

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

## **BID DOCUMENT**

**For**

**Routine Maintenance Works on following selected stretches: Baran-Jhalawar  
(Package: LJ-2), Jhalawar-Jhalawar Road (Package: JJ) and Jhalawar-Ujjain  
(upto State Border) (Package: JU) roads in Rajasthan**

### **Road Infrastructure Development Company of Rajasthan (RIDCOR)**

701-706, 7th Floor, ARG Corporate Park, Gopalbari, Ajmer Road,  
Jaipur-302001 (Rajasthan), Tel. (0141) 2747001/2

**E-Mail :** tender.office@ridcor.in

CIN: U45203RJ2004PLC019850

**October 2022**

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

701-706, 7th Floor, ARG Corporate Park, Gopalbari, Ajmer Road,  
Jaipur-302001 (Rajasthan), Tel. (0141) 2747001/2

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CIN: U45203RJ2004PLC019850

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**INVITATION FOR BID**

**Date: October 27, 2022**

**Sub.:** Routine Maintenance Works on following selected stretches: Baran-Jhalawar (Package: LJ-2), Jhalawar-Jhalawar Road (Package: JJ) and Jhalawar-Ujjain (upto State Border) (Package: JU) roads in Rajasthan

**Dear Sir,**

- (1) M/s Road Infrastructure Development Company of Rajasthan (RIDCOR) hereby invites sealed Bids from contractors for the work of **“Execution of Routine Maintenance Works on Baran-Jhalawar (Package: LJ-2), Jhalawar-Jhalawar Road (Package: JJ) and Jhalawar-Ujjain (upto State Border) (Package: JU) roads in Rajasthan”**

The period for completion of the works shall be 12 months period. Subsequent to completion of the Works, Contractor shall be responsible for any defect arising in the items covered therein for a period of 12 Months from the Works Completion Date as specified in the Contract Data

- (2) Deleted
- (3) Bidding documents may be downloaded by the contractors, *free of cost*, from the Employer’s web site [www.itnlindia.com](http://www.itnlindia.com) & [www.ridcor.in](http://www.ridcor.in) from **October 28, 2022, 11.00 Hrs. to November 11, 2022, 17.00 Hrs.**
- (4) Bid must be accompanied by **Bid Security as per details provided in following table** for BOQ given in Section 7, in favour of Road Infrastructure Development Company of Rajasthan Ltd (RIDCOR), payable at Jaipur, Rajasthan.

Sr. No.	Particular	Bid Security in ₹
1	Bid Security	₹ 12 Lakh
2	Estimated Cost of Work	₹ 5.77 Cr

Bid Security will have to be in the form as specified in the Bidding Document and shall have to be valid for **120 days beyond the validity of the Bid.**

- (5) Bid must be send to email id [tender.office@ridcor.in](mailto:tender.office@ridcor.in) in password protected file and *password of bid shall be sent on Dilip.Bhatia@ilfsindia.com via soft copy mode (All the bids heavy in size can be submitted via link) upto 18.00 Hrs by November 11, 2022.*
- (6) Hard copy of the Bid will also delivered to following location by November 11, 2022 at 18:00 Hrs..

Road Infrastructure Development Company of Rajasthan (RIDCOR),  
701-706, 7th Floor, ARG Corporate Park, Gopalbari, Ajmer Road,  
Jaipur-302001 (Rajasthan), Tel. (0141) 2747001/2

**Signature of Authorized Officer**

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

## Terms & conditions of Bid

Bidders should read these conditions and the complete bid document for Technical part and financial part carefully and comply strictly while submitting their bids.

1. The Bid Security 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 & Bid Fee through Electronic mode of payment are as under :
  - a) Beneficiary Name : RIDCOR Ltd.
  - b) Account No. : 2164002100008369
  - c) Beneficiary Bank : Punjab National Bank
  - d) Beneficiary Branch : Large Corporate Branch, Tolstoy House, New Delhi-110001
  - e) Branch IFSC Code : PUNB0216400

The bid security in the form of Bank Guarantee shall be submitted by the bidder upto 18.00 Hrs by *November 11,2022* at RIDCOR Head Office, Jaipur.

2. Bidder should specifically mention UTR No. (Unit Transaction Reference) in his bid.
3. The time period for completion of the work is 12 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.
4. Director/Manager, RIDCOR reserves right to cancel the Bid without assigning any reason to the Bidder or anyone else.
5. Conditional Bid and casual letters sent by the contractors about the bid will not be accepted.
6. Any representation on the procedure of bidding after opening of bidders shall be ignored. Such parties may be debarred from bidding in future for a period of 1 year.
7. Bidders are requested to read the instructions in the Bid Document and visit the site before submitting the Tender/Bid.
8. ***Bidders, who are already awarded with 2 or more RM works in year 2022 by RIDCOR, will not be eligible to bid.***
9. 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 bidders.
10. Director/Manager (RIDCOR) reserves the right to accept any bid not necessarily the lowest bid and reject any or all bid/ bids without assigning any reason thereof.
11. The bidder shall not assign or sublet his bid or any part thereof to any other agency without prior written approval of Director/Manager or authorized representative of

RIDCOR.

12. The bidder 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 bid submission.
13. The bidder 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.
14. 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 bidding for this work.
15. **All the enclosed documents, Performa's, annexures, appendices, certificates etc. should be digitally signed by the bidder & must be submitted.**
16. **Release of Bid security:**
  - (i) Bid security of the bidder except L1 & L2 shall be released immediately upon receipt of request by the bidder in original or through Email.
  - (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.
17. **Forfeiture of Bid Security:** The Bid Security will be forfeited in the following cases:
  - (i) When bidder withdraws or modifies the offer after opening of technical bid of tender.
  - (ii) When tenderer does not submit the undertaking with respect to Clause 2.2 of ITB within the specified time.
18. Successful bidder will have to execute the contract agreement on requisite non-judicial stamp papers as per norms of GoR.
19. **Performance security:**
  - (i) The successful bidder 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 bidder 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 bid 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) The performance security shall be released upon completion of defect liability period of 12 months for items covered therein after completion of work. If, the bidder 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 bid 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 within the specified period shall also result in cancellation of LOA. Such bidders may be debarred from bidding in RIDCOR for 1 year.
20. 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.
21. Bids shall be valid for a period of 120 days from the date of opening of technical bid.
22. RIDCOR has invited bid for routine maintenance works on following selected stretches of Mega Highways Project roads:

S. No.	Name of Package Road	Amount (Rs in Cr.)
<b>Package-1</b>		
1	Lalsot-Kota (LJ-1) (Km 103-Km 188)	1.78
<b>Total (A)</b>		
<b>Package-2</b>		
1	Baran-Jhalawar (LJ-2)	2.51
2	Jhalawar- Jhalawar Road (JJ)	2.14
3	Jhalawar-Ujjain Road (JU)	1.12
<b>Total (B)</b>		5.77
<b>Grand Total (A+B)</b>		7.55

23. 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.

24. 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.
25. Any grievance related to bid may be resolved as per procedure adopted in Annexure-4. All legal proceedings, if any, arising out of this bid 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.
26. All taxes including GST are inclusive in the rates.
27. 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.
28. 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.
29. 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.
30. Contractors debarred or black listed by any department of Rajasthan State Govt. or any other States/Union Territories are not eligible to bid.
31. Contractors, who have left incomplete any work awarded in last 1 year 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 bid have been altered/changed.

Date:

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



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**SECTION 1:**

**INSTRUCTIONS TO BIDDERS**  
**(ITB)**

# SECTION 1: INSTRUCTIONS TO BIDDERS

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## A : GENERAL

### 1. Scope of Works

- 1.1 RIDCOR (hereinafter be referred to as the “Employer”) proposes to execute the Routine Maintenance Works on selected stretches of **Baran-Jhalawar (Package: LJ-2), Jhalawar-Jhalawar Road (Package: JJ) and Jhalawar-Ujjain (upto State Border) (Package: JU) roads in 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) Repairing Local Potholes;
- (ii) Roadway excavation;
- (iii) Construction of embankment, sub-grade and earthen shoulders;
- (iv) Providing and applying low viscosity bitumen emulsion, prime coat, tack coat, seal coat;
- (v) Milling of Bituminous pavement upto 50 mm using Milling Machine and disposal of surplus material with all lead and salvage value;
- (vi) Providing and laying of brick masonry, stone masonry, plaster etc.;
- (vii) Bituminous Work using DBM/BC Material;
- (viii) Strengthening of existing crust with GSB, WMM, DBM etc.;
- (ix) Road Marking with Hot Applied Thermoplastic Compound with Reflectorizing Glass Beads on Bituminous Surface;
- (x) Providing and laying of NP-4 size 300 to 1200 mm dia Pipe;
- (xi) Providing and laying of cement concrete (M-15 to M-40);
- (xii) Whitewashing/painting of trees; Km Stones, toll buildings, crash barriers etc.; and
- (xiii) Clearing of Litter and Debris from road and structures
- (xiv) Any activity as per BOQ mentioned hereinbelow and other incidental to the above activities.

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 items covered therein for a period of 12 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 operation and maintenance of the existing road and facilities thereto 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 **“Routine Maintenance Works on selected stretches of Baran-Jhalawar (Package: LJ-2), Jhalawar-Jhalawar Road (Package: JJ) and Jhalawar-Ujjain (upto State Border) (Package: JU) roads in 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 12 months for the items of work as specified in Contract Data.

## **2. Eligible Bidders**

- 2.1(a) All the Contractors who will produce the certificate that they have successfully completed construction of any road work/maintenance of road works for an amount equal to or more than 100% of the Estimated Cost in any one of the Financial Year during last 3 years (2019-20, 2020-21, 2021-22) are eligible to bid.
- 2.1(b) The bidders having turnover equal to or more 100% of the Estimated Cost for participation in Bid in any one of the Financial Year during last 3 years (2019-20, 2020-21, 2021-22) or minimum net worth of 100% of Estimated Cost at the close the preceding Financial Year i.e. 31 March, 2022. For the purpose of calculation of financial capacity of the bidder, the turnover/net worth of the sister concern, if any, shall not be considered. Turnover/net worth of entity which is participating in bid shall only be considered on standalone basis. “Sister concern means any business concern with close affiliations to the bidder such as subsidiary company, Holding company, Joint Venture company, associate company, partnership firms, proprietorship firms etc.”

In case of Partnership firm/LLP firm, the turnover/net worth of the firm and not of the individual partners shall be considered.

- 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.
- 2.3 ***Bidders, who are already awarded with 2 or more RM works in RIDCOR/RIPL in year 2022, will not be eligible to bid.***

### **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 2.1(a) in any one of the Financial Year during last 3 years (2019-2020, 2020-21, 2021-22): 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 turnover of estimated cost defined in clause 2.1(b) in any one of the Financial Year during last 3 years (2019-2020, 2020-21, 2021-22). 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 debaring / expelling of Bidder or abandonment of work by Bidder (as per S. No. 1.5 of Form 2A of Section 2);

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.

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.

<b>Invitation for Bid</b>	
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 Employer's web site [www.itnlindia.com](http://www.itnlindia.com) & [www.ridcor.in](http://www.ridcor.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 3 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: [www.ridcor.in](mailto:www.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 [www.ridcor.in](http://www.ridcor.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 [www.ridcor.in](http://www.ridcor.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.

11.3 The Bidder shall submit the Bid 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) 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 upto 18.00 Hrs, November 11, 2022
- f) Compliances as per Annexures 2, 3 & 4 of Section-2

Bid document along with related documents can be downloaded from the website [www.ridcor.in](http://www.ridcor.in) & [www.itnlindia.com](http://www.itnlindia.com)

## **Cover-2**

Envelope/Folder 'B' – 'Financial Proposal'

The bidder shall quote its financial proposal in Cover-2 (Envelope-B).

## **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.
- 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 44 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. 12.00 Lakh 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.
  - (e) The bid security in the form of Bank Guarantee shall be submitted by the bidder at RIDCOR Head Office, Jaipur also upto 18.00 Hrs, November 11, 2022
- 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 receipt of request by the bidder in original or through E-mail. 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 25 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: SUBMISSION OF BIDS**

### **17. Sealing and Marking of Bids**

- 17.1 The Bidder shall seal the original and copy of the Bid duly filled in separate envelopes as described in Sub Clause 17.2, duly marking the envelopes as "**ORIGINAL**" and "**COPY**". These envelopes (called as inner envelopes) shall then be put inside **one outer envelope**.

*In addition to that soft copy of above bid also to be sent on email id: [tender.office@ridcor.in](mailto:tender.office@ridcor.in) in password protected file and password of the softcopy of bid shall be sent on [Dilip.Bhatia@ilfsindia.com](mailto:Dilip.Bhatia@ilfsindia.com), and the bids heavy in size can be submitted via link.*

- 17.2 The **outer** and two **inner** (marked (I) and (II)) envelopes shall be

- a) addressed to the Employer at the following address:

**Road Infrastructure Development Company of Rajasthan**  
701-706, 7th Floor, ARG Corporate Park, Gopalbari, Ajmer Road,  
Jaipur-302001 (Rajasthan), Tel. (0141) 2747001/2

**and**

- b) bear the following identification on **Outer Single Envelope**:

*“Execution of Routine Maintenance Works on following selected stretches of Baran-Jhalawar (Package: LJ-2), Jhalawar-Jhalawar Road (Package: JJ) and Jhalawar-Ujjain (upto State Border) (Package: JU) roads in Rajasthan”*

**DO NOT OPEN ON OR BEFORE 1800 Hrs IST NOVEMBER 14, 2022**

- 17.3 In addition to the identification required in Sub Clause 17.2, the inner envelopes shall indicate the name and address of the Bidder to enable the Bid to be returned unopened in case it is declared late, pursuant to Sub Clause 19.
- 17.4 If the outer envelope is not sealed and marked as above, the Employer will assume no responsibility for the misplacement or premature opening of the Bid.

### **18. Deadline for Submission of the Bids**

- 18.1 **Completed Bids in Hard Copy** must be received by the Employer at the address specified above no later than **1800 Hrs IST on November 11, 2022**. Soft copy of Bids must be received by the Employer at **[tender.office@ridcor.in](mailto:tender.office@ridcor.in) no later than 1800 Hrs. on November 11, 2022 in password protected file and password of the softcopy of bid shall be sent on [Dilip.Bhatia@ilfsindia.com](mailto:Dilip.Bhatia@ilfsindia.com)**

**In the event of the specified date for the submission of hard copy of Bids being declared a holiday for the Employer, the Bids will be received up to the appointed time on the next working day.**

- 18.2 The Employer may extend the deadline for submission of Bids by issuing an amendment in accordance with Clause 9, in which case all rights and obligations of the Employer and the Bidders previously subject to the original deadline will then be subject to the new deadline.

**19. Late Submission of Bids**

Any Bid received by the Employer after the deadline prescribed in Sub Clause 18 will be returned unopened to the Bidder.

**20. Modification and Withdrawal of Bids**

- 20.1 Bidders may modify or withdraw their Bids by giving notice in writing before the deadline prescribed in Clause 18.
- 20.2 Each Bidder's modification or withdrawal notice shall be prepared, sealed, marked, and delivered in accordance with Clause 17, with the outer and inner envelopes additionally marked "**MODIFICATION**" or "**WITHDRAWAL**", as appropriate.
- 20.3 No Bid may be modified after the deadline for submission of Bids.
- 20.4 Withdrawal or modification of a Bid between the deadline for submission of Bids and the expiration of the original period of Bid validity specified in Clause 14.1 or as extended pursuant to Clause 14.2 may result in the forfeiture of the Bid security pursuant to Clause 15.
- 20.5 Bidders may offer discount or modify the prices of their Bids only by submitting Bid modifications in accordance with this clause or included in the original Bid submission.

## **E: BID OPENING AND EVALUATION**

### **21. Opening and Evaluation of Bids:**

- 21.1 Opening and evaluation of Bids will be done for the bids received in accordance to stipulation in Clause 18; Section-1 instruction to bidder. The Employer shall open technical proposal received with the bids on November 14, 2022 i.e bid opening date. The Employer will examine and evaluate the Bids in accordance with the provisions set out in this Bid Document.
- 21.2 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.
- 21.3 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 shall prevail.”**

### **22. Process to be Confidential**

- 22.1 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.

### **23. Clarification of Bids**

- 23.1 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 25. 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.
- 23.2 Subject to Sub Clause 22.1, 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.
- 23.3 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.

### **24. Examination of Bids and Determination of Responsiveness**

- 24.1 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.
- 24.2 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.
- 24.3 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.
- 24.4 The financial proposal of only those bidder will be opened by the Employer whose technical proposal have been determine substantially responsive under clause 24 as stated here in above.

## **25. Correction of Errors**

- 25.1 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.
- 25.2 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.

## **26. Evaluation and Comparison of Bids**

- 26.1 The Employer will evaluate and compare only the Bids determined to be substantially responsive in accordance with Clause 24.
- 26.2 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 25 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.
- 26.3 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.
- 26.4 The estimated effect of the price adjustment conditions under Clause 44 of the Conditions of Contract, during the period of implementation of the Contract, will not be taken into account in Bid evaluation.

26.5 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 30 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.

## F : AWARD OF CONTRACT

### 27. Award Criteria

- 27.1 Subject to Clause 28 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.
- 27.2 RIDCOR has invited bids routine maintenance works on following selected stretches of Mega Highways Project roads:

S. No.	Name of Package Road	Amount (Rs in Cr.)
<b>Package-1</b>		
1	Lalsot-Kota (LJ-1) (Km 103-Km 188)	1.78
<b>Total (A)</b>		
<b>Package-2</b>		
1	Baran-Jhalawar (LJ-2)	2.51
2	Jhalawar- Jhalawar Road (JJ)	2.14
3	Jhalawar-Ujjain Road (JU)	1.12
<b>Total (B)</b>		<b>5.77</b>
<b>Grand Total (A+B)</b>		<b>7.55</b>

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

- 28.1 Notwithstanding Clause 27, 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.

### 29. Notification of Award and Signing of Agreement

- 29.1 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").
- 29.2 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 30.
- 29.3 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.
- 29.4 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.

### **30. Performance Security**

30.1 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 Clause of GCC of Section 3. 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 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.

30.2 Failure of the successful Bidder to comply with the requirements of Sub Clause 30.1 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.

### **31. Advance Payment -Deleted**

### **32. Corrupt or Fraudulent Practices**

32.1 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.

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

(i) Tractor with trolley	–	1 No.
(ii) JCB	–	1 No.
(iii) Soil Compactor	–	1 No.
(iv) Tandem Roller	–	1 No.
(v) Compressor	–	1 No.
(vi) Tar Boiler	–	1 No.
(vii) Mechanical Broomer	–	1 No.
(viii) Tractor Dozer	–	1 No.

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.

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.

**Details of Minimum Key Personnel required to be mobilized by  
Contractor for each Lot**

<b>S No</b>	<b>Position</b>	<b>Minimum Qualification &amp; Experience</b>	<b>Nos.</b>
1	Maintenance Engineer	B.E. (Civil) with 2 years or Diploma civil with 5 years' experience	1
2	Quantity Surveyor	Diploma (Civil) 3 years' experience	1

## **SECTION 2:**

### **QUALIFICATION INFORMATION AND OTHER FORMS**

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



### 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 Deleted**

**1.5 Information regarding current litigation, debaring / expelling of bidder or abandonment of work by bidder in RIDCOR; {(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	Yes/No

		years as on the date of application	
	(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 wherein the value of completed work exceeds 100% of the estimated cost of subject work (Refer Qualification Criteria ITB clause 3.2 (a)) provided further that all other qualification criteria are satisfied (in the same name) of a similar nature during the last 3 years.

Project Name	Name of the Employer*	Description of work	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 *

#### 1.6 (B) Current Commitments and Works in Progress

Sl No	Description of Work	Place & State	Name of the Employer	Contract No. and Date	Value of Contract (Rs Crores) @	Stipulated Period of Completion	Value of works completed (Rs Crores) @	Value of Works Remaining to be Completed (Rs Crores) @	Anticipated Completion Date	Role of Applicant* and Remarks
	<b>TOTAL</b>									

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.

#### 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 Routine Maintenance Works on following selected stretches of Baran-Jhalawar (Package: LJ-2), Jhalawar-Jhalawar Road (Package: JJ) and Jhalawar-Ujjain (upto State Border) (Package: JU) roads in 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,

\_\_\_\_\_  
Authorised Signatory

**Annual Turnover of the Bidder\***

(to be certified by the Chartered Accountant with UDIN)

Particulars	Turnover in last 3 FYs		
	2019-20	2020-21	2021-22

**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 Authorised signatory)  
**Place:** Name and seal of Bidder

## **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 Routine Maintenance Works on following selected stretches of Baran-Jhalawar (Package: LJ-2), Jhalawar-Jhalawar Road (Package: JJ) and Jhalawar-Ujjain (upto State Border) (Package: JU) roads in 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:**

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## SECTION : 3

### PART – I : GENERAL CONDITIONS OF CONTRACT AGREEMENT (GCC)

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## PART – I

### GENERAL CONDITIONS OF CONTRACT AGREEMENT (GCC)

#### A : GENERAL

#### 1. Definitions

- 1.1 Terms which are defined in the Contract Data but are not defined in the Conditions of Contract Agreement 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.

**Work 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 Agreement** is the contract agreement 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, Defect liability period of 12 months for items covered therein (Detail in contract data) after completion of work

**Drawings** include designs and calculations and other information provided.

**Employer** is the party who will employ 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 (if engaged by the Employer) will act as the Engineer.

**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 Agreement and any modification or addition made or approved by the Employer, 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 agreement 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 Routine Maintenance or other Works as stated in the Contract Data.

**Works Completion Date** is the actual date of completion of the Routine Maintenance Works as certified by the Employer in accordance with Clause 50.

**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 Agreement unless specifically defined. The Employer will provide instructions clarifying queries about the Contract.
- 2.2 The documents forming the Contract Agreement shall be interpreted in the following order of priority:
- (1) Contract Agreement
  - (2) Letter of Acceptance
  - (3) Contractor's Bid
  - (4) Contract Data
  - (5) General and Special Conditions of Contract Agreement
  - (6) Specifications
  - (7) Priced Bill of Quantities; and
  - (8) Any other document forming part of the Contract Agreement.

## **3. Language and Law**

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

## **4. Deleted**

## **5. Deleted**

## **6. Communication**

- 6.1 Communication between parties of the Contract Agreement 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 by the successful bidder from any agency as approved by the Engineer.

## **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 an 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 Agreement states are Employer's risks, and the Contractor carries the risks which this Contract Agreement 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, equipment, material and executed work which arise during and in consequence of the performance of the Contract Agreement other than the excepted risks as at Sub Clause 11.1 will be sole responsibility of the Contractor and Employer shall not be held responsible for the same.

## **13. Insurance**

- 13.1 The Contractor shall provide insurance cover from any of the acceptable Insurance Companies in India, valid from the Start Date to Completion Date of the Defect Liability Period, 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 Agreement or the extended period, if any.

#### **14. Contractor to Construct the Works and Works to be completed by Work Completion Date**

14.1 The Contractor shall undertake the Works in accordance with the Contract Agreement as per instructions of the Employer.

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 Employer, and complete them by the Work Completion

#### **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 Employer 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 Employer or by any duly constituted Employer, 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.

#### **16. Working Drawings**

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

#### **17. Approval by the Employer / Engineer**

17.1 The Employer/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 Employer's/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 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. If possession of minimum 75% of the site is not given by the agreed date stated in the Contract Data, then the Works Completion Date shall be extended by the Employer/Engineer as may be required for that particular part/stretch. However, this will not be applicable if sufficient work site is made available to the Contractor as and when required, for him to proceed ahead with progress of work and if available work fronts remain unattended/unutilized. In the case of routine maintenance work, the existing road is always available for work, hence it will be considered that possession of the site is given on the start date of work.

## **21. Access to the Site**

21.1 The Contractor shall allow the Employer or its any authorized person or Independent Engineer to access to the Site, to any place where work in connection with the Contract Agreement 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) A joint survey with the Engineer and Project Manager/his Authorized Representative has been undertaken in accordance with Clause 25 of Conditions of Contract;
- (b) The Contractor's authorized representative, vide Clause 9, with full supporting staff are in position at the Site;
- (c) Equipment, Plant, materials and labour mobilized for the work programmed for execution in the first month 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 Agreement or that the decision was wrongly taken, the objecting party may send 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 : MONITORING OF ROUTINE MAINTENANCE WORKS:**

### **25. Monitoring methodology for identification, quantification and completion schedule for routine maintenance items**

- 25.1 The Supervision Consultant along with representative of the concerned Project Manager of RIDCOR shall make a detailed monthly joint inspection before fifth day of every month and identify the quantum of routine maintenance items to be executed during the month with stipulated timelines. The Contractor/his authorized representative shall invariably accompany during the monthly inspection and sign the tentative schedule for executing identified items during the month.
- 25.2 The Supervision Consultant will notify the contractor, the details of identified items with estimated quantity of execution during the month upto seventh day of every month and it will be obligation of the contractor to complete all such identified RM works during the month.
- 25.3 The Supervision Consultant, representative of contractor and representative of concerned Project Manager of RIDCOR shall undertake a joint inspection in the last week of every month to assess the status of completion of identified items of routine maintenance. In case, the contractor fails to complete the identified items of RM works during the month, it shall attract penalty for delay in execution on daily basis as stipulated in Clause 31.
- 25.4 In case, contractor does not complete the identified quantum and items of RM works during the month and delays it beyond 30 days, the Project manager/Supervision Consultant will be authorized to carryout all such works at the risk & cost of the contractor by any other agency with prior approval from the Employer and the expenses so incurred will be recoverable from the contractor through his performance security/outstanding eligible payments.

### **26. Extension of the Contract Period for Routine Maintenance Works**

- 26.1 Employer is fully empowered to grant extension of the contract period for already identified routine maintenance works in the 12<sup>th</sup> Month without any prejudice to the rights of the Employer under other provisions of the Bid Document.

### **27. Emergent works ordered by the Employer/Engineer**

- 27.1 The Employer/Engineer may instruct the Contractor to carryout emergent works and works related to road safety immediately in a reasonable period through mutual consent. Non-compliance of instructions is likely to attract penalty as per clause 31 apart from execution at the risk & cost of the contractor and/or termination by the Employer.

**28. Maintenance Intervention Level:** The Engineer shall adopt the criteria as mentioned in Annexure-A while indenting the works on monthly basis/ for emergent works

## 29. TIME CONTROL (Contractor's Obligations)

### 29.1 Daily followed by weekly and monthly Inspections

Items to be inspected daily on regular basis followed by weekly and monthly inspections shall include:

- Potholes
- Cracking & Patches
- Rutting
- Defective bridge decks area and bump at approach
- User information – road marking and road signs
- Blocked drains

29.2 Repairs: Repairs arising out of the inspections shall be carried out by the Contractor as per performance standards after a joint assessment with the Engineer and approval of Employer (RIDCOR)

### 29.3 Performance Standards

#### 29.3.1 Performance Standards for Routine Maintenance:

The performance standards define the level at which the routine maintenance is to carried out by the contractor.

#### Road Maintenance: (As per MORTH Specifications)

Sl. No.	Service ability Indicator	Permissible Time Limit for Defect Rectification	Frequency of Inspections by The Contractor to Ensure Required Level of Service
1	Potholes	Two days	Daily on regular basis Followed by weekly & monthly inspections
2	Cracking & Patch	Seven days	- do -
3	Rutting (20mm), max. Permissible limit	Fifteen days	- do -
4	User information	Fifteen days	- do -

#### 29.3.2 Performance standard for "Removal of rank vegetation / weeds etc.

Indent for this work shall be generally issued twice in year by the Engineer. After execution of this indented quantity, it is the sole responsibility of contractor to keep that particular area without any vegetation / weeds / grass for the remaining period of contract (one year). For this purpose, he shall make use of men / machinery deployment.

#### 29.3.3 Monitoring

29.3.3.1 The Contractor shall submit the daily report (by email) indicating the day's activities and the work executed at site before 11.00 AM every day for the preceding 24hours.

29.3.3.2 The daily report should be submitted to Project Manager and Engineer on daily basis as per proforma approved by Engineer in consultation with PM, RIDCOR.

29.3.3.3 The detail summary of these daily inspections and work carried out shall form part of monthly bill in the form of email extracts which shall be basis of regulating monthly payments.

### **30 Monthly Progress Report**

30.1 Monthly progress reports shall be prepared by the Contractor and submitted to the Employer/ Project Manager. The first report shall cover the period upto the end of the first calendar month following the Start Date. Reports shall be submitted within 7 days for each month thereafter.

Each report shall include:

- (i) Details of identified works by the Supervision Consultant during monthly inspection and progress made by the contractor;
- (ii) Identified items not carried out/partially carried out by the contractor with the reasons thereof;
- (iii) Penalties imposed by the Supervision Consultant/Employer against RM items not carried out and the corrective actions taken by the contractor,
- (iv) details of progress of work with charts and photographs, variations required if any by the Project Manager,
- (v) comparison of actual and planned progress, with details of any events or circumstances which may jeopardize the completion of identified RM items during the month in accordance with the Contract, and the measures being (or to be) adopted to overcome delays,
- (vi) list of variations, notices given etc.,
- (vii) copies of quality control documents, tests results and certificate of materials,
- (viii) safety statistics, including details of any hazardous incidents and activities, related to environmental aspects and public relations,
- (ix) weather record during the month, day by day, and
- (x) any other details/matters related to the Work.

### **31. Penalty for delay in execution of identified routine maintenance items under Clause 25**

31.1 Penalty for delays attributable to the contractor shall be applicable @ Rs. 2,000/day of delay for non-completion of the identified item(s) within the stipulated time as directed by the Engineer/Project Manager. Maximum cumulative (total) penalty shall be applicable @5% of the Contract Price.

### Maintenance Intervention Levels

Following Criteria shall be adopted by the Engineer while indicating the works:

Sl. No.	Defects	Criteria/Extent (% of sub-section length)	Treatment/Action	Type of maintenance
<b>1</b>	<b>Shoulder &amp; Slopes</b>			
1.1	Vegetation growth on shoulders & side slopes	Any kind	Vegetation growth be removed	Routine
1.2	Trees	a. All kind	Trim and remove dead / diseased branches	Routine
		b. Fallen trees on carriageway	Remove immediately	Urgent
1.3	Deformation or scour	a. Upto 50mm	Fill & Compact	Routine
		b. More than 50 mm	Reconstruction	Urgent
1.4	Disturbed stone pitching	a. Upto 30 sqm.	Repair	Routine
		b. More than 30 sqm	Reconstruction	Urgent
<b>2</b>	<b>Side drains</b>			
2.1	Kuccha drains silted/ too shallow	Any extent	Clean & repair	Routine
2.2	Standing water on shoulders / drains	Any	Realign to correct gradient and make shallow lateral drains.	Routine
2.3	Silting in pucca side drains	Any extent	Clean out	Routine
2.4	Damages or scouring of pucca drains	Any extent	Repair and reconstruct to adequate size and shape.	Routine

Sl. No.	Defects	Criteria/Extent (% of sub-section length)	Treatment/Action	Type of maintenance
<b>3</b>	<b>CD Works</b>			
3.1	Silted or blocked openings	Any extent	De-silting / cleaning	Routine
3.2	Erosion / Scour in upstream / down stream	Any extent	Repair / fill the boulders	Periodic
3.3	Pot holes erosion in paved surface floor	Any extent	Repair with concreting	Periodic
3.4	Damaged crash barriers	Any	Reconstruct	Recurring/ Urgent
3.5	Vegetation growth at inlet / outlet & near parapets	Any	Remove & Clear	Routine
3.6	Damaged masonry in parapets / substructure/ superstructure	Any extent	Repair to match with existing & report to the Engineer	Recurrent
3.7	Painting exposed surfaces of bridge railings, kerb stones, parapets	Any	Repaint / White wash	Periodic
3.8	Cracks in structure	Any	Repair and report to the Engineer	Recurring/ Urgent
3.9	Leached, honey combed, spalled concrete surface, & exposed reinforcement	a. Upto 20 sqm	Repair with epoxy mortar or injected concreting	Urgent
		b. More than 20 sqm	Reconstruct	Urgent / Special alters
3.1	Checking of expansion joints	Any	Check & repair & clean	Periodic



Sl. No.	Defects	Criteria/Extent (% of sub-section length)	Treatment/Action	Type of maintenance
<b>4</b>	<b>Road Furniture</b>			
4.1	Dirty road signs / delineators	Any	Wash & clean	Routine
4.2	Damaged / corroded road signs and delineators	Any	Repair, repaint or replace	Periodic
4.3	Damaged / missing median kerbs, boundary pillars, 200 m stone, km stone & 5 <sup>th</sup> km stones	Any	Replace	Periodic
4.4	Painting & printing Letters on road signs, km stones, 200 m stone, 5 <sup>th</sup> km stones	Any	Repaint & print to match with existing	Periodic
4.5	Safety barriers, fencing	Any	Repair & repaint	Periodic
4.6	Pavement markings	a. Upto 30sqm.	Repair	Recurring
		b. More than 30 sqm.	Repair	Periodic

Sl. No.	Defects	Criteria/Extent (% of sub-section length)	Treatment/Action	Type of maintenance
<b>5</b>	<b>Carriageway &amp; Crust</b>			
5.1	Stripping	a. <25 sqm.	Local sealing	Routine
		b. >25 sqm.	3 <sup>rd</sup> coat surface dressing	Periodic
5.2	Rutting	a. depth of ruts < 50 mm		
		i. Crack < 10mm	Seal the crack with slurry	Routine
		ii. crack > 10 mm	Crack Sealing & fill ruts with bituminous mix	Recurrent
		b. depth of ruts > 50 mm		
		i. Crack < 10mm	Seal the cracks with slurry and fill ruts with bituminous mix	Routine
		ii. crack > 10mm	Surface coat surface dressing over cracked area to be followed by overlay	Periodic / Special attention
5.3	Pot holes	a. <20 mm	Patch repair to pot holes	Recurrent
	b. >20 mm	Patch repair to pot holes & check dressing of crust for strengthening if required	Recurrent / Special Attention	
5.4	Bleeding	a. < 25 sqm	Spread and roll over 6 mm size heated aggregates	Routine
		b. > 25 sqm	Apply surface dressing	Periodic
5.5	Cracks	a. < 25 sqm	Local sealing of cracks	Routine
		b.>25 sqm	Local Sealing followed by renewal	Periodic

Sl. No.	Defects	Criteria/Extent (% of sub-section length)	Treatment/Action	Type of maintenance
5.6	Hungry surface	Any	Apply, slurry seal or fog seal	Recurrent
5.7	Corrugations	-----	Cutting of high spots and filling of low spots with existing surfacing material and seal the surface.	Recurrent
5.8	Shoving	-----	Remove the material up to firm base and relay stable mix	Recurrent
5.9	Shallow depressions	-----	Repair the depression with pre-mixed material	Recurrent
5.10	Settlements & upheaval	a. <20 sqm	Remove the weak/ defective fill up to base & redo.	Recurrent
		b. >20 sqm	i. Remove the weak /defective fill up to base & redo ii. Strengthen the crust by providing additional layers	Periodic
5.11	Edge breaking & edge steps	a. <25 mm	Cut affected area and patch repair to road edge; with repair to unpaved shoulders also	Recurrent
		b.>25mm	Reconstruct shoulders and repair to carriageway edge also	Periodic

## **C : QUALITY CONTROL**

### **32. Identifying Defects**

- 32.1 The Employer/Engineer shall check the Contractor's work through the Project Manager, Independent Engineer and notify the Contractor of any Defects that are found. The Employer may instruct the Contractor to search for a Defect and to uncover and test any work that the Employer considers may have a Defect. Such checking/instructions shall not absolve the Contractor of his responsibilities.
- 32.2 The Contractor shall permit the Site visits of the Employer's Technical Auditor/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.

### **33. Tests**

- 33.1 The Contractor shall be responsible for carrying out the tests prescribed for the Works.
- 33.2 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 Employer.
- 33.3 If the Employer/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.
- 33.4 The Contractor shall furnish all test results as per the approved Quality Control Plan to the Employer, in a monthly progress report as per Clause 30 or at a frequency directed by the Employer. The Employer may withhold payment for those works where test results have not been submitted or the work requires to be redone.

### **34. Correction of Defects**

- 34.1 The Contractor shall undertake measures to rectify the defects in the Work identified by the Project Manager / Independent Engineer or any of the Employer's authorized representative at the earliest, but not later than the time period specified by the Employer.
- 34.2 The Defect Liability Period shall be as given in the Contract Data. The Employer 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.

### **35. Uncorrected Defects**

- 35.1 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 under intimation to the Contractor.

## **D : COST CONTROL**

### **36. Bill of Quantities**

- 36.1 The Bill of Quantities shall contain items for the Works for construction, execution, testing and commissioning works to be executed by the Contractor.
- 36.2 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.

### **37. Changes in the Quantities**

- 37.1 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.
- 37.2 If requested by the Employer, the Contractor shall provide the Employer with a detailed cost breakdown of rate of any item in the Bill of Quantities.
- 37.3 Director/Manager, RIDCOR is fully empowered to approve the variation of quantity upto 25% of the contract price mentioned in Letter of Acceptance for routine maintenance works and rates for extra item on the merit of the case.

### **38. Variations**

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

### **39. Payments for Variations**

- 39.1 In the event of variation, the payment for the works done, shall be made as per the provisions stated in Sub Clause 37.1.
- 39.2 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.

39.3 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.

39.4 The Contractor shall not be entitled to additional payment for costs that could have been avoided by giving early warning.

39.5 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.

#### **40. Cash Flow Forecasts**

40.1 When the Program is updated, the Contractor shall provide the Employer with an updated cash flow forecast.

#### **41. Payment Certificates & Payment**

41.1 The Contractor shall submit to the Engineer monthly statements of the value of the work executed less the cumulative amount certified previously supported with detailed measurement of the items of work executed.

41.2 The Engineer shall check the Contractor's monthly statement within 7 days and certify the amount to be paid to the Contractor after taking into account any credit or debit for the month in question.

41.3 The value of work executed shall be determined, based on measurements by the Engineer.

41.4 The value of work executed shall comprise the value of the quantities of the items in the Bill of Quantities completed.

41.5 The value of work executed shall also include the valuation of Variations and Compensation Events.

41.6 The Engineer may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information to rectify the mistakes with detail justification acceptable to Employer.

41.7 The final bill shall be submitted by the contractor within one month of the actual date of completion of the work; otherwise the Engineers certificate of the measurement and of the total amount payable for work accordingly shall be final and payment made accordingly within a period of sixty days.

41.8 Payments shall be adjusted for deductions for advance payments, security deposit, other recoveries in terms of the Contract and taxes at source, as applicable under the law. The Employer shall pay the Contractor the amounts Engineer had certified within 15 days of the date of each certificate.

## **42. Tax**

42.1 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 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.

## **43. Currencies**

43.1 All payments shall be made in Indian Rupees only.

## **44. Changes in Cost and Legislation**

### **44.1 Price Adjustment**

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

44.1.2 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.

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

44.1.4 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.

44.1.5 The price adjustment shall be determined during each month in accordance to the formula given in Clause 44.1.6.

### **44.1.6 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:

$$Vb = Q (Cp - Bp)$$

Where

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

**Q = quantity of bitumen** in tonnes consumed in the Routine Maintenance Works during the period under consideration;

**Cp = current price** of bitumen per tonne prevailing on 16<sup>th</sup> day of every month, which shall be the ex-factory price of the nearest refinery of bitumen plus GST, as applicable;

**Bp = basic price** of bitumen Rs. 57786.96 per tonne for VG-40 inclusive of GST and Rs. 54022.76 per tonne for VG-10 inclusive of GST.

Note: For Emulsion and Mastic Asphalt basic rates of VG-10 grade bitumen of nearest refinery will be considered.

#### **44.2 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.

**45. Deleted**

**46. Deleted**

**47. Securities**

The Performance Security and Additional Security (for unbalanced bids) in the form of Bank Guarantee/RTGS/NEFT/IMPS/FDR 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. The Bank Guarantee, in the prescribed format (Form 6C and 6D of Section 6), is acceptable from any Scheduled Bank in India having Net Worth of more than Rs. 500 Crore (Rupees Five Hundred Crores) payable at Jaipur.

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

The Performance Security and Additional Security shall be valid for a period of 1 year beyond the Works Completion Date i.e. upto end of defect liability period. In case, the Works Completion Date is extended, then the Contractor shall substitute fresh Performance Security and additional security (if applicable) for the same value valid until a date 1 year beyond the extended Works Completion Date. These securities shall be released upon completion of defect liability period of 12 months for items covered therein after completion of work.

**48. Deleted**

**49. Deleted**



## **E : FINISHING THE CONTRACT**

### **50. Completion**

- 50.1 The Contractor shall request the Employer/Engineer to issue a certificate of completion of the Works and the Employer/Engineer shall do so upon deciding that the assigned Work is completed.
- 50.2 Deleted
- 50.3 On satisfactory completion of Defect Liability Period, the Contractor shall request the Employer to issue a Certificate of Completion of the Contract. The Employer shall, issue such certificate subject to the Contractor satisfying all provisions under the Contract.

### **51. Final Account**

- 51.1 The Contractor shall supply to the Employer a detailed account of the total amount that the Contractor considers payable under the Contract Agreement within 60 days after the issue of certificate of completion of the Works by the Employer. The Employer shall certify any final payment that is due to the Contractor within 60 days of receiving the Contractor's account. If the Employer is not satisfied with the detailed account, then the Employer 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 Employer's instructions within 15 days, Employer will certify as per the schedule of Corrections or addition sent to contractor and make payment to the Contractor within 45 days.

### **52. Termination**

- 52.1 The Employer or the Contractor may terminate the Contract Agreement if the other party causes a fundamental breach of the Contract.
- 52.2 Fundamental breach of the Contract Agreement 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;
  - (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 gives notice that failure to correct a particular Defect is a fundamental breach of the Contract Agreement 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 fails to carry out instructions of the Employer within a reasonable time determined by the Engineer in accordance with the Sub Clauses 15.1, and 22.1;
- (i) 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;
- (j) if the Contractor, in the judgment of the Employer has engaged in corrupt, fraudulent or coercive practices as defined in Sub Clause 32.1 (a) of ITB in competing for or in executing the Contract;

52.3 When either party to the Contract Agreement gives notice of a breach of contract agreement to the Employer for a cause other than those listed under Sub Clause 52.2, the Employer shall decide whether the breach is fundamental or not.

52.4 Notwithstanding the above, the Employer may terminate the Contract Agreement by giving 30 days prior notice without assigning any reason.

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

### **53. Payment upon Termination**

53.1 If the Contract Agreement is terminated because of a fundamental breach of the Contract Agreement by the Contractor, the Employer 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.

53.2 If the Contract Agreement is terminated at the Employer's convenience or because of a fundamental breach of the Contract Agreement by the Employer, the Employer 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 Agreement and less taxes due to be deducted at source as per applicable law and the Employer shall pay this amount. This includes all type of compensations and no other claim will be payable.

### **54. Property**

54.1 If the Contract Agreement 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.

**55. Release from Performance**

- 55.1 If the Contract Agreement 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 Agreement 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.

**56. Details to be Confidential**

- 56.1 The Contractor shall treat the details of the Contract Agreement 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 prior written consent 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.

**57. Life-saving Appliances and First-aid Equipment**

- 57.1 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 Employer. 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

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## **PART – II SPECIAL CONDITIONS OF THE CONTRACT Agreement (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 will be solely responsible for the terms and conditions of service of their employees and 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 There will be no privity of contract agreement between the Authority and any employee of the Contractor. The Contractor shall keep the Employer indemnify and keep indemnified, the Employer 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 is indicative and 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 Employer 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 Employer 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 Employer, 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 Agreement 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.

## **SECTION 4:**

## **CONTRACT DATA**



## CONTRACT DATA

S. No.	Item	Clause Reference of CC									
1	The Employer is : Director/Manager/Head Operation Road Infrastructure Development Company of Rajasthan Ltd. (RIDCOR) 701-706, 7 <sup>th</sup> Floor, ARG Corporate Park, Gopalbari, Ajmer Road, Jaipur-302001, Rajasthan Tel.: +91 0141-2747001, Facsimile: +91 0141-2747010, E-mail: <a href="mailto:office@ridcor.in">office@ridcor.in</a> 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 is Routine Maintenance Works on following selected stretches of Baran-Jhalawar (Package: LJ-2), Jhalawar-Jhalawar Road (Package: JJ) and Jhalawar-Ujjain (upto State Border) (Package: JU)	1.1 GCC									
4	The Works consists of routine maintenance works & other items as per Bill of Quantities	1.1 ITB									
5	The Start Date shall be the date of signing of contract agreement for the works (Form 6B, Section 6) or as notified in LOA	1.1 GCC									
6	The language of the Contract Agreement documents is English	3 GCC									
7	The law which applies to the Contract Agreement is the laws of Union of India	3 GCC									
8	The following documents are also part of the Contract Agreement 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 style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 10%;">S. No.</th> <th style="text-align: left; width: 45%;">Description of Cause</th> <th style="text-align: left; width: 45%;">Minimum Cover of Insurance</th> </tr> </thead> <tbody> <tr> <td></td> <td colspan="2"><u>During implementation of the Works</u></td> </tr> <tr> <td style="vertical-align: top;">(i)</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 5 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)	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 5 Lacs per person per accident for unlimited number of accidents	13 GCC
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	<p>(ii) Against liabilities for death or injury to any person or loss of or damage to any third-party property</p> <p>(iii) Any other insurance cover</p> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>									
10	<p>Work Completion Date for:</p> <p>(a) Routine maintenance works: - 12 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 Agreement 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: The defect liability period is 12 months for items covered therein after completion of work (Reference: s.no 18 of contract data)</p>	14 GCC								
11	The Site Possession shall be the date of start of the work	20 GCC								
12	<p>Penalty and Liquidated Damages:</p> <table border="1"> <thead> <tr> <th>S. No.</th> <th>Particulars</th> <th>Penalty / Liquidated Damages</th> <th>Limit</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Delay of work</td> <td>Penalty for delays attributable to the contractor shall be applicable @ Rs. 2,000/day of delay for non-completion of the identified item(s) within the stipulated time as directed by the Engineer/Project Manager.</td> <td>Maximum cumulative (total) penalty 5% of the Contract Price.</td> </tr> </tbody> </table>	S. No.	Particulars	Penalty / Liquidated Damages	Limit	1	Delay of work	Penalty for delays attributable to the contractor shall be applicable @ Rs. 2,000/day of delay for non-completion of the identified item(s) within the stipulated time as directed by the Engineer/Project Manager.	Maximum cumulative (total) penalty 5% of the Contract Price.	31 GCC
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13	<p>The Performance Security shall be for the following minimum amounts equivalent as a percentage of the Contract Price for the Works:</p> <p>Performance Security of 5% of Contract Price plus additional security as 40% of the amount beyond 10% lower than the estimated amount for unbalanced bids valid for 1 year beyond the Works Completion Date i.e. upto</p>	47 GCC								

	<p>end of defect liability period.</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>	
18	<p>The defect liability period is 12 months for items covered therein after completion of work.</p> <p>Item Covered in DLP are as follows: DBM, BC, repairs of Potholes, Brick/Stone Masonry, RCC, Thermoplastic Pavement marking, Paver Blocks, Mastic work</p>	<p>34 GCC</p>

## SECTION 5 : SPECIFICATIONS

<b>Part No</b>	<b>Description</b>	<b>Page no</b>
	<b>Preamble</b>	
<b>Part I</b>	<b>General Technical Specifications</b>	<b>77</b>
<b>Part II</b>	<b>Supplementary Technical Specifications</b>	<b>77</b>

## **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 Agreement 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 of 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" (5<sup>th</sup> 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**

- 2.2.1 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 Clause A-1 have been added to the "MORTH SPECIFICATIONS

Clause A-1                      Traffic Safety and Control

- 2.2.2 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 Employer 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.

## **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 channelising 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-reflectorised 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 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, 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.*

**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

### **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 "**Routine maintenance works on following selected stretches of Baran-Jhalawar (Package: LJ-2), Jhalawar-Jhalawar Road (Package: JJ) and Jhalawar-Ujjain (upto State Border) (Package: JU)** roads in 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 12 Lakh 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 \_\_\_\_\_ 2022.

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.: Routine maintenance works on following selected stretches of Baran-Jhalawar (Package: LJ-2), Jhalawar-Jhalawar Road (Package: JJ) and Jhalawar-Ujjain (upto State Border) (Package: JU) roads in 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/RTGS/NEFT/IMPS/FDR for an amount equal to 5% of the Contract price within 14 days of receipt of this letter, in accordance with Clause 30 of ITB and Clause 47 of GCC as defined in the Contract Data S. No. 13. 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 30.2 of ITB will be taken.
7. You are requested to submit a detailed Construction Program including Traffic Management Plans 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 “**Routine maintenance works on following selected stretches of Baran-Jhalawar (Package: LJ-2), Jhalawar-Jhalawar Road (Package: JJ) and Jhalawar-Ujjain (upto State Border) (Package: JU) roads in 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 “**Routine maintenance works on following selected stretches of Baran-Jhalawar (Package: LJ-2), Jhalawar-Jhalawar Road (Package: JJ) and Jhalawar-Ujjain (upto State Border) (Package: JU) roads in 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 “**Routine maintenance works on following selected stretches of Baran-Jhalawar (Package: LJ-2), Jhalawar-Jhalawar Road (Package: JJ) and Jhalawar-Ujjain (upto State Border) (Package: JU) roads in 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 “**Routine maintenance works on following selected stretches of Baran-Jhalawar (Package: LJ-2), Jhalawar-Jhalawar Road (Package: JJ) and Jhalawar-Ujjain (upto State Border) (Package: JU) roads in 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 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:

- 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**

**FORM OF AGREEMENT**

**Agreement**

GENTLEMEN

This agreement, made the \_\_\_\_\_ day of \_\_\_\_\_ 2022 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 “**Routine maintenance works on following selected stretches of Baran-Jhalawar (Package: LJ-2), Jhalawar-Jhalawar Road (Package: JJ) and Jhalawar-Ujjain (upto State Border) (Package: JU) roads in 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 \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## **SECTION 7:**

### **Bill of Quantities (BOQ)**

**for**

**Routine maintenance works on following selected stretches of  
Baran-Jhalawar (Package: LJ-2), Jhalawar-Jhalawar Road  
(Package: JJ) and Jhalawar-Ujjain (upto State Border)  
(Package: JU) roads in Rajasthan**

## Bill of Quantities (BOQ)

<b>Routine Maintenance on Baran -Jhalawar (LJ-2) Road from Km 0+000 Km 76+000 under Mega Highways Project in Rajasthan</b>					
Item	Description	Unit	BOQ		
			Rate (Rs.)	Qty.	Amount (Rs)
1	Dismantling structures & pavement including disposal of resulting material and/or salvaging useful materials complete as per Technical Specifications Clause 202.				
1.1	Bituminous Pavement	Cum	254	10.00	2,540
1.2	Cement Concrete Pavement	Cum	1,261	0.00	0
1.3	Granular base including Granular Sub Base (GSB) and drainage layer	Cum	216	10.00	2,160
1.4	Rubble stone masonry in lime	Cum	286	0.00	0
1.5	Rubble stone masonry in cement	Cum	342	20.00	6,840
1.6	Dry rubble stone masonry	Cum	230	0.00	0
1.7	Hume Pipe	LM	556	20.00	11,120
2	Roadway excavation including removal of unsuitable soil at embankment base necessary for construction of roadway & structural in all types of soil including marshy soil as also excavation of existing shoulders and median to designated widths and depths in existing roadway embankment for purpose of pavement construction including transportation and disposal of surplus and unsuitable material complete with all lead & Lifts as per Technical Specification Clause 301. (original ground level shall be taken after clearing/grubbing operation) - All type soil	Cum	86	3,733.00	3,21,038
3	Construction of embankment with approved materials, transporting to site, spreading, grading to require slope and compacted by vibratory roller 8 - 10 Tone to meet requirement of table 300-2 as per MoRTH specification Clause No. 305. Complete in all respect as per direction of Engineer.				
3.1	Materials deposit at site from roadway cutting and excavation from drain and foundation of structure graded	Cum	161	0.00	0
4	Construction of sub-grade and earthen shoulders with approved material transporting 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 Vth Clause I No.305				
4.1	Material deposited at site from roadway cutting & excavation from drain and foundation of other structures graded	Cum	283	0.00	0
4.2	Material obtained from borrow pits with all lifts and leads	Cum	297	1,500.00	4,45,500
5	Filling of median and island above road level with approved material brought from borrow pits, spreaded sloped and compacted as per MoRTH specification Clause 407	Cum	326	0.00	0
6	Providing and laying granular sub-base material having P.I. not more than 6 including spreading in layers not exceeding 150 mm compacted thickness and consolidation by 8-10 tonne power roller to required camber and grade including cost of labour water and hire charge of machinery including T&P with all lead & Lift (compacted thickness to be measured ) as per MoRTH specification table 400-1,400-2.				
6.1	Using 100% Crushed Material	Cum	1,294	50.00	64,700
6.2	Using 100% Natural Material	Cum	884	20.00	17,680
7	Providing and laying , Spreading and compaction graded stone aggregate to Wet Mix Macadam specification including premixing the material with water at OMC in mechanical				

<b>Routine Maintenance on Baran -Jhalawar (LJ-2) Road from Km 0+000 Km 76+000 under Mega Highways Project in Rajasthan</b>					
Item	Description	Unit	BOQ		
			Rate (Rs.)	Qty.	Amount (Rs)
	mix plant ,carriage of mixed Material by tipper to site, laying in uniform layers and compacting with 8-10 tonne Smooth wheel roller to achieve the desired density complete as per MoRTH specification Clause 3004.				
7.1	Base Course	Cum	1,617	20.00	32,340
7.2	Pothole Repair	Cum	1,617	200.00	3,23,400
8	Providing and applying low viscosity modified bitumen emulsion for sealing cracks with crusher dust and emulsion on aligator cracks, incipient freeting or disintegration on existing bituminous surfacing after necessary cleaning of surface, removing of dust/debris/loose material etc. as per MORTH specification (2013) clause 300.3.3 or as directed by Engineer.	Sqm.	70	38,500.00	26,95,000
9	Providing and applying primer coat over prepared surface or granular base with bitumen emulsion SS-1 as per IS 8887 & manufacturers specifications @ 6kg/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 Cl 502 & 112 (including cleaning of road surface)	Sqm.	41	105.00	4,305
10	Providing and applying tack coat on the prepared surface with bitumen emulsion RS-1 as per IS 8887 & manufacturer specifications @ 2 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 Clause 503 & 112 (including cleaning of bituminous road surface)	Sqm.	14	210.00	2,940
11	Milling of the existing bituminous surface ( upto 50 mm thickness ) without disturbing the base by using Milling Machine inclusive cleaning and brooming with power broomer, air compressor & manpower complete traffic management, disposal of milled materila as instructed by the Engineer including disposal and salvage material	Sqm.	89	0.00	0
12	Providing and laying Dense Bituminous Macadam on prepared surface with specified graded crushed aggregate as per table-510 and design mix for base/biner course including loading of material with front end loader heating of binder (including cost of anti-stripping compound wherever required) aggregate and filler in hot mix plant 40-60 TPH. Transporting the mix material with tipper and laying with sensor paver finisher (as per clause 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) but excluding cost fo primer/tack coat (MoRTH Specification : Clause 507 & 112). Grading II (10 mm nominal size) Bitumen @ 4-4.5% of mix (60/70 grade) VG 30 & thickness 50-75 mm with	Cum	10,006	6.30	63,038
13	Providing and laying bituminous concrete as per design mix on prepared surface with specified graded stone as per table-500-18 for wearing course including loading fo aggregate with front end loader and hot mixing of binder (including cost of anti-stripping compound wherever required) and 3% cement filler with aggregates in hot mix plant 40-60 TPH.	Cum	11,684	4.20	49,073



<b>Routine Maintenance on Baran -Jhalawar (LJ-2) Road from Km 0+000 Km 76+000 under Mega Highways Project in Rajasthan</b>					
Item	Description	Unit	BOQ		
			Rate (Rs.)	Qty.	Amount (Rs)
	Transporting the mix material with tipper and laying with sensor paver finisher (as per clause 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 fo primer/tack coat (MoRTH Specification : Clause 509 & 112) Grading I (19 mm nominal size) Bitumen @ 5% of mix & thickness 50-65 mm with lead of mix material 20 Km - 60/70 grade VG 30				
14	Providing and laying seal coat for sealing the voids in a bituminous surface laid to the specified levels grade and cross fall, including cleaning and rolling with a smooth wheeled roller 8-10 tonne capacity finished to required level and grades, complete as per MoRTH specification clause 513 Type B - comprising of 2.36 mm to 180 micron size aggregate @ 0.06 Cum per 10 Sqm and bitumen binder @ 6.8 kg / 10 Sqm complete	Sqm.	110	10,500.00	11,55,000
15	Filling potholes and patch repairs with bituminous concrete, with varying thickness preferably 30/40 mm with removal of all failed material, trimming of completed excavation to provide firm vertical faces, cleaning of surface, painting of tack coat on the sides @ 2 Kg/10 Sqm and base of excavation as per Clause 503 back filling the potholes with hot bituminous material using 60/70 grade bitumen @ 5% of total mix & mixed in hot mix plant 40-60 TPH capacity and carriage with all leads as per clause 59, compacting with smooth wheel roller 8-10 tonne, trimming & finishing the surface to form a smooth continuous surface, all as per MoRTH specification Clause 3004.2	MT	5,080	500.00	25,40,000
16	Providing and laying First class brick masonry (Minimum 10.5 Mpa) in cement Mortar 1:3 up to a depth of 1.5 below ground and 1.5 m from bed/ground level (MORTH specification, clause 1000/1300)	Cum	5,770	20.00	1,15,400
17	Random Rubble Stone masonry work in cement mortar 1:3 for foundation / substructure including staging and treatment of joints complete as per drawing, Technical Specification Section 1400 and as directed by the Engineer.- Bridge/Culvert/Drain/Walls.	Cum	4,891	1,510.00	73,85,410
18	Provide plaster with Cement mortar (1 : 3), complete as per Technical Specification Section 1300 and as directed by the Engineer.				
18.1	25mm Thick.	Sqm.	196	2,200.00	4,31,200
18.2	12mm Thick.	Sqm.	169	250.00	42,250
19	Providing and laying reinforced cement concrete pipes N.P.4 for culverts including jointing ends and fixing collar with cement mortar 1:2 [MoRTH Specification : Clause : 1000/2900]				
19.1	1200mm Dia.	LM	10,746	5.00	53,730
19.2	1000mm Dia.	LM	9,643	0.00	0
19.3	900mm Dia.	LM	8,477	20.00	1,69,540
19.4	600mm Dia.	LM	5,770	12.50	72,125
19.5	300mm Dia.	LM	3,825	5.00	19,125
20	Structural plain/reinforced cement concrete in foundation/Substructure ,including cost of all material				

**Routine Maintenance on Baran -Jhalawar (LJ-2) Road from Km 0+000 Km 76+000 under Mega Highways Project in Rajasthan**

Item	Description	Unit	BOQ		
			Rate (Rs.)	Qty.	Amount (Rs)
	,formwork ,shuttering ,labour, Mechanically mixing, trasportationn, placing, vibration ,curing ,etc.excluding reinforcement complete as per drawing and Technical specification Section 1500, 1700 & 2100				
20.1	M-15 Grade	Cum	4,037	339.60	13,70,965
20.2	M-20 Grade	Cum	4,631	15.00	69,465
20.3	M-25 Grade	Cum	5,224	93.50	4,88,444
20.4	M-30 Grade	Cum	5,830	3.00	17,490
20.5	M-35Grade	Cum	6,519	2.00	13,038
20.6	M-40 Grade	Cum	6,890	3.00	20,670
21	Thermoplastice pavement marking with hot applied thermoplastic material for road marking with surface application of glass beads at specified rate complete as per deawing, Technical Specification Clause 803 and as derected by the Engineer. Thermoplastice marking with material comforming to Clause 803.4 of MoRTH having Tio2 (for white ) minimum 10% and softing point 102.5 + 9.5 C - Lane ,Centerline, Edge, pedestrian crossing marking and other marking along strips				
21.1	Including Material, Application, Labour Charge Complete Item	Sqm.	440	3,000.00	13,20,000
22	White washing of trees 1.50 m height complete:				
22.1	Girth from 300 mm to 600 mm	Each	19	150.00	2,850
22.2	Girth from 600 mm to 900 mm	Each	29	90.00	2,610
22.3	Girth from 900 mm to 1800 mm	Each	37	83.00	3,071
22.4	Girth above 1800 mm	Each	41	98.00	4,018
23	Painting with superior grade enamel paint of approved quality to give an even shade including writing littering figuring etc. complete as per IRC standards of:-				
23.1	5th Km Stone	Each	292	2.00	584
23.2	Km Stone for ODR & MDR	Each	174	5.00	870
23.3	200 M stone & Boundary stone	Each	96	20.00	1,920
24	Painting two coats including primer coat after filling the surface with synthetic enamel paint in all shades on new, plastered / concrete surfaces as per drawing and technical specification (Clause 1701)	Sqm.	122	7,860.60	9,58,993
25	Painting two coats of ready mix paint including primer coat of approved brand on steel surface after thourgh cleaning of surface to give an even shadeas per drawing and Technical specification clause (1701)	Sqm.	120	900.00	1,08,000
26	White washing with lime to give an even shade at parapets,kerbs,railling,trees,boundry stone , guard etc.including scaffolding all complete :				
26.1	New work (two or more coats)	Sqm.	25	10.00	250
26.2	Old work (two or more coats) including scrapping old surface and pepairing with whitng where ever necessary	Sqm.	19	20.00	380
27	Distempering with oil bould washable distemper of approved brand and manufacture to give an even shade including all scaffolding:				
27.1	New work (two or more coats) over and including scrapping and priming coat with cement primer	Sqm.	109	5.00	545
27.2	Old work (two or more coats) including scrapping old surface and necessary repair- Coulour Change	Sqm.	103	20.00	2,060

<b>Routine Maintenance on Baran -Jhalawar (LJ-2) Road from Km 0+000 Km 76+000 under Mega Highways Project in Rajasthan</b>					
Item	Description	Unit	BOQ		
			Rate (Rs.)	Qty.	Amount (Rs)
28	Removing dry or oil bound distemper by scrapping sand papering and preparing surface smooth including necessary repairs to scratches by sandla/loi and all scaffolding (for colour changing only)	Sqm.	24	20.00	480
29	Supply and fixing of Micro Prismatic type Retro-Reflective Stickers Type 9 ASTM D 4956_01 100mm dia size in different colour (Red,Amber,Green,White,etc.), including pasting on backside of vehicle complete .	Each	16	1,000.00	16,000
30	Supply and fixing of aluminium folio micro prismatic tape 9 ASTM D 4956-01 Retro -Reflective tape fix on concrete base, trees.	Sqm.	98	1,000.00	98,000
31	Supplying and fixing Cut stones including earth work, cement concrete 1:4:8 engraving letters and numerals, as per IRC standard design.				
31.1	Km Stone for NH, SH & MDR (size 35 x 110 x 25 cm)	Each	2,396	5.00	11,980
31.2	5th Km Stone ( size-50 x 152 x 25 CM)	Each	3,935	2.00	7,870
31.3	200 Meter (size 15 x 15 x 90 cm)	Each	684	20.00	13,680
31.4	Guide stone (size 15 x 15 120 cm )	Each	684	10.00	6,840
32	Supply & Fixing cement concrete pre cast kerb or dand upto 60cm. Length over 20mm thick base of cement mortar 1:4 including jointing earth work, pointing and jointing with cement mortar 1:4 of size including cost of M-20 mix dand/kerb complete -(20x25)/2x30cm	LM	610	20.00	12,200
33	Re-Fixing of Existing cement concrete pre cast kerb or dand upto 60cm. Length over 20mm thick base of cement mortar 1:4 including desmantling & Cleaning of existing surface, jointing earth work, pointing and jointing with cement mortar 1:4 of size including cost of M-20 mix dand/kerb complete - (20x25)/2x30cm	LM	74	100.00	7,400
34	Providing and laying 300x300x25mm precast cement concrete chequered tilse of grade M20 in ordinary grey cement without chips laid in cement mortar 1:3 over 150 mm compacted granular sub-base as per Clause 401 and 25 mm thick cement concrete M15 grade including pointing of tiles with neat cement all complete for footpath/ Wall median/junctions/islands etc. as per drawing , Technical Specifications and as directed by the Enginner.	Sqm.	587	20.00	11,740
35	Providing stone slab covering over drains including filling of joints in cement sand mortar 1:3 with 35mm thick cement concrete flooring 1:2:4 mix complete with good finish with stone slab 60 to 75 mm thick average	Sqm.	732	361.00	2,64,252
36	Providing and laying graded stone aggregate filter media underneath pitching on slopes complete as per drawing and technical specification (MoRTH specifaion clause : 2504)	Cum	1,093	75.00	81,975
37	Providing and laying pitching slopes complete as per drawing and technical specification (MoRTH specification clause : 2504 )- With RR stone, Weighing not less than 40 kg thickness not less than 1500 mm (specification gravity not less than 2.65 )	Cum	1,524	150.00	2,28,600
38	Furnishinng and laying of the live sods of perennial turf forming grass on embankment slope, verges or other location shown on the drawing or as directed by the engineer including preparation of ground , fetchng of sods and watering for two months	Sqm.	85	17.50	1,488

**Routine Maintenance on Baran -Jhalawar (LJ-2) Road from Km 0+000 Km 76+000 under Mega Highways Project in Rajasthan**

Item	Description	Unit	BOQ		
			Rate (Rs.)	Qty.	Amount (Rs)
39	Half brick circular tree guard in second class bricks internal dia. 1.25 meters and Ht. 1.2 meter above ground and 0.2 meters below ground bottom two course laid dry and top three course in cement meter 1:6 ( 1 Cement 6 Sand ) and the intermediate course bung in dry honey comb masonry as per design complete.	Each	1,219	20.00	24,380
40	P & F Delineator with 30 Cm. outer die RCC Hume pipe NP-2 (As per IS-458/1971 ) pipe 1.0 M. Long 40 cm. embedded in cement concrete (1:4:8) block of size 50x50x40 cm . Including excavation upto 40 cm depth. The inside of pipe shall be filled with C.C. (1:4:8) stone grit max size 20 mm or less upto the top semi-circular humping ,The pipes shall be painted white/black with enamel paint fitted with red reflector three Nos. of 7.5 cm die on each side,complete	Each	732	0.00	0
41	Repair of Poles,frames of sign boards/SOS phones/blinkers/delineators at road side including cutting welding and refixing as per directions but excluding painting and lettering	Each	732	150.00	1,09,800
42	Repair of road side cuts by earthen bags using empty gunny bag or cement bag including filling by dry sandy soil or local dry soil, transporting and fixing properly at site as per direction by Engineer.	Nos.	36	500.00	18,000
43	Restoration of rain cuts with soil, Morrum, gravel or a mixture of these including all leads lifts and cost of arrangement of land, clearing the loose soil, benching for 300mm width, laying fresh material in layers not exceeding 250mm and compacting with plate compactor or power rammer to restore the original alignment levels & slope complete as per MoRTH specification 3002	Cum	204	3,750.00	7,65,000
44	Silt clearance of drains, channels and canals with lift 1.5 m and lead upto 50 m in all respect.	Cum	244	2,250.00	5,49,000
45	Supplying of Dewatering Pumps (5-9 HP) during Monsoon Rains, Rates are inclusive of cost of fuel , maintenance ,transportation to the site & operator complete.	Per Hour	366	50.00	18,300
46	Supply of Tractor including brommer/grader for shoulder cleaning loose river sand with Operator & Diesel as and when required as per the directions of Engineer-In-Charge	Per Hour	531	20.00	10,620
47	Supply of Tractor including brommer/grader for shoulder cleaning loose river sand with Operator & Diesel as and when required as per the directions of Engineer-In-Charge	Per Day (8 Hrs )	3,657	10.00	36,570
48	Supply of Tractor With trolley for Transportation of materials including Operator, Diesel & all maintenance , as and when required as per the directions of Engineer-In-Charge	Per Hour	561	50.00	28,050
49	Supply of Tractor With trolley for Transportation of materials including Operator, Diesel & all maintenance , as and when required as per the directions of Engineer-In-Charge	Per Day (8 Hrs )	3,597	30.00	1,07,910
50	Providing and fixing of precast concrete interlocking blocks of M 30 grade 60mm thick manufactured from fully computerised automatic stationery hydraulic vibropressed machine and fully computerised automatic batching plant of class A1/A2 as per BS 6717:2001. The CC interlocking				

**Routine Maintenance on Baran -Jhalawar (LJ-2) Road from Km 0+000 Km 76+000 under Mega Highways Project in Rajasthan**

Item	Description	Unit	BOQ		
			Rate (Rs.)	Qty.	Amount (Rs)
	paving blocks be laid on average 50mm. thick bed of coarse sand and the joint is to be filled with fine sand. Laying procedure on compacted sub-base as defined. Complete job is to be executed as per the instruction of Engineer incharge. The rates to be inclusive of all lead, Lifts and taxes. General specification of blocks:1) Shape as defined by Engineer incharge2) Tensile splitting strength and braking load as per BS 6717:20013) Color: Grey cement natural colour4) Variation in dimension: Less than 1.6mm.5) Variation in thickness: Less than 3.2mm6) Abrasion: As per BS: 6717:2001				
50.1	60 mm thick M-30 Grade	Sqm.	718	100.00	71,800
50.2	80 mm thick M-30 Grade	Sqm.	937	50.00	46,850
50.3	100 mm thick M-30 Grade	Sqm.	1,131	50.00	56,550
50.4	Providing and laying 100 mm thick cement concrete blocks of M50 Grade(Manufactured with fully mechanised dry cast process with forced action mixer whose arms revolve along the main axis and rotate about itsown axis also,having humidity sensor for moisture control of w/c ratio in concrete mix,manufactured with steel moulds(milled and manufactured in csi diamond or csi Nitro process for accuracy) on steelbase plate of min 16mm thick:having vibration and pressing action both together with the help of multiple synchronised vibrators. Power of hydraulic station should be minimum 50 KW for compaction and cured in controlled chambers having humidity control and automated air circulation system) spreading 25 mm thick sand underneath and filling joints with sand on existing wbm base,as per IS 15658:2006 and all materials shall conform to MORTH specification Clause 602	Sqm.	1,572	0.00	0
51	Structural plain/reinforced cement concrete in foundation/Substructure ,including cost of all material ,formwork ,shuttering ,labour, Mechanically mixing, trasportationn, placing, vibration ,curing ,etc.excluding reinforcement complete as per drawing and Technical specification -Concrete M-10	Cum	3,817	0.00	0
52	Trim or prune trees and vegetation ,remove undesired trees branches and vegetation ,cut and trim vegetation hedge to the heigth and width described by the engineer using mobile mechanical equipment capable of vertical, horizontal and angle cuts with J.C.B. Disposing of cut tree branches and shrubs within the adjoining right-of-way where pruning activity is performed as specified by Engineer.	Hour	1,092	320.00	3,49,440
53	Trim or prune trees and vegetation ,remove undesired trees branches and vegetation and debries ,cut and trim vegetation hedge to the 2.5m heigth and width from the front of road furniture ,signages & shoulders as described by the engineer manually .Disposing of cut tree branches and shrubs debries within the adjoining right-of-way where pruning activity is performed as specified by Engineer.	Sqm.	3	90,000.00	2,70,000
54	Providing and Fixining in position HYSD /TMT reinforcement including cuttting, bending etc.complete as per drawing and technical Specification Laps, chairs and wastage shall be included in the rate and shall not be considered in the	MT	77,077	1.00	77,077

**Routine Maintenance on Baran -Jhalawar (LJ-2) Road from Km 0+000 Km 76+000 under Mega Highways Project in Rajasthan**

Item	Description	Unit	BOQ		
			Rate (Rs.)	Qty.	Amount (Rs)
	measurement .				
55	Supply of retro-reflective radium paint including surface application as per derrection of Project Manager	Kg.	5,462	0.00	0
56	Plantation of Avenue trees including digging & backfilling of Pits - 120x120x120 cmc size with good agricultural earth soil, including all lead & lift and providing & Fixing of FYM 10 kg per pit, Methyl Parathion Dust fertilizer 2% 50gm per pit and watering of plants once required at the time of plantation (25 litre ) as per the direction of Engineer.	Per Pit	177	500.00	88,500
57	Providing required plants as mentioned below complete in all respect in proper size of 1m to 1.5m clear height above ground level and packing (1) Neem (2) Amaltas (3) Jharkhanda (4) karan (5) Sheesham (6) Siras (7) Gulmohar (8) Sainjana (9) Peepal (10) Kadamb (11) Papdi .All plants Shall be supported by bamboo stick.	Nos.	150	500.00	75,000
58	Maintenance of avenue/median plants by the contractor including of watering, preparation of Thavala, Hoeing ,Weeding, pruning,application of insecticides, security, if the plant die during maintenance contractor has to replace same height plant at his own cost, maintaning bamboo supports etc. complete in all respect	per plant per month	20	6,000.00	1,20,000
59	Supply & laying of bituminious cold Mix Material prepared by mixing of cutback bitumen 5 to 7% and find aggregate as per specifications provied in kandhal Mix (Capacity : 50 Kg/bag)	Bags	689	300.00	2,06,700
60	Construction of earthen shoulder (minimum soaked CBR 10% ) complete with material obtained from road side with all lifts & leads, transporting to site, spreading, grading to required slope with motor grader, water tanker and compacted with 8-10 Ton roller to meet requirement of table No.300-2 as per availability and as per Technical Specification Clause 305	Sqm.	6	2,100.00	12,600
61	P&F 20 to 25 mm thick polished kota stone flooring over 20 mm thick base of cm. 1:4 (1-cement:4-coarse sand) and jointed with grey cement slurry including rubbing complete in all respect.	Sqm.	1,054	100.00	1,05,400
62	Providing weep holes in Plain/reinforced concrete/Random Rubble Massonary abutment, wing wall, return wall, drain, etc with 100 mm dia PVC pipe, extending through the full width of the structure with slope of 1V : 20H towards. Complete as per drawing and Technical specifications Section 2700	LM	153	100.00	15,300
63	Supply and Fixing of Flood Gauge ( Water Gauge) as per IRC 67 Standard 200CM long fixed on Angle iron post 50X50X6mm , 2.6M Long, fixing of Flood Gauge in Cement Concrete M15 Mix Size 30X30X60Cm complete including Transportation , excavation Et Complete	Each	2,379	100	2,37,900
64	Provision of Metal Drum/ Empty Bitumen Drum Delineator , 300mm In Diameter, 800MM high , filled wit eart for stability , Painted in Circumferential strips of alternate Black & White 100mm wide fitted with reflectror 3Nos of 7.5Cm dia, all as per IRC SP55 2001.	Each	536	20	10,720
65	Providing and fixing Pre moulded Bitumen Joint Filler at any level , for expansion joints including the cost of selaing	Meter/ Cm	11.00	0	0

**Routine Maintenance on Baran -Jhalawar (LJ-2) Road from Km 0+000 Km 76+000 under Mega Highways Project in Rajasthan**

Item	Description	Unit	BOQ		
			Rate (Rs.)	Qty.	Amount (Rs)
	compund and priming coat .( Mort&H Specification clause 2600). 25mm Wide				
66	Removal of existing sealent and resealing of contraction / longitudinal or expansion joints in concrete pavement with fresh sealent material hot poured rubberized bitumen or cold polysulphide type as per clause 602.2.8 with appropriate type of primer complete as per MORT&H specification clause 3005.2 & 2600	RM	164.00	0	0
67	Providing and fixing steel gate grating and grills made of angles / Tees , square bars or other flats black pipes with hold fast and fittings complete as p-er designe and drawing including cutting , welding and fabrication with priming coat of redoxide .	Kg.	107.00	200	21,400
68	Pointing of any design with cement mortart 1:3 on brick / stone work at any level as per MORT&H Specification 1600 .	Sqm.	76.00	0	0
69	Providing & Fixing Complete Single metal beam crash barrier made out of cold rolled steel strip W profile of 3 mm thick having a minimum yield strength of 2400 kg/sqcm, width of 312mm and depth of corrugation as 83 mm hot dip galvanized of zinc coating @ 550 gm/sq.m. The post and spacer channel is made out of cold rolled channel 150x75x5 mm having minimum yield strength of 2400 kg/sqcm and hot dip galvanized of zinc coating @ 550 gm/sq.m. The total length of post shall be 1900 mm and minimum height of post above foundation shall be 800 mm. The length of spacer channel shall be 330 mm. Job includes neatly fixing new post @ 2m C/C in cement concrete of M20 grade complete (cost included) as directed by the Engineer including fasteners and fixing etc. complete in all respect. as per MORT&H Specification 811.3 & IS 1364 & IS1367.	LM	3,807.00	150	5,71,050
70	Providing & Fixing Complete Double metal beam crash barrier made out of cold rolled steel strip W profile of 3 mm thick having a minimum yield strength of 2400 kg/sqcm, width of 535 mm and depth of corrugation as 83 mm hot dip galvanized of zinc coating @ 550 gm/sq.m. The post and spacer channel is made out of cold rolled channel 150x75x5 mm having minimum yield strength of 2400 kg/sqcm and hot dip galvanized of zinc coating @ 550 gm/sq.m. The total length of post shall be 1900 mm and minimum height of post above foundation shall be 800 mm. The length of spacer channel shall be 330 mm. Job includes neatly fixing new post @ 2m C/C in cement concrete of M20 grade complete (cost included) as directed by the Engineer including fasteners and fixing etc. complete in all respect.	LM	5,933.00	0	0
71	P&P Precast Dense Cement Concrete ( Vibro pressed) Drain section block of different size as per approved drawing and section block of different size approved drawing and designe and strength as per IS code:2185 Part-I of grade "D"(5.00mm) proper quality of additive/ Admixture like plasticizer etc added to produce high quality and durable drain section blocks of "L" shape, "U" shape etc. as per approved designe and drawing comlete with fixing and				0

<b>Routine Maintenance on Baran -Jhalawar (LJ-2) Road from Km 0+000 Km 76+000 under Mega Highways Project in Rajasthan</b>					
<b>Item</b>	<b>Description</b>	<b>Unit</b>	<b>BOQ</b>		
			<b>Rate (Rs.)</b>	<b>Qty.</b>	<b>Amount (Rs)</b>
	jointing in C.M. 1:4 in proper grade and level complete in all respect including earth work and disposal of surplus earth within 0.5km lead .				
71.1	115MM Thick	Sqm.	1,184	0	0
72	Providing and laying 25mm Thick mastic asphalt wearing course with paving grade Bitumen / Industrial grade Bitumen meeting the reuirement given in Table 500-39,40,41,42 prepared by using mastic cooker and laid to required level and slope after cleaning the surface ,including providing anti-skid surface with bitumen precoated fine grained hard stone chipping of 13.2mm nominal size at the rate of 0.005 cum per 10 Sqm and at an approximate spacing of 10cm center to center in both directions, pressed in to surface when the temperature of surfaces is not less than 1000c, protuding 1mmto4mm over mastic surface, all complete as per MoRT&H specification Clause 516	RM	669	0	0
73	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 front end loader and hot mixing of binder (including cost of anti-stripping compound wherever required) and aggregates in hot mix plant 40-60 TPH. Transporting the mix material with tipper and laying with sensor paver finisher (as per clause 501.5.3) to the required level grades and rolling with vibratory compactor 80 -100KN and pneumatic tyred roller 120-150 KN, TP=0.56 Mpa to achieve the desired density (approved by the department) excluding cost fo primer/tack coat (MoRTH Specification : Clause 507 & 112) Grading II (13.2 mm nominal size) Bitumen grade VG 30 @ 5.4% Minimum of mix & thickness 30-40 mm .				0
73.1	Bituminous Concrete For Rumble strip of size(10.5X0.3X0.025) a set of 6 strips @1m C/C at one location , Qty for one set = 0.567Cum	Cum	11,684	0	0
74	Supply & Fixing of Glare Blocker of M20 grade including reinforcement as per specficatrion/attached drawing with complete finishing .painting with cement paint of approved make and shade, inculding cost of foundation transportation and unloading of glare blocker at site complete in all respect as directed by Engineer-in-charge.	Nos.	3,566	0	0
<b>Total</b>					<b>2,51,78,099</b>



## Bill of Quantities (BOQ)

<b>Routine Maintenance on Jhalawar - Jhalawar (JJ) Road from Km 0+000 Km 31+000 under Mega Highways Project in Rajasthan</b>					
Item	Description	Unit	BOQ		
			Rate (Rs.)	Qty.	Amount (Rs)
1	Dismantling structures & pavement including disposal of resulting material and/or salvaging useful materials complete as per Technical Specifications Clause 202.				
1.1	Bituminous Pavement	Cum	254	80.00	20,320
1.2	Cement Concrete Pavement	Cum	1,261	10.00	12,610
1.3	Granular base including Granular Sub Base (GSB) and drainage layer	Cum	216	360.00	77,760
1.4	Rubble stone masonry in lime	Cum	286	0.00	0
1.5	Rubble stone masonry in cement	Cum	342	5.00	1,710
1.6	Dry rubble stone masonry	Cum	230	0.00	0
1.7	Hume Pipe	LM	556	0.00	0
2	Roadway excavation including removal of unsuitable soil at embankment base necessary for construction of roadway & structural in all types of soil including marshy soil as also excavation of existing shoulders and median to designated widths and depths in existing roadway embankment for purpose of pavement construction including transportation and disposal of surplus and unsuitable material complete with all lead & Lifts as per Technical Specification Clause 301. (original ground level shall be taken after clearing/grubbing operation) - All type soil	Cum	86	3,894.00	3,34,884
3	Construction of embankment with approved materials, transporting to site, spreading, grading to required slope and compacted by vibratory roller 8 - 10 Tonne to meet requirement of table 300-2 as per MoRTH specification Clause No. 305. Complete in all respect as per direction of Engineer.				
3.1	Material deposit at site from roadway cutting and excavation from drain and foundation of structure graded	Cum	161	0.00	0
4	Construction of sub-grade and earthen shoulders with approved material transporting to site, spreading, grading to required slope and compacted by, vibratory roller 8- 10 Tonne to meet requirement of Table 300-2 as per MoRTH specification Vth Clause 1 No.305				
4.1	Material deposited at site from roadway cutting & excavation from drain and foundation of other structures graded	Cum	283	1,350.00	3,82,050
4.2	Material obtained from borrow pits with all lifts and leads	Cum	297	0.00	0
5	Filling of median and island above road level with approved material brought from borrow pits, spreaded sloped and compacted as per MoRTH specification Clause 407	Cum	326	0.00	0
6	Providing and laying granular sub-base material having P.I. not more than 6 including spreading in layers not exceeding 150 mm compacted thickness and consolidation by 8-10 tonne power roller to required camber and grade including cost of labour water and hire charge of machinery including T&P with all lead & Lift (compacted thickness to be measured) as per MoRTH specification table 400-1,400-2.				
6.1	Using 100% Crushed Material	Cum	1,294	330.00	4,27,020
6.2	Using 100% Natural Material	Cum	884	50.00	44,200
7	Providing and laying, Spreading and compaction graded stone aggregate to Wet Mix Macadam specification including premixing the material with water at OMC in mechanical mix plant, carriage of mixed Material by tipper to site, laying in				

<b>Routine Maintenance on Jhalawar - Jhalawar (JJ) Road from Km 0+000 Km 31+000 under Mega Highways Project in Rajasthan</b>					
Item	Description	Unit	BOQ		
			Rate (Rs.)	Qty.	Amount (Rs)
	uniform layers and compacting with 8-10 tonne Smooth wheel roller to achieve the desired density complete as per MoRTH specification Clause 3004.				
7.1	Base Course	Cum	1,617	20.00	32,340
7.2	Pothole Repair	Cum	1,617	100.00	1,61,700
8	Providing and applying low viscosity modified bitumen emulsion for sealing cracks with crusher dust and emulsion on aligator cracks, incipient freeting or disintegration on existing bituminous surfacing after necessary cleaning of surface, removing of dust/debris/loose material etc. as per MORTH specification (2013) clause 300.3.3 or as directed by Engineer.	Sqm.	70	10,500.00	7,35,000
9	Providing and applying primer coat over prepared surface or granular base with bitumen emulsion SS-1 as per IS 8887 & manufacturers specifications @ 6kg/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 Cl 502 & 112 (including cleaning of road surface)	Sqm.	41	35.00	1,435
10	Providing and applying tack coat on the prepared surface with bitumen emulsion RS-1 as per IS 8887 & manufacturer specifications @ 2 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 Clause 503 & 112 (including cleaning of bituminous road surface)	Sqm.	14	35.00	490
11	Milling of the existing bituminous surface ( upto 50 mm thickness ) without disturbing the base by using Milling Machine inclusive cleaning and brooming with power broomer, air compressor & manpower complete traffic management, disposal of milled materila as instructed by the Engineer including disposal and salvage material	Sqm.	89	0.00	0
12	Providing and laying Dense Bituminous Macadam on prepared surface with specified graded crushed aggregate as per table-510 and disign mix for base/biner course including loading of material with frount end loader heating of binder (including cost of anti-stripping compound wherever required) aggregate and filler in hot mix plant 40-60 TPH. Transporting the mix material with tipper and laying with sensor paver finisher (as per clause 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) but excluding cost fo primer/tack coat (MoRTH Specification : Clause 507 & 112). Grading II (10 mm nominal size) Bitumen @ 4-4.5% of mix (60/70 grade) VG 30 & thickness 50-75 mm with	Cum	10,006	2.10	21,013
13	Providing and laying bituminous concrete as per design mix on prepared surface with specified graded stone as per table-500-18 for wearing course including loading fo aggregate with front end loader and hot mixing of binder (including cost of anti-stripping compound wherever required) and 3% cement filler with aggregates in hot mix plant 40-60 TPH. Transporting the mix material with tipper and laying with sensor paver finisher (as per clause 507.3.5) to the required	Cum	11,684	1.40	16,358

<b>Routine Maintenance on Jhalawar - Jhalawar (JJ) Road from Km 0+000 Km 31+000 under Mega Highways Project in Rajasthan</b>					
Item	Description	Unit	BOQ		
			Rate (Rs.)	Qty.	Amount (Rs)
	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 fo primer/tack coat (MoRTH Specification : Clause 509 & 112) Grading I (19 mm nominal size) Bitumen @ 5% of mix & thickness 50-65 mm with lead of mix material 20 Km - 60/70 grade VG 30				
14	Providing and laying seal coat for sealing the voids in a bituminous surface laid to the specified levels grade and cross fall, including cleaning and rolling with a smooth wheeled roller 8-10 tonne capacity finished to required level and grades, complete as per MoRTH specification clause 513 Type B - comprising of 2.36 mm to 180 micron size aggregate @ 0.06 Cum per 10 Sqm and bitumen binder @ 6.8 kg / 10 Sqm complete	Sqm.	110	0.00	0
15	Filling potholes and patch repairs with bituminous concrete, with varying thickness preferably 30/40 mm with removal of all failed material, trimming of completed excavation to provide firm vertical faces, cleaning of surface, painting of tack coat on the sides @ 2 Kg/10 Sqm and base of excavation as per Clause 503 back filling the potholes with hot bituminous material using 60/70 grade bitumen @ 5% of total mix & mixed in hot mix plant 40-60 TPH capacity and carriage with all leads as per clause 59, compacting with smooth wheel roller 8-10 tonne, trimming & finishing the surface to form a smooth continuous surface, all as per MoRTH specification Clause 3004.2	MT	5,080	400.00	20,32,000
16	Providing and laying First class brick masonry (Minimum 10.5 Mpa) in cement Mortar 1:3 up to a depth of 1.5 below ground and 1.5 m from bed/ground level (MORTH specification, clause 1000/1300)	Cum	5,770	50.00	2,88,500
17	Random Rubble Stone masonry work in cement mortar 1:3 for foundation / substructure including staging and treatment of joints complete as per drawing, Technical Specification Section 1400 and as directed by the Engineer.- Bridge/Culvert/Drain/Walls.	Cum	4,891	1,200.00	58,69,200
18	Provide plaster with Cement mortar (1 : 3), complete as per Technical Specification Section 1300 and as directed by the Engineer.				
18.1	25mm Thick.	Sqm.	196	2,100.00	4,11,600
18.2	12mm Thick.	Sqm.	169	250.00	42,250
19	Providing and laying reinforced cement concrete pipes N.P.4 for culverts including jointing ends and fixing collar with cement mortar 1:2 [MoRTH Specification : Clause : 1000/2900]				
19.1	1200mm Dia.	LM	10,746	0.00	0
19.2	1000mm Dia.	LM	9,643	0.00	0
19.3	900mm Dia.	LM	8,477	20.00	1,69,540
19.4	600mm Dia.	LM	5,770	10.00	57,700
19.5	300mm Dia.	LM	3,825	5.00	19,125
20	Structural plain/reinforced cement concrete in foundation/Substructure ,including cost of all material ,formwork ,shuttering ,labour, Mechanically mixing, trasportationn, placing, vibration ,curing ,etc.excluding				

<b>Routine Maintenance on Jhalawar - Jhalawar (JJ) Road from Km 0+000 Km 31+000 under Mega Highways Project in Rajasthan</b>					
Item	Description	Unit	BOQ		
			Rate (Rs.)	Qty.	Amount (Rs)
	reinforcement complete as per drawing and Technical specification Section 1500, 1700 & 2100				
20.1	M-15 Grade	Cum	4,037	408.75	16,50,124
20.2	M-20 Grade	Cum	4,631	40.00	1,85,240
20.3	M-25 Grade	Cum	5,224	89.25	4,66,242
20.4	M-30 Grade	Cum	5,830	0.00	0
20.5	M-35Grade	Cum	6,519	0.00	0
20.6	M-40 Grade	Cum	6,890	219.00	15,08,910
21	Thermoplastice pavement marking with hot applied thermoplastic material for road marking with surface application of glass beads at specified rate complete as per deawing, Technical Specification Clause 803 and as derected by the Engineer. Thermoplastice marking with material conforming to Clause 803.4 of MoRTH having Tio2 (for white ) minimum 10% and softing point 102.5 + 9.5 C - Lane ,Centerline, Edge, pedestrian crossing marking and other marking along strips				
21.1	Including Material, Application, Labour Charge Complete Item	Sqm.	440	1,600.00	7,04,000
22	White washing of trees 1.50 m height complete:				
22.1	Girth from 300 mm to 600 mm	Each	19	100.00	1,900
22.2	Girth from 600 mm to 900 mm	Each	29	50.00	1,450
22.3	Girth from 900 mm to 1800 mm	Each	37	50.00	1,850
22.4	Girth above 1800 mm	Each	41	50.00	2,050
23	Painting with superior grade enamel paint of approved quality to give an even shade including writing littering figuring etc. complete as per IRC standards of:-				
23.1	5th Km Stone	Each	292	2.00	584
23.2	Km Stone for ODR & MDR	Each	174	5.00	870
23.3	200 M stone & Boundary stone	Each	96	20.00	1,920
24	Painting two coats including primer coat after filling the surface with synthetic enamel paint in all shades on new, plastered / concrete surfaces as per drawing and technical specification (Clause 1701)	Sqm.	122	5,441.55	6,63,869
25	Painting two coats of ready mix paint including primer coat of approved brand on steel surface after thorough cleaning of surface to give an even shade as per drawing and Technical specification clause (1701)	Sqm.	120	570.00	68,400
26	White washing with lime to give an even shade at parapets,kerbs,railling,trees,boundry stone , guard etc.including scaffolding all complete :				
26.1	New work (two or more coats)	Sqm.	25	100.00	2,500
26.2	Old work (two or more coats) including scrapping old surface and pepairing with whitng where ever necessary	Sqm.	19	100.00	1,900
27	Distempering with oil bould washable distemper of approved brand and manufacture to give an even shade including all scaffolding:				
27.1	New work (two or more coats) over and including scrapping and priming coat with cement primer	Sqm.	109	0.00	0
27.2	Old work (two or more coats) including scrapping old surface and necessary repair- Coulour Change	Sqm.	103	10.00	1,030
28	Removing dry or oil bound distemper by scrapping sand papering and preparing surface smooth including necessary	Sqm.	24	50.00	1,200

<b>Routine Maintenance on Jhalawar - Jhalawar (JJ) Road from Km 0+000 Km 31+000 under Mega Highways Project in Rajasthan</b>					
Item	Description	Unit	BOQ		
			Rate (Rs.)	Qty.	Amount (Rs)
	repairs to scratches by sandla/loi and all scaffolding (for colour changing only)				
29	Supply and fixing of Micro Prismatic type Retro-Reflective Stickers Type 9 ASTM D 4956_01 100mm dia size in different colour (Red,Amber,Green,White,etc.), including pasting on backside of vehicle complete .	Each	16	500.00	8,000
30	Supply and fixing of aluminium folio micro prismatic tape 9 ASTM D 4956-01 Retro -Reflective tape fix on concrete base, trees.	Sqm.	98	500.00	49,000
31	Supplying and fixing Cut stones including earth work, cement concrete 1:4:8 engraving letters and numerals, as per IRC standard design.				
31.1	Km Stone for NH, SH & MDR (size 35 x 110 x 25 cm)	Each	2,396	5.00	11,980
31.2	5th Km Stone ( size-50 x 152 x 25 CM)	Each	3,935	2.00	7,870
31.3	200 Meter (size 15 x 15 x 90 cm)	Each	684	20.00	13,680
31.4	Guide stone (size 15 x 15 120 cm )	Each	684	20.00	13,680
32	Supply & Fixing cement concrete pre cast kerb or dand upto 60cm. Length over 20mm thick base of cement mortar 1:4 including jointing earth work, pointing and jointing with cement mortar 1:4 of size including cost of M-20 mix dand/kerb complete -(20x25)/2x30cm	LM	610	10.00	6,100
33	Re-Fixing of Existing cement concrete pre cast kerb or dand upto 60cm. Length over 20mm thick base of cement mortar 1:4 including desmantling & Cleaning of existing surface, jointing earth work, pointing and jointing with cement mortar 1:4 of size including cost of M-20 mix dand/kerb complete - (20x25)/2x30cm	LM	74	100.00	7,400
34	Providing and laying 300x300x25mm precast cement concrete chequered tilse of grade M20 in ordinary grey cement without chips laid in cement mortar 1:3 over 150 mm compacted granular sub-base as per Clause 401 and 25 mm thick cement concrete M15 grade including pointing of tiles with neat cement all complete for footpath/ Wall median/junctions/islands etc. as per drawing , Technical Specifications and as directed by the Enginner.	Sqm.	587	100.00	58,700
35	Providing stone slab covering over drains including filling of joints in cement sand mortar 1:3 with 35mm thick cement concrete flooring 1:2:4 mix complete with good finish with stone slab 60 to 75 mm thick average	Sqm.	732	2,394.00	17,52,408
36	Providing and laying graded stone aggregate filter media underneath pitching on slopes complete as per drawing and technical specification (MoRTH specifaicaion clause : 2504)	Cum	1,093	9.00	9,837
37	Providing and laying pitching slopes complete as per drawing and technical specification (MoRTH specification clause : 2504 )- With RR stone, Weighing not less than 40 kg thickness not less than 1500 mm (specification gravity not less than 2.65 )	Cum	1,524	18.00	27,432
38	Furnishinng and laying of the live sods of perennial turf forming grass on embankment slope, verges or other location shown on the drawing or as directed by the engineer including preparation of ground , fetching of sods and watering for two months	Sqm.	85	35.00	2,975
39	Half brick circular tree guard in second class bricks internal dia. 1.25 meters and Ht. 1.2 meter above ground and 0.2	Each	1,219	20.00	24,380

<b>Routine Maintenance on Jhalawar - Jhalawar (JJ) Road from Km 0+000 Km 31+000 under Mega Highways Project in Rajasthan</b>					
Item	Description	Unit	BOQ		
			Rate (Rs.)	Qty.	Amount (Rs)
	meters below ground bottom two course laid dry and top three course in cement meter 1:6 ( 1 Cement 6 Sand ) and the intermediate course bung in dry honey comb masonry as per design complete.				
40	P & F Delineator with 30 Cm. outer die RCC Hume pipe NP-2 (As per IS-458/1971 ) pipe 1.0 M. Long 40 cm. embedded in cement concrete (1:4:8) block of size 50x50x40 cm . Including excavation upto 40 cm depth. The inside of pipe shall be filled with C.C. (1:4:8) stone grit max size 20 mm or less upto the top semi-circular humping ,The pipes shall be painted white/black with enamel paint fitted with red reflector three Nos. of 7.5 cm die on each side,complete	Each	732	10.00	7,320
41	Repair of Poles,frames of sign boards/SOS phones/blinkers/delineators at road side including cutting welding and refixing as per directions but excluding painting and lettering	Each	732	100.00	73,200
42	Repair of road side cuts by earthen bags using empty gunny bag or cement bag including filling by dry sandy soil or local dry soil, transporting and fixing properly at site as per direction by Engineer.	Nos.	36	250.00	9,000
43	Restoration of rain cuts with soil, Morrum, gravel or a mixture of these including all leads lifts and cost of arrangement of land, clearing the loose soil, benching for 300mm width, laying fresh material in layers not exceeding 250mm and compacting with plate compactor or power rammer to restore the original alignment levels & slope complete as per MoRTH specification 3002	Cum	204	1,125.00	2,29,500
44	Silt clearance of drains, channels and canals with lift 1.5 m and lead upto 50 m in all respect.	Cum	244	2,250.00	5,49,000
45	Supplying of Dewatering Pumps (5-9 HP) during Monsoon Rains, Rates are inclusive of cost of fuel , maintenance ,transportation to the site & operator complete.	Per Hour	366	50.00	18,300
46	Supply of Tractor including brommer/grader for shoulder cleaning loose river sand with Operator & Diesel as and when required as per the directions of Engineer-In-Charge	Per Hour	531	5.00	2,655
47	Supply of Tractor including brommer/grader for shoulder cleaning loose river sand with Operator & Diesel as and when required as per the directions of Engineer-In-Charge	Per Day (8 Hrs )	3,657	3.00	10,971
48	Supply of Tractor With trolley for Transportation of materials including Operator, Diesel & all maintenance , as and when required as per the directions of Engineer-In-Charge	Per Hour	561	50.00	28,050
49	Supply of Tractor With trolley for Transportation of materials including Operator, Diesel & all maintenance , as and when required as per the directions of Engineer-In-Charge	Per Day (8 Hrs )	3,597	50.00	1,79,850
50	Providing and fixing of precast concrete interlocking blocks of M 30 grade 60mm thick manufactured from fully computerised automatic stationery hydraulic vibropressed machine and fully computerised automatic batching plant of class A1/A2 as per BS 6717:2001. The CC interlocking paving blocks be laid on average 50mm. thick bed of coarse sand and the joint is to be filled with fine sand. Laying procedure on compacted sub-base as defined. Complete job is				

<b>Routine Maintenance on Jhalawar - Jhalawar (JJ) Road from Km 0+000 Km 31+000 under Mega Highways Project in Rajasthan</b>					
Item	Description	Unit	BOQ		
			Rate (Rs.)	Qty.	Amount (Rs)
	to be executed as per the instruction of Engineer incharge. The rates to be inclusive of all lead, Lifts and taxes. General specification of blocks: 1) Shape as defined by Engineer incharge 2) Tensile splitting strength and braking load as per BS 6717:2001 3) Color: Grey cement natural colour 4) Variation in dimension: Less than 1.6mm. 5) Variation in thickness: Less than 3.2mm 6) Abrasion: As per BS: 6717:2001				
50.1	60 mm thick M-30 Grade	Sqm.	718	200.00	1,43,600
50.2	80 mm thick M-30 Grade	Sqm.	937	20.00	18,740
50.3	100 mm thick M-30 Grade	Sqm.	1,131	20.00	22,620
50.4	Providing and laying 100 mm thick cement concrete blocks of M50 Grade(Manufactured with fully mechanised dry cast process with forced action mixer whose arms revolve along the main axis and rotate about its own axis also, having humidity sensor for moisture control of w/c ratio in concrete mix, manufactured with steel moulds(milled and manufactured in csi diamond or csi Nitro process for accuracy) on steel base plate of min 16mm thick:having vibration and pressing action both together with the help of multiple synchronised vibrators. Power of hydraulic station should be minimum 50 KW for compaction and cured in controlled chambers having humidity control and automated air circulation system) spreading 25 mm thick sand underneath and filling joints with sand on existing wbm base, as per IS 15658:2006 and all materials shall conform to MORTH specification Clause 602	Sqm.	1,572	0.00	0
51	Structural plain/reinforced cement concrete in foundation/Substructure ,including cost of all material ,formwork ,shuttering ,labour, Mechanically mixing, transportation, placing, vibration ,curing ,etc.excluding reinforcement complete as per drawing and Technical specification -Concrete M-10	Cum	3,817	5.00	19,085
52	Trim or prune trees and vegetation ,remove undesired trees branches and vegetation ,cut and trim vegetation hedge to the height and width described by the engineer using mobile mechanical equipment capable of vertical, horizontal and angle cuts with J.C.B. Disposing of cut tree branches and shrubs within the adjoining right-of-way where pruning activity is performed as specified by Engineer.	Hour	1,092	300.00	3,27,600
53	Trim or prune trees and vegetation ,remove undesired trees branches and vegetation and debris ,cut and trim vegetation hedge to the 2.5m height and width from the front of road furniture ,signages & shoulders as described by the engineer manually .Disposing of cut tree branches and shrubs debris within the adjoining right-of-way where pruning activity is performed as specified by Engineer.	Sqm.	3	75,000.00	2,25,000
54	Providing and Fixing in position HYSD /TMT reinforcement including cutting, bending etc.complete as per drawing and technical Specification Laps, chairs and wastage shall be included in the rate and shall not be considered in the measurement .	MT	77,077	2.00	1,54,154
55	Supply of retro-reflective radium paint including surface	Kg.	5,462	0.00	0

<b>Routine Maintenance on Jhalawar - Jhalawar (JJ) Road from Km 0+000 Km 31+000 under Mega Highways Project in Rajasthan</b>					
Item	Description	Unit	BOQ		
			Rate (Rs.)	Qty.	Amount (Rs)
	application as per direction of Project Manager				
56	Plantation of Avenue trees including digging & backfilling of Pits - 120x120x120 cm size with good agricultural earth soil, including all lead & lift and providing & Fixing of FYM 10 kg per pit, Methyl Parathion Dust fertilizer 2% 50gm per pit and watering of plants once required at the time of plantation (25 litre ) as per the direction of Engineer.	Per Pit	177	500.00	88,500
57	Providing required plants as mentioned below complete in all respect in proper size of 1m to 1.5m clear height above ground level and packing (1) Neem (2) Amaltas (3) Jharkhanda (4) karan (5) Sheesham (6) Siras (7) Gulmohar (8) Sainjana (9) Peepal (10) Kadamb (11) Papdi .All plants Shall be supported by bamboo stick.	Nos.	150	500.00	75,000
58	Maintenance of avenue/median plants by the contractor including of watering, preparation of Thavala, Hoeing ,Weeding, pruning,application of insecticides, security, if the plant die during maintenance contractor has to replace same height plant at his own cost, maintaining bamboo supports etc. complete in all respect	per plant per month	20	6,000.00	1,20,000
59	Supply & laying of bituminous cold Mix Material prepared by mixing of cutback bitumen 5 to 7% and fine aggregate as per specifications provided in kandhal Mix (Capacity : 50 Kg/bag)	Bags	689	300.00	2,06,700
60	Construction of earthen shoulder (minimum soaked CBR 10% ) complete with material obtained from road side with all lifts & leads, transporting to site, spreading, grading to required slope with motor grader, water tanker and compacted with 8-10 Ton roller to meet requirement of table No.300-2 as per availability and as per Technical Specification Clause 305	Sqm.	6	150.00	900
61	P&F 20 to 25 mm thick polished kota stone flooring over 20 mm thick base of cm. 1:4 (1-cement:4-coarse sand) and jointed with grey cement slurry including rubbing complete in all respect.	Sqm.	1,054	300.00	3,16,200
62	Providing weep holes in Plain/reinforced concrete/Random Rubble Masonry abutment, wing wall, return wall, drain, etc with 100 mm dia PVC pipe, extending through the full width of the structure with slope of 1V : 20H towards. Complete as per drawing and Technical specifications Section 2700	LM	153	80.00	12,240
63	Supply and Fixing of Flood Gauge ( Water Gauge) as per IRC 67 Standard 200CM long fixed on Angle iron post 50X50X6mm , 2.6M Long, fixing of Flood Gauge in Cement Concrete M15 Mix Size 30X30X60Cm complete including Transportation , excavation Et Complete	Each	2,379	0	0
64	Provision of Metal Drum/ Empty Bitumen Drum Delineator , 300mm In Diameter, 800MM high , filled with earth for stability , Painted in Circumferential strips of alternate Black & White 100mm wide fitted with reflector 3Nos of 7.5Cm dia, all as per IRC SP55 2001.	Each	536	20	10720
65	Providing and fixing Pre moulded Bitumen Joint Filler at any level , for expansion joints including the cost of sealant compound and priming coat .( Mort&H Specification clause 2600). 25mm Wide	RM	11	0	0
66	Removal of existing sealant and resealing of contraction /	RM	164.00	0	0



<b>Routine Maintenance on Jhalawar - Jhalawar (JJ) Road from Km 0+000 Km 31+000 under Mega Highways Project in Rajasthan</b>					
Item	Description	Unit	BOQ		
			Rate (Rs.)	Qty.	Amount (Rs)
	longitudinal or expansion joints in concrete pavement with fresh sealent material hot poured rubberized bitumen or cold polysulphide type as per clause 602.2.8 with appropriate type of primer complete as per MORT&H specification clause 3005.2 & 2600				
67	Providing and fixing steel gate grating and grills made of angles / Tees , square bars or other flats black pipes with hold fast and fittings complete as p-er designe and drawing including cutting , welding and fabrication with priming coat of redoxide .	Kg.	107.00	200	21,400
68	Pointing of any design with cement mortart 1:3 on brick / stone work at any level as per MORT&H Specification 1600 .	Sqm.	76.00	0	0
69	Providing & Fixing Complete Single metal beam crash barrier made out of cold rolled steel strip W profile of 3 mm thick having a minimum yield strength of 2400 kg/sqcm, width of 312mm and depth of corrugation as 83 mm hot dip galvanized of zinc coating @ 550 gm/sq.m. The post and spacer channel is made out of cold rolled channel 150x75x5 mm having minimum yield strength of 2400 kg/sqcm and hot dip galvanized of zinc coating @ 550 gm/sq.m. The total length of post shall be 1900 mm and minimum height of post above foundation shall be 800 mm. The length of spacer channel shall be 330 mm. Job includes neatly fixing new post @ 2m C/C in cement concrete of M20 grade complete (cost included) as directed by the Engineer including fasteners and fixing etc. complete in all respect. as per MORT&H Specification 811.3 & IS 1364 & IS1367.	LM	3,807.00	50	1,90,350
70	Providing & Fixing Complete Double metal beam crash barrier made out of cold rolled steel strip W profile of 3 mm thick having a minimum yield strength of 2400 kg/sqcm, width of 535 mm and depth of corrugation as 83 mm hot dip galvanized of zinc coating @ 550 gm/sq.m. The post and spacer channel is made out of cold rolled channel 150x75x5 mm having minimum yield strength of 2400 kg/sqcm and hot dip galvanized of zinc coating @ 550 gm/sq.m. The total length of post shall be 1900 mm and minimum height of post above foundation shall be 800 mm. The length of spacer channel shall be 330 mm. Job includes neatly fixing new post @ 2m C/C in cement concrete of M20 grade complete (cost included) as directed by the Engineer including fasteners and fixing etc. complete in all respect.	LM	5,933.00	0	0
71	P&P Precast Dense Cement Concrete ( Vibro pressed) Drain section block of different size as per approved drawing and section block of different size approved drawing and designe and strength as per IS code:2185 Part-I of grade "D"(5.00mm) proper quality of additive/ Admixture like plasticizer etc added to produce high quality and durable drain section blocks of "L" shape, "U" shape etc. as per approved designe and drawing comlete with fixing and jointing in C.M. 1:4 in proper grade and level complete in all respect including earth work and disposal of surplus earth within 0.5km lead .				0
71.1	115MM Thick	Sqm.	1,184	0	0
72	Providing and laying 25mm Thick mastic asphalt wearing course with paving grade Bitumen / Industrial grade Bitumen	RM	669	0	0

<b>Routine Maintenance on Jhalawar - Jhalawar (JJ) Road from Km 0+000 Km 31+000 under Mega Highways Project in Rajasthan</b>					
<b>Item</b>	<b>Description</b>	<b>Unit</b>	<b>BOQ</b>		
			<b>Rate (Rs.)</b>	<b>Qty.</b>	<b>Amount (Rs)</b>
	meeting the requirement given in Table 500-39,40,41,42 prepared by using mastic cooker and laid to required level and slope after cleaning the surface ,including providing anti-skid surface with bitumen pre-coated fine grained hard stone chipping of 13.2mm nominal size at the rate of 0.005 cum per 10 Sqm and at an approximate spacing of 10cm center to center in both directions, pressed in to surface when the temperature of surfaces is not less than 100°C, protruding 1mm to 4mm over mastic surface, all complete as per MoRTH specification Clause 516				
73	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 front end loader and hot mixing of binder (including cost of anti-stripping compound wherever required) and aggregates in hot mix plant 40-60 TPH. Transporting the mix material with tipper and laying with sensor paver finisher (as per clause 501.5.3) to the required level grades and rolling with vibratory compactor 80 -100KN and pneumatic tyred roller 120-150 KN, TP=0.56 Mpa to achieve the desired density (approved by the department) excluding cost of primer/tack coat (MoRTH Specification : Clause 507 & 112) Grading II (13.2 mm nominal size) Bitumen grade VG 30 @ 5.4% Minimum of mix & thickness 30-40 mm .				0
73.1	Bituminous Concrete For Rumble strip of size(10.5X0.3X0.025) a set of 6 strips @1m C/C at one location , Qty for one set = 0.567Cum	Cum	11,684	0	0
74	Supply & Fixing of Glare Blocker of M20 grade including reinforcement as per specification/attached drawing with complete finishing .painting with cement paint of approved make and shade, including cost of foundation transportation and unloading of glare blocker at site complete in all respect as directed by Engineer-in-charge.	Nos.	3,566	0	0
<b>Total</b>					<b>2,14,76,940</b>

## Bill of Quantities (BOQ)

<b>Routine Maintenance on Jhalawar -Ujjain Road (JU) Road from Km 0+000 Km 29+000 under Mega Highways Project in Rajasthan</b>					
Item	Description	Unit	BOQ		
			Rate (Rs.)	Qty.	Amount (Rs)
1	Dismantling structures & pavement including disposal of resulting material and/or salvaging useful materials complete as per Technical Specifications Clause 202.				
1.1	Bituminous Pavement	Cum	254	10.00	2,540
1.2	Cement Concrete Pavement	Cum	1,261	0.00	0
1.3	Granular base including Granular Sub Base (GSB) and drainage layer	Cum	216	10.00	2,160
1.4	Rubble stone masonry in lime	Cum	286	0.00	0
1.5	Rubble stone masonry in cement	Cum	342	0.00	0
1.6	Dry rubble stone masonry	Cum	230	0.00	0
1.7	Hume Pipe	LM	556	0.00	0
2	Roadway excavation including removal of unsuitable soil at embankment base necessary for construction of roadway & structural in all types of soil including marshy soil as also excavation of existing shoulders and median to designated widths and depths in existing roadway embankment for purpose of pavement construction including transportation and disposal of surplus and unsuitable material complete with all lead & Lifts as per Technical Specification Clause 301. (original ground level shall be taken after clearing/grubbing operation) - All type soil	Cum	86	1,316.00	1,13,176
3	Construction of embankment with approved materials, transporting to site, spreading, grading to require slope and compacted by vibratory roller 8 - 10 Tone to meet requirement of table 300-2 as per MoRTH specification Clause No. 305. Complete in all respect as per direction of Engineer.				
3.1	Materials deposit at site from roadway cutting and excavation from drain and foundation of structure graded	Cum	161	0.00	0
4	Construction of sub-grade and earthen shoulders with approved material transporting 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 Vth Clause I No.305				
4.1	Material deposited at site from roadway cutting & excavation from drain and foundation of other structures graded	Cum	283	0.00	0
4.2	Material obtained from borrow pits with all lifts and leads	Cum	297	900.00	2,67,300
5	Filling of median and island above road level with approved material brought from borrow pits, spreaded sloped and compacted as per MoRTH specification Clause 408	Cum	326	0.00	0
6	Providing and laying granular sub-base material having P.I. not more than 6 including spreading in layers not exceeding 150 mm compacted thickness and consolidation by 8-10 tonne power roller to required camber and grade including cost of labour water and hire charge of machinery including T&P with all lead & Lift (compactness to be measured ) as per MoRTH specification table 400-1,400-2.				
6.1	Using 100% Crushed Material	Cum	1,294	50.00	64,700
6.2	Using 100% Natural Material	Cum	884	0.00	0
7	Providing and laying , Spreading and compaction graded stone aggregate to Wet Mix Macadam specification including premixing the material with water at OMC in mechanical				

<b>Routine Maintenance on Jhalawar -Ujjain Road (JU) Road from Km 0+000 Km 29+000 under Mega Highways Project in Rajasthan</b>					
Item	Description	Unit	BOQ		
			Rate (Rs.)	Qty.	Amount (Rs)
	mix plant ,carriage of mixed Material by tipper to site, laying in uniform layers and compacting with 8-10 tonne Smooth wheel roller to achieve the desired density complete as per MoRTH specification Clause 3004.				
7.1	Base Course	Cum	1,617	0.00	0
7.2	Pothole Repair	Cum	1,617	50.00	80,850
8	Providing and applying low viscosity modified bitumen emulsion for sealing cracks with crusher dust and emulsion on aligator cracks, incipient freeting or disintegration on existing bituminous surfacing after necessary cleaning of surface, removing of dust/debris/loose material etc. as per MORTH specification (2013) clause 300.3.3 or as directed by Engineer.	Sqm.	70	14,000.00	9,80,000
9	Providing and applying primer coat over prepared surface or granular base with bitumen emulsion SS-1 as per IS 8887 & manufacturers specifications @ 6kg/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 Cl 502 & 112 (including cleaning of road surface)	Sqm.	41	100.00	4,100
10	Providing and applying tack coat on the prepared surface with bitumen emulsion RS-1 as per IS 8887 & manufacturer specifications @ 2 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 Clause 503 & 112 (including cleaning of bituminous road surface)	Sqm.	14	200.00	2,800
11	Milling of the existing bituminous surface ( upto 50 mm thickness ) without disturbing the base by using Milling Machine inclusive cleaning and brooming with power broomer, air compressor & manpower complete traffic management, disposal of milled materila as instructed by the Engineer including disposal and salvage material	Sqm.	89	0.00	0
12	Providing and laying Dense Bituminous Macadam on prepared surface with specified graded crushed aggregate as per table-510 and design mix for base/biner course including loading of material with front end loader heating of binder (including cost of anti-stripping compound wherever required) aggregate and filler in hot mix plant 40-60 TPH. Transporting the mix material with tipper and laying with sensor paver finisher (as per clause 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) but excluding cost fo primer/tack coat (MoRTH Specification : Clause 507 & 112). Grading II (10 mm nominal size) Bitumen @ 4-4.5% of mix (60/70 grade) VG 30 & thickness 50-75 mm with	Cum	10,006	6.00	60,036
13	Providing and laying bituminous concrete as per design mix on prepared surface with specified graded stone as per table-500-18 for wearing course including loading fo aggregate with front end loader and hot mixing of binder (including cost of anti-stripping compound wherever required) and 3% cement filler with aggregates in hot mix plant 40-60 TPH.	Cum	11,684	4.00	46,736

<b>Routine Maintenance on Jhalawar -Ujjain Road (JU) Road from Km 0+000 Km 29+000 under Mega Highways Project in Rajasthan</b>					
Item	Description	Unit	BOQ		
			Rate (Rs.)	Qty.	Amount (Rs)
	Transporting the mix material with tipper and laying with sensor paver finisher (as per clause 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 fo primer/tack coat (MoRTH Specification : Clause 509 & 112) Grading I (19 mm nominal size) Bitumen @ 5% of mix & thickness 50-65 mm with lead of mix material 20 Km - 60/70 grade VG 30				
14	Providing and laying seal coat for sealing the voids in a bituminous surface laid to the specified levels grade and cross fall, including cleaning and rolling with a smooth wheeled roller 8-10 tonne capacity finished to required level and grades, complete as per MoRTH specification clause 513 Type B - comprising of 2.36 mm to 180 micron size aggregate @ 0.06 Cum per 10 Sqm and bitumen binder @ 6.8 kg / 10 Sqm complete	Sqm.	110	0.00	0
15	Filling potholes and patch repairs with bituminous concrete, with varying thickness preferably 30/40 mm with removal of all failed material, trimming of completed excavation to provide firm vertical faces, cleaning of surface, painting of tack coat on the sides @ 2 Kg/10 Sqm and base of excavation as per Clause 503 back filling the potholes with hot bituminous material using 60/70 grade bitumen @ 5% of total mix & mixed in hot mix plant 40-60 TPH capacity and carriage with all leads as per clause 59, compacting with smooth wheel roller 8-10 tonne, trimming & finishing the surface to form a smooth continuous surface, all as per MoRTH specification Clause 3004.2	MT	5,080	100.00	5,08,000
16	Providing and laying First class brick masonry (Minimum 10.5 Mpa) in cement Mortar 1:3 up to a depth of 1.5 below ground and 1.5 m from bed/ground level (MORTH specification, clause 1000/1300)	Cum	5,770	20.00	1,15,400
17	Random Rubble Stone masonry work in cement mortar 1:3 for foundation / substructure including staging and treatment of joints complete as per drawing, Technical Specification Section 1400 and as directed by the Engineer.- Bridge/Culvert/Drain/Walls.	Cum	4,891	500.00	24,45,500
18	Provide plaster with Cement mortar (1 : 3), complete as per Technical Specification Section 1300 and as directed by the Engineer.				
18.1	25mm Thick.	Sqm.	196	1,400.00	2,74,400
18.2	12mm Thick.	Sqm.	169	0.00	0
19	Providing and laying reinforced cement concrete pipes N.P.4 for culverts including jointing ends and fixing collar with cement mortar 1:2 [MoRTH Specification : Clause : 1000/2900]				
19.1	1200mm Dia.	LM	10,746	10.00	1,07,460
19.2	1000mm Dia.	LM	9,643	0.00	0
19.3	900mm Dia.	LM	8,477	20.00	1,69,540
19.4	600mm Dia.	LM	5,770	10.00	57,700
19.5	300mm Dia.	LM	3,825	5.00	19,125
20	Structural plain/reinforced cement concrete in foundation/Substructure ,including cost of all material				

**Routine Maintenance on Jhalawar -Ujjain Road (JU) Road from Km 0+000 Km 29+000  
under Mega Highways Project in Rajasthan**

Item	Description	Unit	BOQ		
			Rate (Rs.)	Qty.	Amount (Rs)
	,formwork ,shuttering ,labour, Mechanically mixing, trasportationn, placing, vibration ,curing ,etc.excluding reinforcement complete as per drawing and Technical specification Section 1500, 1700 & 2100				
20.1	M-15 Grade	Cum	4,037	114.00	4,60,218
20.2	M-20 Grade	Cum	4,631	50.00	2,31,550
20.3	M-25 Grade	Cum	5,224	34.00	1,77,616
20.4	M-30 Grade	Cum	5,830	0.00	0
20.5	M-35Grade	Cum	6,519	0.00	0
20.6	M-40 Grade	Cum	6,890	3.00	20,670
21	Thermoplastice pavement marking with hot applied thermoplastic material for road marking with surface application of glass beads at specified rate complete as per deawing, Technical Specification Clause 803 and as derected by the Engineer. Thermoplastice marking with material comforming to Clause 803.4 of MoRTH having Tio2 (for white ) minimum 10% and softing point 102.5 + 9.5 C - Lane ,Centerline, Edge, pedestrian crossing marking and other marking along strips				
21.1	Including Material, Application, Labour Charge Complete Item	Sqm.	440	1,300.00	5,72,000
22	White washing of trees 1.50 m height complete:				
22.1	Girth from 300 mm to 600 mm	Each	19	100.00	1,900
22.2	Girth from 600 mm to 900 mm	Each	29	50.00	1,450
22.3	Girth from 900 mm to 1800 mm	Each	37	40.00	1,480
22.4	Girth above 1800 mm	Each	41	40.00	1,640
23	Painting with superior grade enamel paint of approved quality to give an even shade including writing littering figuring etc. complete as per IRC standards of:-				
23.1	5th Km Stone	Each	292	2.00	584
23.2	Km Stone for ODR & MDR	Each	174	5.00	870
23.3	200 M stone & Boundary stone	Each	96	20.00	1,920
24	Painting two coats including primer coat after filling the surface with synthetic enamel paint in all shades on new, plastered / concrete surfaces as per drawing and technical specification (Clause 1701)	Sqm.	122	2,384.55	2,90,915
25	Painting two coats of ready mix paint including primer coat of approved brand on steel surface after thourgh cleaning of surface to give an even shadeas per drawing and Technical specification clause (1701)	Sqm.	120	450.00	54,000
26	White washing with lime to give an even shade at parapets,kerbs,railling,trees,boundry stone , guard etc.including scaffolding all complete :				
26.1	New work (two or more coats)	Sqm.	25	10.00	250
26.2	Old work (two or more coats) including scrapping old surface and pepairing with whitening where ever necessary	Sqm.	19	10.00	190
27	Distempering with oil bould washable distemper of approved brand and manufacture to give an even shade including all scaffolding:				
27.1	New work (two or more coats) over and including scrapping and priming coat with cement primer	Sqm.	109	5.00	545
27.2	Old work (two or more coats) including scrapping old surface and necessary repair- Coulour Change	Sqm.	103	10.00	1,030

<b>Routine Maintenance on Jhalawar -Ujjain Road (JU) Road from Km 0+000 Km 29+000 under Mega Highways Project in Rajasthan</b>					
Item	Description	Unit	BOQ		
			Rate (Rs.)	Qty.	Amount (Rs)
28	Removing dry or oil bound distemper by scrapping sand papering and preparing surface smooth including necessary repairs to scratches by sandla/loi and all scaffolding (for colour changing only)	Sqm.	24	10.00	240
29	Supply and fixing of Micro Prismatic type Retro-Reflective Stickers Type 9 ASTM D 4956_01 100mm dia size in different colour (Red,Amber,Green,White,etc.), including pasting on backside of vehicle complete .	Each	16	500.00	8,000
30	Supply and fixing of aluminium folio micro prismatic tape 9 ASTM D 4956-01 Retro -Reflective tape fix on concrete base, trees.	Sqm.	98	500.00	49,000
31	Supplying and fixing Cut stones including earth work, cement concrete 1:4:8 engraving letters and numerals, as per IRC standard design.				
31.1	Km Stone for NH, SH & MDR (size 35 x 110 x 25 cm)	Each	2,396	5.00	11,980
31.2	5th Km Stone ( size-50 x 152 x 25 CM)	Each	3,935	2.00	7,870
31.3	200 Meter (size 15 x 15 x 90 cm)	Each	684	20.00	13,680
31.4	Guide stone (size 15 x 15 120 cm )	Each	684	20.00	13,680
32	Supply & Fixing cement concrete pre cast kerb or dand upto 60cm. Length over 20mm thick base of cement mortar 1:4 including jointing earth work, pointing and jointing with cement mortar 1:4 of size including cost of M-20 mix dand/kerb complete -(20x25)/2x30cm	LM	610	10.00	6,100
33	Re-Fixing of Existing cement concrete pre cast kerb or dand upto 60cm. Length over 20mm thick base of cement mortar 1:4 including desmantling & Cleaning of existing surface, jointing earth work, pointing and jointing with cement mortar 1:4 of size including cost of M-20 mix dand/kerb complete - (20x25)/2x30cm	LM	74	100.00	7,400
34	Providing and laying 300x300x25mm precast cement concrete chequered tilse of grade M20 in ordinary grey cement without chips laid in cement mortar 1:3 over 150 mm compacted granular sub-base as per Clause 401 and 25 mm thick cement concrete M15 grade including pointing of tiles with neat cement all complete for footpath/ Wall median/junctions/islands etc. as per drawing , Technical Specifications and as directed by the Enginner.	Sqm.	587	50.00	29,350
35	Providing stone slab covering over drains including filling of joints in cement sand mortar 1:3 with 35mm thick cement concrete flooring 1:2:4 mix complete with good finish with stone slab 60 to 75 mm thick average	Sqm.	732	1,260.00	9,22,320
36	Providing and laying graded stone aggregate filter media underneath pitching on slopes complete as per drawing and technical specification (MoRTH specifaion clause : 2504)	Cum	1,093	13.50	14,756
37	Providing and laying pitching slopes complete as per drawing and technical specification (MoRTH specification clause : 2504 )- With RR stone, Weighing not less than 40 kg thickness not less than 1500 mm (specification gravity not less than 2.65 )	Cum	1,524	27.00	41,148
38	Furnishinng and laying of the live sods of perennial turf forming grass on embankment slope, verges or other location shown on the drawing or as directed by the engineer including preparation of ground , fetching of sods and watering for two months	Sqm.	85	0.00	0

<b>Routine Maintenance on Jhalawar -Ujjain Road (JU) Road from Km 0+000 Km 29+000 under Mega Highways Project in Rajasthan</b>					
Item	Description	Unit	BOQ		
			Rate (Rs.)	Qty.	Amount (Rs)
39	Half brick circular tree guard in second class bricks internal dia. 1.25 meters and Ht. 1.2 meter above ground and 0.2 meters below ground bottom two course laid dry and top three course in cement meter 1:6 ( 1 Cement 6 Sand ) and the intermediate course bung in dry honey comb masonry as per design complete.	Each	1,219	20.00	24,380
40	P & F Delineator with 30 Cm. outer die RCC Hume pipe NP-2 (As per IS-458/1971 ) pipe 1.0 M. Long 40 cm. embedded in cement concrete (1:4:8) block of size 50x50x40 cm . Including excavation upto 40 cm depth. The inside of pipe shall be filled with C.C. (1:4:8) stone grit max size 20 mm or less upto the top semi-circular humping ,The pipes shall be painted white/black with enamel paint fitted with red reflector three Nos. of 7.5 cm die on each side,complete	Each	732	10.00	7,320
41	Repair of Poles,frames of sign boards/SOS phones/blinkers/delineators at road side including cutting welding and refixing as per directions but excluding painting and lettering	Each	732	100.00	73,200
42	Repair of road side cuts by earthen bags using empty gunny bag or cement bag including filling by dry sandy soil or local dry soil, transporting and fixing properly at site as per direction by Engineer.	Nos.	36	1,000.00	36,000
43	Restoration of rain cuts with soil, Morrum, gravel or a mixture of these including all leads lifts and cost of arrangement of land, clearing the loose soil, benching for 300mm width, laying fresh material in layers not exceeding 250mm and compacting with plate compactor or power rammer to restore the original alignment levels & slope complete as per MoRTH specification 3002	Cum	204	1,500.00	3,06,000
44	Silt clearance of drains, channels and canals with lift 1.5 m and lead upto 50 m in all respect.	Cum	244	2,250.00	5,49,000
45	Supplying of Dewatering Pumps (5-15 HP) during Monsoon Rains, Rates are inclusive of cost of fuel , maintenance ,transportation to the site & operator complete.	Per Hour	366	50.00	18,300
46	Supply of Tractor including brommer/grader for shoulder cleaning loose river sand with Operator & Diesel as and when required as per the directions of Engineer-In-Charge	Per Hour	531	10.00	5,310
47	Supply of Tractor including brommer/grader for shoulder cleaning loose river sand with Operator & Diesel as and when required as per the directions of Engineer-In-Charge	Per Day (8 Hrs )	3,657	10.00	36,570
48	Supply of Tractor With trolley for Transportation of materials including Operator, Diesel & all maintenance , as and when required as per the directions of Engineer-In-Charge	Per Hour	561	50.00	28,050
49	Supply of Tractor With trolley for Transportation of materials including Operator, Diesel & all maintenance , as and when required as per the directions of Engineer-In-Charge	Per Day (8 Hrs )	3,597	50.00	1,79,850
50	Providing and fixing of precast concrete interlocking blocks of M 30 grade 60mm thick manufactured from fully computerised automatic stationery hydraulic vibropressed machine and fully computerised automatic batching plant of class A1/A2 as per BS 6717:2001. The CC interlocking				



**Routine Maintenance on Jhalawar -Ujjain Road (JU) Road from Km 0+000 Km 29+000  
under Mega Highways Project in Rajasthan**

Item	Description	Unit	BOQ		
			Rate (Rs.)	Qty.	Amount (Rs)
	paving blocks be laid on average 50mm. thick bed of coarse sand and the joint is to be filled with fine sand. Laying procedure on compacted sub-base as defined. Complete job is to be executed as per the instruction of Engineer incharge. The rates to be inclusive of all lead, Lifts and taxes. General specification of blocks: 1) Shape as defined by Engineer incharge 2) Tensile splitting strength and braking load as per BS 6717:2001 3) Color: Grey cement natural colour 4) Variation in dimension: Less than 1.6mm. 5) Variation in thickness: Less than 3.2mm 6) Abrasion: As per BS: 6717:2001				
50.1	60 mm thick M-30 Grade	Sqm.	718	40.00	28,720
50.2	80 mm thick M-30 Grade	Sqm.	937	500.00	4,68,500
50.3	100 mm thick M-30 Grade	Sqm.	1,131	10.00	11,310
50.4	Providing and laying 100 mm thick cement concrete blocks of M50 Grade(Manufactured with fully mechanised dry cast process with forced action mixer whose arms revolve along the main axis and rotate about itsown axis also,having humidity sensor for moisture control of w/c ratio in concrete mix,manufactured with steel moulds(milled and manufactured in csi diamond or csi Nitro process for accuracy) on steelbase plate of min 16mm thick:having vibration and pressing action both together with the help of multiple synchronised vibrators. Power of hydraulic station should be minimum 50 KW for compaction and cured in controlled chambers having humidity control and automated air circulation system) spreading 25 mm thick sand underneath and filling joints with sand on existing wbm base,as per IS 15658:2006 and all materials shall conform to MORTH specification Clause 602	Sqm.	1,572	0.00	0
51	Structural plain/reinforced cement concrete in foundation/Substructure ,including cost of all material ,formwork ,shuttering ,labour, Mechanically mixing, trasportationn, placing, vibration ,curing ,etc.excluding reinforcement complete as per drawing and Technical specification -Concrete M-10	Cum	3,817	0.00	0
52	Trim or prune trees and vegetation ,remove undesired trees branches and vegetation ,cut and trim vegetation hedge to the heigth and width described by the engineer using mobile mechanical equipment capable of vertical, horizontal and angle cuts with J.C.B. Disposing of cut tree branches and shrubs within the adjoining right-of-way where pruning activity is performed as specified by Engineer.	Hour	1,092	160.00	1,74,720
53	Trim or prune trees and vegetation ,remove undesired trees branches and vegetation and debries ,cut and trim vegetation hedge to the 2.5m heigth and width from the front of road furniture ,signages & shoulders as described by the engineer manually .Disposing of cut tree branches and shrubs debries within the adjoining right-of-way where pruning activity is performed as specified by Engineer.	Sqm.	3	87,000.00	2,61,000
54	Providing and Fixining in position HYSD /TMT reinforcement including cuttting, bending etc.complete as per	MT	77,077	0.50	38,539

<b>Routine Maintenance on Jhalawar -Ujjain Road (JU) Road from Km 0+000 Km 29+000 under Mega Highways Project in Rajasthan</b>					
Item	Description	Unit	BOQ		
			Rate (Rs.)	Qty.	Amount (Rs)
	drawing and technical Specification Laps, chairs and wastage shall be included in the rate and shall not be considered in the measurement .				
55	Supply of retro-reflective radium paint including surface application as per drection of Project Manager	Kg.	5,462	0.00	0
56	Plantation of Avenue trees including digging & backfilling of Pits - 120x120x120 cmc size with good agricultural earth soil, including all lead & lift and providing & Fixing of FYM 10 kg per pit, Methyl Parathion Dust fertlizer 2% 50gm per pit and watering of plants once required at the time of plantation (25 litre ) as per the direction of Engineer.	Per Pit	177	500.00	88,500
57	Providing required plants as mentioned below complete in all respect in proper size of 1m to 1.5m clear height above ground level and packing (1) Neem (2) Amaltas (3) Jharkhanda (4) karan (5) Sheesham (6) Siras (7) Gulmohar (8) Sainjana (9) Peepal (10) Kadamb (11) Papdi .All plants Shall be supported by bamboo stick.	Nos.	150	500.00	75,000
58	Maintenance of avenue/median plants by the contractor including of watering, preparation of Thavala, Hoeing ,Weeding, pruning,application of insecticides, security, if the plant die during maintenance contractor has to replace same height plant at his own cost, maintaning bamboo supports etc. complete in all respect	per plant per month	20	6,000.00	1,20,000
59	Supply & laying of bituminious cold Mix Material prepared by mixing of cutback bitumen 5 to 7% and find aggregate as per specifications provied in kandhal Mix (Capacity : 50 Kg/bag)	Bags	689	200.00	1,37,800
60	Construction of earthen shoulder (minimum soaked CBR 10% ) complete with material obtained from road side with all lifts & leads, transporting to site, spreading, grading to required slope with motor grader, water tanker and compacted with 8-10 Ton roller to meet requirement of table No.300-2 as per availability and as per Technical Specification Clause 305	Sqm.	6	600.00	3,600
61	P&F 20 to 25 mm thick polished kota stone flooring over 20 mm thick base of cm. 1:4 (1-cement:4-coarse sand) and jointed with grey cement slurry including rubbing complete in all repect.	Sqm.	1,054	100.00	1,05,400
62	Providing weep holes in Plain/reinforced concrete/Random Rubble Massonary abutment, wing wall, return wall, drain, etc with 100 mm dia PVC pipe, extending through the full width of the structure with slope of 1V : 20H towards. Complete as per drawing and Technical specifications Section 2700	LM	153	100.00	15,300
63	Supply and Fixing of Flood Gauge ( Water Gauge) as per IRC 67 Standard 200CM long fixed on Angle iron post 50X50X6mm , 2.6M Long, fixing of Flood Gauge in Cement Concrete M15 Mix Size 30X30X60Cm complete including Transportation , excavation Et Complete	Each	2,379	2	4,758
64	Provision of Metal Drum/ Empty Bitumen Drum Delineator , 300mm In Diameter, 800MM high , filled wit eart for stability , Painted in Circumferential strips of alternate Black & White 100mm wide fitted with reflectror 3Nos of 7.5Cm dia, all as per IRC SP55 2001.	Each	536	20	10,720

<b>Routine Maintenance on Jhalawar -Ujjain Road (JU) Road from Km 0+000 Km 29+000 under Mega Highways Project in Rajasthan</b>					
Item	Description	Unit	BOQ		
			Rate (Rs.)	Qty.	Amount (Rs)
65	Providing and fixing Pre moulded Bitumen Joint Filler at any level , for expansion joints including the cost of selaing compund and priming coat .( Mort&H Specification clause 2600). 25mm Wide	Meter/ Cm	11.00	0	0
66	Removal of existing sealent and resealing of contraction / longitudinal or expansion joints in concrete pavement with fresh sealent material hot poured rubberized bitumen or cold polysulphide type as per clause 602.2.8 with appropriate type of primer complete as per MORT&H specification clause 3005.2 & 2600	RM	164.00	0	0
67	Providing and fixing steel gate grating and grills made of angles / Tees , square bars or other flats black pipes with hold fast and fittings complete as p-er designe and drawing including cutting , welding and fabrication with priming coat of redoxide .	Kg.	107.00	250	26,750
68	Pointing of any design with cement mortart 1:3 on brick / stone work at any level as per MORT&H Specification 1600 .	Sqm.	76.00	0	0
69	Providing & Fixing Complete Single metal beam crash barrier made out of cold rolled steel strip W profile of 3 mm thick having a minimum yield strength of 2400 kg/sqcm, width of 312mm and depth of corrugation as 83 mm hot dip galvanized of zinc coating @ 550 gm/sq.m. The post and spacer channel is made out of cold rolled channel 150x75x5 mm having minimum yield strength of 2400 kg/sqcm and hot dip galvanized of zinc coating @ 550 gm/sq.m. The total length of post shall be 1900 mm and minimum height of post above foundation shall be 800 mm. The length of spacer channel shall be 330 mm. Job includes neatly fixing new post @ 2m C/C in cement concrete of M20 grade complete (cost included) as directed by the Engineer including fasteners and fixing etc. complete in all respect. as per MORT&H Specification 811.3 & IS 1364 & IS1367.	LM	3,807.00	50	1,90,350
70	Providing & Fixing Complete Double metal beam crash barrier made out of cold rolled steel strip W profile of 3 mm thick having a minimum yield strength of 2400 kg/sqcm, width of 535 mm and depth of corrugation as 83 mm hot dip galvanized of zinc coating @ 550 gm/sq.m. The post and spacer channel is made out of cold rolled channel 150x75x5 mm having minimum yield strength of 2400 kg/sqcm and hot dip galvanized of zinc coating @ 550 gm/sq.m. The total length of post shall be 1900 mm and minimum height of post above foundation shall be 800 mm. The length of spacer channel shall be 330 mm. Job includes neatly fixing new post @ 2m C/C in cement concrete of M20 grade complete (cost included) as directed by the Engineer including fasteners and fixing etc. complete in all respect.	LM	5,933.00	0	0
71	P&P Precast Dense Cement Concrete ( Vibro pressed) Drain section block of different size as per approved drawing and section block of different size approved drawing and designe and strength as per IS code:2185 Part-I of grade "D"(5.00mm) proper quality of additive/ Admixture like plasticizer etc added to produce high quality and durable drain section blocks of "L" shape, "U" shape etc. as per				0

<b>Routine Maintenance on Jhalawar -Ujjain Road (JU) Road from Km 0+000 Km 29+000 under Mega Highways Project in Rajasthan</b>					
Item	Description	Unit	BOQ		
			Rate (Rs.)	Qty.	Amount (Rs)
	approved designe and drawing comlete with fixing and jointing in C.M. 1:4 in proper grade and level complete in all respect including earth work and disposal of surplus earth within 0.5km lead .				
71.1	115MM Thick	Sqm.	1,184	0	0
72	Providing and laying 25mm Thick mastic asphalt wearing course with paving grade Bitumen / Industrial grade Bitumen meeting the reuirement given in Table 500-39,40,41,42 prepared by using mastic cooker and laid to required level and slope after cleaning the surface ,including providing anti-skid surface with bitumen precoated fine grained hard stone chipping of 13.2mm nominal size at the rate of 0.005 cum per 10 Sqm and at an approximate spacing of 10cm center to center in both directions, pressed in to surface when the temperature of surfaces is not less than 1000c, protuding 1mmto4mm over mastic surface, all complete as per MoRT&H specification Clause 516	RM	669	0	0
73	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 front end loader and hot mixing of binder (including cost of anti-stripping compound wherever required) and aggregates in hot mix plant 40-60 TPH. Transporting the mix material with tipper and laying with sensor paver finisher (as per clause 501.5.3) to the required level grades and rolling with vibratory compactor 80 -100KN and pneumatic tyred roller 120-150 KN, TP=0.56 Mpa to achieve the desired density (approved by the department) excluding cost fo primer/tack coat (MoRTH Specification : Clause 507 & 112) Grading II (13.2 mm nominal size) Bitumen grade VG 30 @ 5.4% Minimum of mix & thickness 30-40 mm .				0
73.1	Bituminous Concrete For Rumble strip of size(10.5X0.3X0.025) a set of 6 strips @1m C/C at one location , Qty for one set = 0.567Cum	Cum	11,684	0	0
74	Supply & Fixing of Glare Blocker of M20 grade including reinforcement as per specificatrion/attached drawing with complete finishing .painting with cement paint of approved make and shade, inculding cost of foundation transportation and unloading of glare blocker at site complete in all respect as directed by Engineer-in-charge.	Nos.	3,566	0	0
<b>Total</b>					<b>1,12,90,821</b>

