitable stable and resistent to thermal degradation.)</p> | | | | |
| (i) | Grading-II compacted thickness 30-40mm (13.2mm Nominal Size aggregate). Minimum PMB shall be 5.4%. Binder content to be as per Job Mix Design; no additional payment to PMB admissible if binder content is more than 5.4% | Cum | 6744 | 10384 | 7,00,29,696 |
| | Total | | | | 10,58,18,362 |

Upgradation of Existing State Highway-25 from 4-Lane to 6 Lane including construction of drain for the stretch between Tapukara (Km 212+800) to Bhiwadi (Km 221+350) in the state of Rajasthan

Bill of Quantities (BILL No. - 5: CC PAVEMENT (RIGID PAVEMENT))

| Item No. | Descriptions | Unit | Qty. | Rate (Rs) | Amount (Rs) |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------|-----------|---------------------|
| 5.01 | Construction of dry lean cement concrete sub-base over a prepared sub-grade with coarse and fine aggregate conforming to IS: 383, the size of coarse aggregate not exceeding 25 mm , aggregate cement ratio not to exceed 15:1 , aggregate gradation after blening to be as per Table 600-1, cement content not to be less than 150 Kg/Cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant as per mix design, transported to site, laid with a hydrostatic paver with electronic sensor, compacting with 8-10 tonne vibratory roller, finishing and curing complete as per MoRTH specification clause 601. | Cum | 7900 | 2878 | 2,27,36,200 |
| 5.02 | Construction of un-reinforced, dowel jointed, plain cement concrete pavement over a prepared sub-base with 43 grade cement @ 400 Kg per cum , coarse and fine aggregate conforming to IS: 383, maximum size of coarse aggregate not exceeding 25 mm, mixed in a batching and mixing plant as per approved mix design, transported to site, laid with a slip form paver, spread, compacted and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints, joint filler, separation membrane, sealant primer, joint sealant, debonding strip, dowel bar, tie rod, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per MoRTH specification clause 602. | Cum | 15397 | 6700 | 10,31,59,900 |
| | Total | | | | 12,58,96,100 |

Upgradation of Existing State Highway-25 from 4-Lane to 6 Lane including construction of drain for the stretch between Tapukara (Km 212+800) to Bhiwadi (Km 221+350) in the state of Rajasthan

Bill of Quantities (BILL No. - 6: CROSS DRAINAGE STRUCTURE (CULVERTS, MINOR BRIDGE))

| Item No. | Description | Unit | Qty. | Rate (Rs.) | Amount (Rs.) |
|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------|------------|--------------|
| 6.01 | Excavation for Structures (Earth work in excavation of foundation of structures as per drawing and technical specification, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom and backfilling with approved material.) | Cum | 4913 | 147 | 7,22,211 |
| 6.02 | Plain/Reinforced cement concrete in open foundation complete as per drawing and technical specifications. | | | | |
| (i) | PCC M-15 | Cum | 408 | 4244 | 17,31,552 |
| 6.03 | Plain/Reinforced cement concrete in open foundation complete as per drawing and technical specifications. | | | | |
| (i) | RCC M-30 | Cum | 524 | 5437 | 28,48,988 |
| 6.04 | Plain/Reinforced cement concrete in sub-structure complete as per drawing and technical specifications. | | | | |
| (i) | RCC M-30 | Cum | 1218 | 5437 | 66,22,266 |
| 6.05 | PCC M15 Grade leveling course below approach slab complete as per drawing and Technical specifications. | Cum | 181 | 4082 | 7,38,842 |
| 6.06 | Reinforced cement concrete approach slab including reinforcement and formwork complete as per drawing and Technical specification. | | | | |
| (i) | RCC M-30 | Cum | 361 | 8900 | 32,12,900 |
| 6.07 | Providing and laying cement concrete wearing coat M-30 grade including reinforcement complete as per drawing and MoRTH specification section 2702. | Cum | 407 | 10730 | 43,67,110 |
| 6.08 | Supplying, fitting and placing HYSD bar reinforcement in substructure complete as per drawing and technical specification MoRTH Section 1600,2200. | MT | 112 | 95000 | 1,06,40,000 |

| Item No. | Description | Unit | Qty. | Rate (Rs.) | Amount (Rs.) |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------|------------|--------------|
| 6.09 | Providing and laying of filter media with granular materials/ stone crushed aggregates satisfying the requirements laid down in Clause 2504.2. Of MORT&H specifications to a thickness of not less than 600 mm with smaller size towards the soil and bigger size towards the wall and provided over the entire surface behind abutment, wing wall and return wall to the full height compacted to a firm condition complete as per drawing and technical specifications clause 710.1.4 of IRC 78 & MoRTH section 2200. | Cum | 623 | 522 | 3,25,206 |
| 6.10 | Providing and laying flooring complete as per drawing and Technical specification laid over cement concrete bedding 15 cm thick as per MoRTH specification clause 2505, 1700. | | | | |
| (i) | Cement concrete blocks Grade M -15 in CM 1:3 with form work. | Cum | 200 | 5701 | 11,40,200 |
| 6.11 | Flexible apron: Construction of flexible apron 1 m thick comprising of loose stone boulders weighing not less than 40 Kg beyond curtain wall complete as per MoRTH specification clause 2507.2 | Cum | 1261 | 893 | 11,26,073 |
| 6.12 | Providing A.C pipe Weep holes 150mm dia in Masonry/Plain Concrete/.Reinforced Concrete abutment, wing wall/return wall complete as per drawing and technical specification.[MoRTH Specification Clause 2205] | Rm | 836 | 115 | 96,140 |
| 6.13 | Providing and fixing drainage spouts complete as per drawing and Technical specification. | Nos. | 52 | 1736 | 90,272 |
| 6.14 | Providing & Fixing reinforced cement concrete crash barrier at the edges of the road, approaches to bridge structures and medians, constructed with concrete with HYSD reinforcement conforming to IRC: 21 and dowel bars 25 mm dia , 450 mm long at expansion joints filled with pre-moulded asphalt filler board, keyed to the structure on which it is built and installed as per design given in the enclosure to MOST Circular No. RW/ NH- 33022/ 1/ 94-DO III dated 24th June 1994 as per dimensions in the approved drawing and at locations directed by the Engineer , all as specified as per MORTH specification Cl. 809. | | | | |
| (i) | M-30 grade Concrete | Rm | 285 | 3607 | 10,27,995 |
| 6.15 | Providing and laying filter material underneath pitching on slopes complete as per drawing and MoRTH specifications clause 2504. | Cum | 137 | 654 | 89,598 |

| Item No. | Description | Unit | Qty. | Rate (Rs.) | Amount (Rs.) |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------|------------|--------------------|
| 6.16 | Providing and laying pitching on slopes laid over prepared filter media including boulder apron laid dry in front of toe of embankment complete as per drawing and MoRTH specifications clause 2504. | | | | |
| (i) | Using Stone/ Boulder weighing not less than 40 Kg., thickness not less than 150mm & specific gravity not less than 2.65. | Cum | 274 | 845 | 2,31,530 |
| 6.17 | Curtain wall excluding excavation filter media weep holes etc.complete as per drawing and MoRTH specification clause 2507.1, 1700. | | | | |
| (i) | Cement concrete grade M 15. | Cum | 471 | 4244 | 19,98,924 |
| 6.18 | Back filling behind abutment, wing wall and return wall, in 150mm layers, with mechanical compaction, complete with all lead and lift, as per drawing and technical specification. [MoRTH Specification : Clause : 304] | | | | |
| (i) | Sandy material | Cum | 292 | 368 | 1,07,456 |
| 6.19 | Filler joint (Providing & fixing 2 mm thick corrugated copper plate in expansion joint complete as per drawing & Technical Specification, including cost of all labour, material, usage charges of machinery, lead, lifts, loading, unloading, transporting, etc., complete) | Rm | 351 | 3744 | 13,14,144 |
| 6.20 | Painting Two Coats on New Concrete Surfaces (Painting two coats after filling the surface with synthetic enamel paint in all shades on new plastered concrete surfaces, including cost of all materials all labour, lead, lifts, loading, unloading transporting etc., complete.) | | | | |
| (i) | New Surface | Sqm | 313 | 69 | 21,597 |
| | Total | | | | 3,84,53,004 |

Upgradation of Existing State Highway-25 from 4-Lane to 6 Lane including construction of drain for the stretch between Tapukara (Km 212+800) to Bhiwadi (Km 221+350) in the state of Rajasthan

Bill of Quantities (BILL No. - 7: DRAINAGE WORKS)

| Item No. | Descriptions | Unit | Qty. | Rate | Amount (Rs.) |
|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------|-------|--------------|
| 7.01 | PCC 1:3:6 in Foundation (Providing and laying mechanically mixed and vibrated Cement Concrete in foundation up to a depth of 1.5 meters below ground level and 1.50 meters above Ground/Bed level. [MoRTH Specification : Clause 1000/1700]) Cement concrete 1:3:6 mix crushed stone aggregates 40mm nominal size. | Cum | 2190 | 3789 | 82,97,910 |
| 7.02 | Stone masonry work in cement mortar 1:3 in foundation complete as drawing and Technical Specification | | | | |
| (i) | Random Rubble Masonry | Cum | 23 | 3711 | 85,353 |
| 7.03 | Plain/Reinforced cement concrete in open foundation complete as per drawing and technical specifications | | | | |
| (i) | PCC Grade M15 | Cum | 45 | 4244 | 1,90,980 |
| 7.04 | Providing and laying cement concreting including curing compaction etc. complete using stone aggregate 20mm nominal size mechanically mixed & vibrated in foundation and plinth including the cost of shuttering if required. | | | | |
| (i) | RCC Grade M20 | Cum | 9055 | 4905 | 4,44,14,775 |
| 7.05 | Supplying, fitting and placing un-coated HYSD bar reinforcement in foundation complete as per drawing and technical specifications | MT | 213 | 95000 | 2,02,35,000 |
| 7.06 | Pointing with cement mortar (1:3) on brick work in substructure as per Technical specifications | Sqm | 62 | 106 | 6,572 |

| Item No. | Descriptions | Unit | Qty. | Rate | Amount (Rs.) |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------|------|--------------------|
| 7.07 | Providing and Laying Reinforced Cement Concrete Pipe NP4/prestrssed concrete pipe on first class bedding in single row . (Laying Reinforced cement concrete pipe NP4/prestrssed concrete pipe for culverts on first class bedding of granular material in single row including fixing collar with cement mortar 1:2 but excluding excavation, protection works, backfilling, concrete and masonry works in head walls and parapets .) | | | | |
| (i) | 1200 mm dia | Rm | 230 | 7774 | 17,88,020 |
| | Total | | | | 7,50,18,610 |

Upgradation of Existing State Highway-25 from 4-Lane to 6 Lane including construction of drain for the stretch between Tapukara (Km 212+800) to Bhiwadi (Km 221+350) in the state of Rajasthan

Bill of Quantities (BILL No. - 8: JUNCTIONS)

| Item No. | Description of Item | Unit | Qty. | Rate (Rs.) | Amount (Rs.) |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|-------------------|---------------------|
| 8.01 | Clearing and grubbing road land including uprooting rank vegetation, grass, brush, shrubs, saplings and trees of girth upto 300 mm, removal of stumps, disposal of unserviceable material upto 1000 m from road boundary. (MoRTH Specification : Clause 201) | Ha | 2.70 | 16669 | 45,006 |
| 8.02 | Construction of sub-grade and earthen shoulders with approved material obtained from borrow pits with all lifts and leads, transportings to site, spreading, grading to require slope and compacted by vibratory roller 8-10 tonne to meet requirement of Table 300-2 as per MoRTH specification : Clause No. 305 | Cum | 13496 | 150 | 20,24,400 |
| 8.03 | Granular Sub-Base with Coarse Graded Material (Table:- 400- 2) (Construction of granular sub-base by providing coarse graded material, spreading in uniform layers with motor grader on prepared surface, mixing by mix in place method with rotavator at OMC, and compacting with vibratory roller to achieve the desired density, complete as per clause 401) | Cum | 5398 | 1240 | 66,93,520 |
| 8.04 | Providing laying, spreading and compacting crushed graded stone aggregate as per table 400.10 and 400.11 to wet mix macadam specification including premixing the material with water to OMC in mechanical mixer (Pug mill) as per design mix, carriage of mixed material by tipper to site laying in uniform layers, with motor grade/ F.E. loader / paver finisher in sub base / base course on a well prepared under base and compacting with vibratory roller to achieve the desired density including lighting, gaurding, barricating and maintenance of diversion etc (MoRTH specification : clause 406). By mechanical means with lead upto 1 Km. | Cum | 6748 | 1450 | 97,84,600 |

| Item No. | Description of Item | Unit | Qty. | Rate (Rs.) | Amount (Rs.) |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------|------------|--------------|
| 8.05 | Providing and applying primer coat over prepared surface of granular base with bitumen emulsion as per IS:8887 & manufacturer specification @7 kg/10 Sqm. with a self propelled or towed bitumen pressure sprayer equipped for spraying the material uniformly at specified rates and temperatures (including cleaning of road surface) as per MoRTH specification :CL.502, 112. | Sqm | 18563 | 38 | 6,96,113 |
| 8.06 | Providing and applying tack coat on the prepared surface, with bitumen emulsion as per IS:8887 & manufacturer's specification @0.2 kg/Sqm. with a self propelled or towed bitumen pressure sprayer equipped for spraying the material uniformly at specified rates and temperatures (including cleaning of road surface) as per MoRTH specification :CL.502, 112. | Sqm | 18563 | 12 | 2,19,043 |
| 8.07 | Providing and Laying Dense Bituminous Macadam on prepared surface with specified graded crushed aggregates (as per table 500-9, 500-10 and design mix) for base/ binder course including loading of material with F.E. loader, heating of binder (including cost of anti stripping compound, wherever required) aggregates and filler in hot mix plant (40-60 TPH), transporting the mixed material by tippers and laying with sensor paver finisher as per clause 504.3.5 to the required level and grade. rolling by self propelled power rollers and vibratory rollers or pneumatic tired roller, 150-250 KN TP=0.7 Mpa, to achieve the desired density (approved by the department) but excluding primer/tack coat. (MoRTH specification : Clause 507,112) | | | | |
| (i) | Grading I (40 mm nominal size) - Bitumen @ minimum 4.0 % of mix (VG-30 grade) & thickness 80 - 100 mm | Cum | 1114 | 7015 | 78,14,710 |
| 8.08 | Providing and laying bituminous concrete with 100-120 TPH batch type hot mix plant producing an average output of 75 tonnes per hour using crushed aggregates of specified grading, premixed with bituminous binder @ 5.4 to 5.6 per cent of mix and filler, transporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRTH specification clause No. 509 complete in all respects | | | | |
| (i) | PMB-76-10E confirming to IS 15462 - 2019 | Cum | 557 | 10384 | 57,83,888 |

| Item No. | Description of Item | Unit | Qty. | Rate (Rs.) | Amount (Rs.) |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------|------------|--------------------|
| 8.09 | Construction of cement concrete kerb with top and bottom width 115 and 165 mm respectively, 250 mm high in M 20 grade on M-15 grade foundation 150 mm thick, foundation having 50 mm projection beyond kerb stone, kerb stone laid with kerb laying machine, foundation concrete laid manually, all complete as per clause 409 as per drawing, form work, curing including cost of all materials all labour, usage charges of all machinery, all lead, lifts, loading, unloading transporting etc., complete. Using concrete Batching and Mixing plant item 1 Km. mix lead is considered.. | Rm | 1239 | 343 | 4,24,977 |
| 8.10 | Footpaths and Separators (Construction of footpath/separator by providing a 150 mm compacted granular sub base as per clause 401 and 25 mm thick cement concrete grade M15, over laid with precast concrete tiles in cement mortar 1:3 including provision of all drainage arrangements but excluding kerb channel..) | Sqm | 1103 | 525 | 5,79,075 |
| | Total | | | | 3,40,65,332 |

Upgradation of Existing State Highway-25 from 4-Lane to 6 Lane including construction of drain for the stretch between Tapukara (Km 212+800) to Bhiwadi (Km 221+350) in the state of Rajasthan

Bill of Quantities (BILL No. - 9: TRAFFIC SIGNS, MARKINGS & APPURTENANCES)

| Item No. | Descriptions | Unit | Qty. | Rate (Rs.) | Amount (Rs.) |
|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------|------------|--------------|
| 9.01 | Cast in Situ Cement Concrete M20 kerb (Construction of cement concrete kerb with top and bottom width 115 and 165 mm respectively, 250 mm high in M 20 grade PCC on M-10 grade foundation 150 mm thick, foundation having 50 mm projection beyond kerb stone, kerb stone laid with kerb laying machine, foundation concrete laid manually, all complete as per clause 408) | | | | |
| (i) | Using Concrete Batching and Mixing Plant | Rm | 4306 | 343 | 14,76,958 |
| 9.02 | Retro- reflectorised Traffic signs (Providing and fixing of retro- reflectorised cautionary, mandatory and informatory sign as per IRC :67 made of encapsulated lens type reflective sheeting vide clause 801.3, fixed over aluminium sheeting, 1.5 mm thick supported on a mild steel angle iron post 75 mm x 75 mm x 6 mm firmly fixed to the ground by means of properly designed foundation with M15 grade cement concrete 45 cm x 45 cm x 60 cm, 60 cm below ground level as per approved drawing) | | | | |
| (i) | 90 cm equilateral triangle | Nos. | 100 | 4310 | 4,31,000 |
| (ii) | 80 mm x 60 mm rectangular | Nos. | 50 | 5199 | 2,59,950 |
| (iii) | 90 cm high octagon | Nos. | 14 | 6512 | 91,168 |
| 9.03 | Direction and Place Identification signs upto 0.9 sqm size board. (Providing and erecting direction and place identification retro-reflectorised sign as per IRC:67 made of encapsulated lens type reflective sheeting vide clause 801.3, fixed over aluminium sheeting, 2 mm thick with area not exceeding 0.9 sqm supported on a mild steel single angle iron post 75 x 75 x 6 mm firmly fixed to the ground by means of properly designed foundation with M15 grade cement concrete 45 x 45 x 60 cm, 60 cm below ground level as per approved drawing) | | | | |
| (i) | for 600 X 900 mm size board (For Villages) | Nos. | 20 | 5047 | 1,00,940 |
| (ii) | for 900 X 600 mm size board (For Minor Junction) | Nos. | 18 | 5047 | 90,846 |
| (iii) | for 1200 X750 mm size board | Nos. | 10 | 8413 | 84,130 |

| Item No. | Descriptions | Unit | Qty. | Rate (Rs.) | Amount (Rs.) |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|------|------------|--------------|
| (iv) | for 900 X 750 mm size board | Nos. | 10 | 6309 | 63,090 |
| 9.04 | Direction and Place Identification signs with size more than 0.9 sqm size board. (Providing and erecting direction and place identification retro- reflectorised sign as per IRC :67 made of encapsulated lens type reflective sheeting vide clause 801.3, fixed over aluminium sheeting, 2 mm thick with area exceeding 0.9 sqm supported on a mild steel angle iron post 75 mm x 75 mm x 6 mm, 2 Nos. firmly fixed to the ground by means of properly designed foundation with M 15 grade cement concrete 45 cm x 45 cm x 60 cm, 60 cm below ground level as per approved drawing) | | | | |
| (i) | for 1800 X 1200 mm size board | Nos. | 17 | 20189 | 3,43,213 |
| (ii) | for 1500 X 1200 mm size board | Nos. | 14 | 16825 | 2,35,550 |
| 9.05 | Overhead Signs (Providing and erecting overhead signs with a corrosion resistant aluminium alloy sheet reflectorised with high intensity retro-reflective sheeting of encapsulated lense type with vertical and lateral clearance given in clause 802.2 and 802.3 and installed as per clause 802.7 over a designed support system of aluminium alloy or galvanised steel trestles and trusses of sections and type as per structural design requirements and approved plans) | | | | |
| (i) | Truss and Vertical Support | Tonne | 29 | 74216 | 21,52,264 |
| (ii) | Aluminium alloy plate for over head sign | Sqm | 329 | 5821 | 19,15,109 |
| 9.06 | Road Marking with Hot Applied Thermoplastic Compound with Reflectorising Glass Beads on Bituminous Surface (Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads @ 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 .The finished surface to be level, uniform and free from streaks and holes.) | Sqm | 7647 | 565 | 43,20,555 |
| 9.07 | Kilo Metre Stone (Supply & fixing of precast reinforced cement concrete M-15 grade kilometre stone of standard design as per IRC: 8-1980, fixing in position in cement concrete 1:4:8 including painting and printing etc.) | | | | |
| (i) | 5th kilometre stone (precast) | Nos. | 4 | 2261 | 9,044 |
| (ii) | Ordinary Kilometer stone (Precast) | Nos. | 13 | 1390 | 18,070 |
| (iii) | Hectometer stone (Precast) | Nos. | 66 | 374 | 24,684 |
| 9.08 | Road Delineators (Supplying and fixing delineators with 15cm. dia cement concrete M-15 solid block with nominal reinforcement 80-100 cm. long embedded in cement concrete 1:4:8 (1 cement : 4 coarse sand : 8 coarse aggregate 20mm nominal size (45cm. x 45cm.x 60cm.) painted 15 cm. wide alternate strips black /white with enamel paint (black strip at top) with white round reflector 7.5 cm. dia at top on side facing the traffic and opposite side (as per IRC-79). | Nos. | 315 | 491 | 1,54,665 |
| 9.09 | Boundary pillar (Reinforced cement concrete M15 grade boundary pillars of standard design as per IRC:25-1967, fixed in position including finishing and lettering but excluding painting) | Nos. | 332 | 531 | 1,76,292 |

| Item No. | Descriptions | Unit | Qty. | Rate (Rs.) | Amount (Rs.) |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------|--------------|--------------------|
| 9.10 | Metal Beam Crash Barrier -Type - A, "W" : Metal Beam Crash Barrier (Providing and erecting a "W" metal beam crash barrier comprising of 3 mm thick corrugated sheet metal beam rail, 70 cm above road/ground level, fixed on ISMC series channel vertical post, 150 x 75 x 5 mm spaced 2 m centre to centre, 1.8 m high, 1.1 m below ground/road level, all steel parts and fitments to be galvanised by hot dip process, all fittings to conform to IS:1367 and IS:1364, metal beam rail to be fixed on the vertical post with a spacer of channel section 150 x 75 x 5 mm, 330 mm long complete as per clause 810) | Rm | 2000 | 3304 | 66,08,000 |
| 9.11 | Cable Duct Across the Road (Providing and laying of a reinforced cement concrete pipe duct, 300 mm dia, across the road (new construction), extending from drain to drain in cuts and toe of slope to toe of slope in fills, constructing head walls at both ends, providing a minimum fill of granular material over top and sides of RCC pipe as per IRC:98-1997, bedded on a 0.3 m thick layer of granular material free of rock pieces, outer to outer distance of pipe at least half dia of pipe subject to minimum 450 mm in case of double and triple row ducts, joints to be made leak proof, invert level of duct to be above higher than ground level to prevent entry of water and dirt, all as per IRC: 98 - 1997 and approved drawings.) | | | | |
| (i) | Single Row for one utility service | Rm | 510 | 1960 | 9,99,600 |
| 9.12 | Road Markers/Road Stud with Lense Reflector (Providing and fixing of road stud 100x 100 mm, die cast in aluminium, resistant to corrosive effect of salt and grit, fitted with lense reflectors, installed in concrete or asphaltic surface by drilling hole 30 mm upto a depth of 60 mm and bedded in a suitable bituminous grout or epoxy mortar, all as per BS 873 part 4:1973) | Nos. | 7466 | 458 | 34,19,428 |
| 9.13 | Supply and Fixing of 'L' type Bollard made out of 1.25 mm thick M.S. sheet height 134 cm, welded in circular type ring section having upper dia 15 cm. and lower dia 21 cm with another attachment of 15x15 cm circular section with 15 cm. face plate and hold fast at bottom, whole body is processed in white stoving enamel and red reflective 3 hands, each of 7.5 cm end one reflective sheet of 15 cm. dia provided to it complete in all respect. | Nos. | 12 | 1594 | 19,128 |
| 9.14 | Supplying and Fixing of Bollard including excavation and laying cement concrete (1:3:6) (size 45x45x30cm) in foundation & curing complete as per specifications | Nos. | 12 | 289 | 3,468 |
| 9.15 | Supply and fixing of Chevron sign of size 600x450 mm thick with fixing provision on MS angle iron post 50x50x6mm 3M long screwed with stainless steel nut bolts of 8m dia plate is covered by high intensity grade retro reflective sheeting and black reflective arrow, complete in all respect | Nos. | 180 | 4066 | 7,31,880 |
| 9.16 | Construction of Median and Island with Soil Taken from Borrow Areas (Construction of median and Island above road level with approved material brought from borrow pits, spread, sloped and compacted as per clause 408) | Cum | 294 | 230 | 67,620 |
| | | | | Total | 2,37,96,652 |